



## TENDER OF RETROFITTING WORKS

FOR

## JUNIOR SCHOOL BUILDING BISHOP COTTON SCHOOL AT

Shimla Bypass, near Khalini, New Shimla, Shimla  
Himachal Pradesh 171002

VERSION 02  
04<sup>TH</sup> NOVEMBER 2023

**first principle**

ARCHITECTURE & INTERIOR SOLUTIONS

FIRST PRINCIPLE DESIGNS PVT. LTD.  
3/19, Basement Floor, Kalkaji Extension, New Delhi - 110019



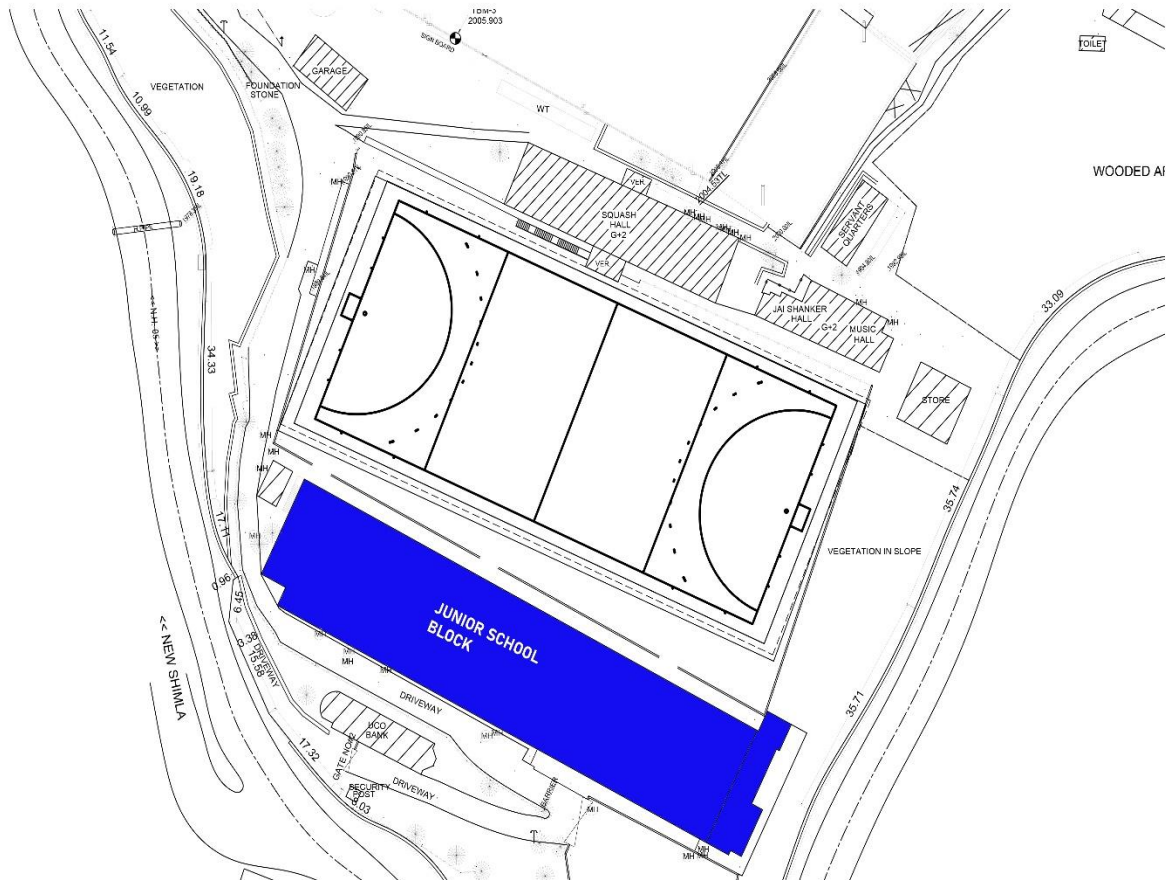
# CONTENTS

1. BROAD DETAILS OF THE PROJECT .....	1
2. NOTICE INVITING TENDERS.....	5
3. ANNEXURE-I .....	9
4. INSTRUCTIONS TO TENDERERS .....	5
5. FORM I: DETAILS OF THE CONTRACTOR/FIRM .....	13
6. FORM II: TENDER ACCEPTANCE LETTER.....	15
7. ARTICLES OF AGREEMENT BETWEEN EMPLOYER AND CONTRACTOR .....	17
8. ANNEXURE – I: DETAILED TERMS & CONDITIONS OF THE CONTRACT .....	21
9. ANNEXURE – II: GENERAL CONDITIONS OF CONTRACT .....	35
10. SAFETY CODE.....	55
11. PROFORMA FOR INDENTURE FOR SECURED ADVANCES.....	61
12. PERFORMANCE GUARANTEE/BANK GUARANTEE BOND.....	67
13. GUARANTEE TO BE EXECUTED BY CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION .....	71
15. LIST OF TENDER DRAWINGS .....	75
16. LIST OF APPROVED MAKES .....	77
17. SUMMARY OF COSTS .....	85
18. BILL OF QUANTITY.....	95



# 1. BROAD DETAILS OF THE PROJECT

Bishop Cotton School, Shimla is the oldest school in the region. It is proposed that the existing facilities at the school need to be refurbished through retrofitting. The proposed Project includes retrofitting of the Junior School Building.



The Retrofitting works implementation shall be planned in a manner that the maximum works can be completed within 3 months with external painting works for being carried out subsequently. The broad area program for retrofitting is as follows:

SI No.	Floor/Space	Floor Height (m)	Area for Retrofitting (sq.m)
1	Ground Floor	3.4	350
2	First Floor	3.4	1810
3	Second Floor	3.4	1810
4	Loft Floor	2 - 4	1000
<b>TOTAL RETROFITTING AREA</b>			<b>4970</b>

**1.1 Broad Scope of Retrofitting works for the Junior School shall include the following -**

The Floor plans of the Junior School will undergo layout changes with regards to room layouts, furniture layouts, replacement of fixtures, installation of new windows, augmentation of fire safety and security measures as per plans. The broad details of the proposed work listed floor wise is as below -

**a) Ground Floor**

- Relocation of the toilet block with addition of another toilet block for the students
- Retrofitting of the Staff Areas
- Creation of the Science Lab in the kitchen area.
- Creation of Infirmary.
- Protection of the Junior School from water / moisture coming from the third flat by creating a 100 mm thick M-25 RCC protection wall.
- Exhaust fans to be installed for replenishment of air in the classrooms near the retaining wall.

**b) First Floor**

- Relaying of the plumbing and sewerage lines
- Redoing the driveway at a lower level for prevention of stormwater entry to the First floor.
- Installation of Skylights for the ground-floor classrooms in the driveway.
- Creation of overnight rooms with a bathroom in the box room area.
- Refurbishing of the Warden's Quarters.

- Additional Lighting and power supply points to be provided near the study areas and beds.
- Completely new Toilet blocks with all new plumbing, sewerage and fixtures with prefabricated cubicle partitions for stalls.
- Space for the Janitor's Closet and Fire Hydrant cabinet will be provided.

c) Second Floor

- Relaying of the plumbing and sewerage lines
- Creation of overnight rooms with a bathroom in the box room area.
- Refurbishing of the Warden's Quarters.
- Additional Lighting and power supply points to be provided near the study areas and beds.
- Completely new Toilet blocks with all new plumbing, sewerage and fixtures with prefabricated cubicle partitions for stalls.
- Space for the Janitor's Closet and Fire Hydrant cabinet will be provided.

d) Fire Compliance Related Works

- Provision of A/B Fire Hydrants in each Fire Hydrant Closet in front of the Toilet Blocks.
- Provision of Fire Aid Hose Reel in each F.H.C.
- Extension of Wet Risers from the Driveway up to the Second Floor.
- Manually operated Fire Alarms to be installed in each block.
- Automated Detection Systems to be installed in all enclosed spaces on every floor.

e) Security Related works

- Installation of CCTV cameras in the staircases.
- Separate lockable entries to the first and second floor to prevent unwarranted access.
- Closing off of internal access to adjacent dorm blocks.

f) Finishing Works

- Re-finishing of the Ground Floor affected areas to match the existing finishes.
- Re-finishing of the First and Second Floor as per detailed drawings being issued.





## 2. NOTICE INVITING TENDERS

Sealed item rate tender on behalf of the **Director, BISHOP COTTON SCHOOL, Shimla Bypass, near Khalini, New Shimla**, invited by the Architects **M/s First Principle Designs Pvt. Ltd., New Delhi** and will be received in the office of BISHOP COTTON SCHOOL, SHIMLA.

- 2.01 Details of work to be done : **Retrofitting works for Junior School Building, Bishop Cotton School, New Shimla, Himachal Pradesh - 171002**
- 2.02 Form of Contract : Item Rate Contract as per detailed Bill Of Quantities attached
- 2.03 Estimate Cost of Project : The Estimated cost of the development of Building and site development works for Phase-I as described above is Rs.2,98,40,240.75 Crores (Rupees Two Crores Ninety Eight Lakhs and Forty thousand only) inclusive of applicable GST.
- 2.04 Minimum Eligibility Criteria
- a.Experience : Minimum 5 years proven experience engaged in the Civil, Structural and finishing works for Corporates, Institution and Government undertakings.
- b. Eligible Works : Details of completed similar works with a minimum of two new / retrofitting project of more than 20000 sq.ft. of covered area with Civil, Structural Work and external

finishing works including Plumbing and Electrical works during last 5 years to be provided.

- c. Average Annual Turnovers : Audited balance sheets of 2022-23, 2023-22, 2020-21, 2019-20 and 2018-19 are to be provided.
- d. Profit/Loss : Bidder should be a Profit-making firm and should not have made losses in two financial years out of the last five financial years. (Supporting documents to be submitted)
- e. References : At least two references of clients and / or architects to be provided.
- 2.05. Cost of Tender : Rs. 2500/- in form of DD in favour of Bishop Cotton School, payable at Shimla
- 2.06. Earnest Money  
/Performance Guarantee : 2% of the Contract Value  
*The same shall only be deposited by the successful Bidder*
- 2.07. Period of contract /  
time of completion : 3 months
- 2.08. Liquidated damages for non-  
Performance Contract : 10% of the Contract value for any delays in completion of works as per timelines specified.
- 2.09. Defect Liability Period : 12 months (Twelve months) from the date of virtual completion as certified by Architect / Employer.

- 2.10. Retention amount : 10% of the total bill value shall be retained till the successful discharge of all responsibilities as per Contract for the complete Defect Liability Period.
- 2.11. Period of submitting of Final bill : 30 days from the date of completion.
- 2.12. Mobilization Advance : 10% Mobilization Advance against Bank Guarantee.
- 2.13. Last date and time for submission: \_\_\_\_\_at BISHOP COTTON SCHOOL SHIMLA
- 2.14. Date of opening of Technical Bid : \_\_\_\_\_at BISHOP COTTON SCHOOL SHIMLA
- The Contractors can authorize one representative to attend Bid Opening.
- 2.15. Date of Opening of Financial Bid : The time and date of opening of financial bid of contractors qualifying the technical bid shall be communicated to them at a later date
- 2.16. Validity of tender : 60 days.
- 2.17. Submission Requirements : As per Annexure - I

The Director,  
BISHOP COTTON SCHOOL  
SHIMLA,



### **3. ANNEXURE-I**

Completed tenders containing two sealed covers of technical bid and price bid will be received only in the office of BISHOP COTTON SCHOOL, SHIMLA at the fixed time and the date indicated in the NIT. The tenderer will be at liberty to be present either in person or through an authorized representative at the time of the opening of the Technical Bid with the Bid Acknowledgement Receipt. Price Bids of only those tenders shall be opened whose technical bids qualify, at a time and place of which notice will be given. The tenderer technically qualified will be at liberty to be present either in person or through an authorized representative at the time of opening of the Price Bids with the Bid Acknowledgment Receipt.

#### **TECHNICAL BID**

The following documents are to be furnished by the Contractor along with Technical Bid as per the tender document:

- i. Original Demand Draft of a Scheduled Bank as specified in this tender document towards the cost of Earnest Money Deposit.
- ii. Original Demand Draft of a Scheduled Bank as specified in this tender document towards the cost of Tenders
- iii. Copies of Registration Certificate under Indian Partnership Act in case of Partnership Firm / Company incorporation certificate in case of Ltd. Company/Affidavit in case of proprietary firm along with power of attorney and other documents as per the conditions stipulated under the General Rules & directions for the guidance of contractors in the tender document.
- iv. Copies of Experience/work completion certificates of required amount as per the conditions of Tender Notice.
- v. Tender Acceptance Letter (Form-II) in the firm/Company letterhead duly filled & signed by the Authority with a seal of Firm/Company.
- vi. Copy of PAN Card.
- vii. Copy of Financial turnover certificate for previous five years issued by Chartered Accountant.

- viii. Registration as Contractor with various PSUs, State PWDs, CPWD, MES, Railways and Autonomous Bodies, if any.
- ix. Details of Technical and Administrative employees.
- x. List of Plant& Machineries/ Equipment.

**PRICE BID**

- a) Schedule of price bid in the form of BoQ\_

## **4. INSTRUCTIONS TO TENDERERS**

1. BISHOP COTTON SCHOOL, SHIMLA reserves the right to verify the authenticity of the documents submitted by the contractors. BISHOP COTTON SCHOOL, SHIMLA also reserve the right to reject any or all application, split the work and cancel the process without assigning any reason whatsoever. Also,
  - a. Work experience certificate should specify breakup values each work in each project
  - b. BISHOP COTTON SCHOOL, SHIMLA reserves the right to verify the Work Completion Certificates from respective clients
  - c. If necessary, the authorized representative of BISHOP COTTON SCHOOL, SHIMLA will visit any/ all projects/ sites which are recently executed/ being executed by the applicants, in order to evaluate the performance and quality work of the applicants. In such case, the applicant will be required to obtain/ give them the necessary permission/ facilities and arrangements for site visit as required.
  - d. Merely fulfilling of the prescribed minimum prequalification criteria does not entitle the applicant for shortlisting, which is subject to the verification of the documents/ information furnished by the applicants, inspection of work, quality and timely execution of project, seeking confidential performance reports from the client etc.
2. No Joint venture or consortium of firms shall be allowed.
3. A schedule of approximate quantities for various items accompanies this tender. It shall be definitely understood that the architects do not accepts any responsibility for the correctness of completeness of this schedule is liable to alteration by omission, deduction additions or substitution of any materials specified in the schedule at the discretions of the architects without affecting the terms of the contract.
4. The tender form must be filled in English only and all entries made by hand written in ink. Any tender in which there is over written or erasure is liable to rejected. All corrections should be attested by the tenderer with his dated initials as many times as the corrections occur. Tenders which propose any 3 alteration in the work

specified in the said form of invitation to tender or in the time allowed for carrying out the work or which contain any other conditions of any sort, will be liable to rejection.

5. The contractor should fill in the rates tendered in figures as well as in words. The amount for each item should be worked out and the required total is given. The tenders who do not fulfill those requirements are liable to be summarily rejected.
6. The items mentioned in the BOQ are complete and the rates to be quoted are for delivering the works as per the details mentioned in the BOQ. No request for additional payments against any items in the BOQ shall be accepted.
7. The Contractor will not be paid any extra charges for load involved in transport of materials to site of works, erection and hire of Tools and Plants, Sheds for materials royalty for earth boulders, metal and sand etc. or for any other reasons in case the contractor is found later on to have misjudged the materials available. All taxes any claim whatsoever in this respect shall not be entrained.
8. No alteration which is made by the tender In the Notice of Tender, instructions to the contractor, the contract form, the conditions of the contract, drawings, specifications or quantities accompanying the same shall be recognized, and if any such alterations are made or any special conditions are attached the tender is liable to be rejected. The site for the work is available.
9. The bid submitted shall become invalid if:
  - i. All tenders in whom any of the prescribed conditions are not fulfilled or are incomplete in any respect
  - ii. The bidder is found ineligible.
  - iii. The bidder does not submit all the documents as per Annexure-I.
10. The Employer does not bind himself to accept the lowest or any tender and reserve the right of accepting the whole or any apart of the tender and the tender shall be bound to perform the same at the rates quoted.



11. Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
12. No part of the contract shall be sublet without the written permission of the Architect/ Employer nor shall be made by power of Attorney authorizing other to receive the payment on behalf of the contractor.
13. The work shall be carried out under the direction and in stages desired by the Employer's Architect, **M/s First Principle Designs Pvt. Ltd., New Delhi**. On acceptance of the tender the contractor shall intimate the name of his accredited representative(s) who would be responsible for taking instructions from the Architect / Project Manager and for carrying out the work.
14. Every tenderer is expected before quoting these rates to inspect the site of the proposed work. He should also inspect the source of materials, their quality and availability including the removal of Malba, if any, from site since there is no Malba stacking area available permission may be required from the Property Managers. The material must strictly comply with the relevant specifications attached. Samples of the materials as required by the Architect in all cases shall be submitted for their approval before the supply to site of work begins, in the absence of any specifications of entire satisfaction of the Architect.
15. The successful tender must be co-operative with other the contractors appointed by the Employer so that the work shall proceed smoothly with the least possible delay and to the satisfaction of the architects.
16. The tenderer whose tender has been accepted shall, within two days of the intimation of the acceptance of tender, hand over to Bishop Cotton School, Shimla a stamp-paper of Rs. **1000/- (Rupees One thousand only)**. The Tenderer failure to furnish stamp paper within the time, shall give right to the Employer to revoke the acceptance of tender without any further notice to the tender.
17. After acceptance of the tender, the tenderer shall sign the necessary contract papers within 3 days of the above intimation. In case of delay to sign the necessary contract papers, the work order shall be assumed as cancelled.

18. The Contractor's responsibility for his contract shall commence within 7 days from the date of issue of order of acceptance of tender.
19. The Contractor shall sign each page of this tender. The rates include removing of existing partitions, paneling, false ceiling, electrical/data cabling wiring, if required at site of work.
20. Payment to the Contractor Agency shall be made as per actual work done at site.
21. The rates to be quoted against each tendered item shall include the **Cost of material, labour charges, carriage, overheads, etc. and any / all other taxes including Goods and Service Tax (GST).**
22. The Contractor agency shall keep particular vigil on his workers / carpenters / painters etc. to maintain very good workmanship of all items, failing which no payment shall be made and no claim of material / labour used shall be made to him in any case, and the same work shall be executed by him again without charging any extra cost.
23. All the cutting over writing shall be signed.
24. All items to be executed, as per drawings, if any change is required, the same shall be brought to the notice of Architect / Project Manager.
25. Any tender / quotation containing clerical or arithmetical mistakes shall be rejected.
26. Any addition, alteration or correction shall be signed and stamped properly.
27. Contractor/ agencies are advised (before quoting the rates) to inspect the site of the proposed work. He must go through all drawings and specifications and documents.
28. The Contractor agency should have already executed works of Civil works, Electrical works, plumbing works, fire fighting works, External development works and interior furnishing & exterior works of very good workmanship.

29. Quality of material and workmanship rejected by the Architect / Concerned Authorities shall be removed immediately by the contractor and rectified / replaced.
30. No advance payment shall be made to the Contractor on supply of any material supplied at site for execution. Payment shall only be made on execution of any concerned / particular item, unless specified.
31. Rates for partitions, paneling, wall cladding and false ceiling shall include cutting and making good of necessary cut-outs/chiseling to be made for electrical conduits, switch boards etc.
32. Time period for the completion of work shall be 60 (Sixty) days from the date of award of work-order.
33. Tenders for works shall remain open for acceptance for a period of 5 days from the date of opening of tenders. If the tenderer withdraws his tender before the expiry of the period or makes any modifications in terms and conditions of the tender which are not acceptable to BISHOP COTTON SCHOOL, SHIMLA, then BISHOP COTTON SCHOOL, SHIMLA without prejudice to any other right or remedy is at liberty to forfeit the earnest money.
34. BISHOP COTTON SCHOOL, SHIMLA shall not be responsible for any loss or damage to the contractor/ labour due to any natural calamity during the course of construction. Contractor is liable to make good all the damages if any, till the work is completed and handed over to the BISHOP COTTON SCHOOL, SHIMLA Ltd. authorities.
35. Any payment to the contractor on account of execution of work, whether it is running payment or final, shall be verified by the Architects.
36. Unless, otherwise mentioned all materials to be used shall be ISI marked. Failure to do so, the work may be rejected and in that case, the Contractor shall have to remove the defective materials and replace / re-do the work for which no claim shall be entertained.

37. The total work shall be supervised by the Project Manager and he/she shall be kept fully informed by the contractor regarding the progress of work.
38. BISHOP COTTON SCHOOL, SHIMLA may award the work in part or whole to a single party or any other party.
39. It may please be noted that the Employer is not bound to allot the work to the lowest party. And as such, the allotment of work shall be based on work ability of rates quoted by the contractor on account of quality work.
40. TDS as applicable shall be deducted from the payments due to the contractor.
41. Contractor shall follow all rules/regulations in force and should possess the license for employing labour and also follow all safety measures, labour bye-laws and shall be responsible for any lapse.
42. At any stage i.e., during the execution of work, any kind of change reqd. whether it is in design or specifications, the same has to be incorporated by the contractor.
43. Last date for submission of competitive tenders is \_\_\_\_\_.  
Tender document, duly filled in super scribing the name of work, contractor's address shall be addressed to The Director, BISHOP COTTON SCHOOL Shimla Bypass, near Khalini, New Shimla, Shimla, Himachal Pradesh 171002 in 2 separate envelopes with a specific marking of Technical Bid and Financial Bid on each envelope.
44. The Employer reserves the right to reject any or all the tenders without assigning any reason whatsoever.
45. Only contractors having GSTIN (Goods and Service Tax) are eligible. The contractor has to submit their GST No. along with tender, otherwise tender will be rejected.
46. The tenderers are required to take **Contractor's All risk insurance policies (CAR Policies)** with respect to the work within one week from the receipt of the work order and workmen with an approved Indian Insurance Company in the **joint name**

**of the CLIENT and the Tenderer** from the day of commencement of the work till the defect liability period. The value of the work to be insured would be 125% of the contract value.

47. The Tenderer shall submit the proposed Work Completion plan as per the BOQ for Bid evaluation.
48. The tenderer should enter into the agreement as per the articles of agreement on stamp paper attached with this notice within 7 days of issue of acceptance of tender.
49. Quantity of work may increase or decrease at site as per requirement, which shall not affect the rates quoted by the contractor.
50. Furnishing works including electrical works etc. shall be done to the complete satisfaction of the Project Manager.

**CONTRACTOR**

**FOR BISHOP COTTON SCHOOL,  
SHIMLA**



## 5. FORM I: DETAILS OF THE CONTRACTOR/FIRM

1	Name of the Contractor firm			
2	Address			
3	Name of the Directors / Partners/ Proprietor			
4	Details of Qualifying Work as above along with Completion Certificates / Work Orders			
5	Details of Bank account		<b>Bank &amp; Branch</b>	<b>Account No.</b>
6	GSTIN			
7	PAN number.			
8	Service Tax Registration No.			
9	TIN No.			
10	Details of Litigation / Arbitration entered in to last five years, if any.			
11	Details of current works in Hand			
	Company	Quantum of work	When allotted	Date for completion

We undertake the information submitted above is true and no material information has been concealed. If at any time, it is found that we have given wrong information of concealed material information, the tender and / or our firm's empanelment may be cancelled.

Signature of the Contractor





## 6. FORM II: TENDER ACCEPTANCE LETTER

## LETTER FROM THE CONTRACTOR

To

The Director,  
BISHOP COTTON SCHOOL,  
Shimla Bypass,near Khalini,  
New Shimla,Shimla  
Himachal Pradesh 171002

Dear Sir,

## RETROFITTING WORKS FOR THE JUNIOR SCHOOL BUILDING FOR BISHOP COTTON SCHOOL, SHIMLA

1. Having examined the specifications, conditions of the tender, form of item rate, contract, schedule of Quantities relating to the above work and having visited and examined the site of the proposed works having acquired the requisite information relating thereto as affecting the tender invited by you on behalf of the BISHOP COTTON SCHOOL, SHIMLA, I/We, the undersigned hereby offer to execute the above proposed works on item rate basis in strict accordance with the contract conditions and specifications for the sum of Rs \_\_\_\_\_/- (Rupees .....only) or such other sums as may be ascertained in the accordance with the said contract.

2. I/We, undertake to complete and deliver the whole of the works within a stipulated period as specified in the contract conditions. I/We, shall be under obligation to pay the sum as stated in the conditions of the contract for every day if the work remains incomplete, damages, as compensation subject to the conditions of the contract relating to an extension of time.

**3. In the event of the tender being accepted,** I/We, agree to deposit an Amount equal to 5% of the Bid Value with the BISHOP COTTON SCHOOL, SHIMLA within 3 days of issue of letter of Bid acceptance as Earnest Money Deposit towards the Contract. Further, I/We agree that 5% of the gross amount of each interim bill shall be

deducted and accumulated till the sum along with the sum already deposited equals the total security deposit as per the clause of the conditions of the contract.

Yours faithfully,

SIGNATURE OF THE CONTRACTOR

(With official seal)

## 7. ARTICLES OF AGREEMENT BETWEEN EMPLOYER AND CONTRACTOR

Made on the \_\_\_\_ day of \_\_\_\_\_ 2023 between **M/s Bishop Cotton School, a registered Society** represented by **The Director**, (hereinafter, called “the Employer”) of the one part whose Registered office is situated at) **registered at Shimla Bypass, near Khalini, New Shimla, Shimla, Himachal Pradesh - 171002**

and

\_\_\_\_\_ represented by \_\_\_\_\_, having registered Office \_\_\_\_\_  
\_\_\_\_\_ (hereinafter called “the Contractor”) of the other part,

WHEREAS the Employer is desirous of **Retrofitting Works for the Junior School at BISHOP COTTON SCHOOL**, Shimla Bypass, near Khalini, New Shimla, Shimla, Himachal Pradesh – 171002

and has caused Drawings and a Specification describing the works to be done to be prepared by M/s First Principle Designs Pvt. Ltd., Architects and

WHEREAS the said drawings numbered to include, the Specification and / or on the Schedule of Quantities have been signed by or on behalf of the parties here to AND WHEREAS the conditions set forth herein ( hereinafter referred to as “the said Conditions”) the works shown upon the said Drawings and / or described I the said specification and included in the said Schedule of quantities at \_\_\_\_\_ the rates therein set forth amounting to the sum of Rupees (“hereinafter referred to as “the said Contract Amount”).

### NOW IT IS HEREBY AGREED AS FOLLOWS:

1. In consideration of the said contract amount to be paid at the times and in the manner set forth in said conditions, the Contractor shall upon and subject to the

said Conditions execute and complete the works shown upon the said Drawings or described in the Specified and / or the priced Schedule of Quantities.

2. The Employer shall pay the Contractor, the said Contract Amount or such other sum as shall become payable at the times and in the manner hereinafter specified in the said Conditions.
3. The term “the Architect” in the said Conditions shall mean the said firm, First Principle Designs Pvt. Ltd. Designs or, on the event of its closure or ceasing to be the Architect for the purpose of this Contract, such other person or Company as shall be nominated for that purpose by the Employer, not being a person to whom the Contractor shall object for reasons considered to be insufficient provided always that no person subsequently appointed to be Architect under this Contract shall be entitled to disregard or overrule any previous decision or approval or direction given or expressed by the Architect for the time being.
4. In consideration of the payments to be made to the contractor for the work to the executed by him, the contractor does hereby covenant with the EMPLOYER that the contractor shall and will duly provide, execute, and complete the said works on or before the dates mentioned in the said conditions attached to the tender documents and shall maintain the same at his own cost for a period of six/twelve months thereafter, perform another acts and things in the contract mentioned described of which are to be implied there from or may be reasonably necessary, for the completion of the said works and in the manner and subject to the terms and conditions of stipulations mentioned in the contract.
5. In consideration of the due provision, execution, and completion of the said works the EMPLOYER does hereby agree with the contractor that the EMPLOYER will pay to the contractor of the respective amount for the work actually done by him at the “Schedule or Rate” as contained in the appended schedule and such other sums as may become payable to the contractor under the provisions of the contract, such payments to be made at such time and in such manner as provided for in this agreement.

6. The contractor has furnished a sum of Rs..... as Earnest Money and agrees that the balance Security Deposit amounting to Rs..... shall be recovered from the bills payable to the contractor from time to time till the whole of the Security Deposit of Rs..... Stipulated in the memorandum of the tender and clause of the "Condition of the Contract is recovered.
7. In consideration of the due provision, execution and completion of the said works, the contractor does hereby agree to pay the EMPLOYER the sum as may be due to the other sum or sums as may become payable to the EMPLOYER towards loss / damage to the EMPLOYER's equipment, materials, plant and machinery, liquidated damages, if any as set forth in the said conditions of contract such payments to be made at such time and in such manner as is provided in the contractor.
8. The said Detailed Terms and Conditions of Contract and Appendix thereto shall be read and construed as forming part of this agreement; and the parties hereto shall respectively abide by, submit themselves to the Conditions and perform the agreements on their respectively in such contained.

As witness our hands this \_\_\_\_\_ day of \_\_\_\_\_ 2023.

Signed by the said :

For EMPLOYER -

For CONTRACTOR -

Authorized Signatory

Authorized Signatory

WITNESS, Signed by the said in the presence of:

Name - \_\_\_\_\_

Name - \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

Occupation

Occupation



## **8. ANNEXURE – I: DETAILED TERMS & CONDITIONS OF THE CONTRACT**

The execution of this Contract shall be subject to the following terms and conditions:

### **1. Scope of work**

Attached alongside with the Contract

### **2. Contract Value**

- a. The total value of the final BOQ including all taxes is Rs. \_\_\_\_\_  
(Rupees \_\_\_\_\_)

### **3. Specifications**

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates except as otherwise provided, cover all his obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works.

In the case of discrepancy between the schedule of Quantities, and the specifications etc., the following order of preference shall be observed:

- i. Description of Schedule of Quantities.
- ii. Particular Specification and Special Conditions, if any.
- iii. CPWD SPECIFICATIONS
- iv. Indian Standard Specifications of BIS.
- v. Specification notified by local bodies, if any.

If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.

Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.

#### **4. Price Fixation**

- a. This is an item rate tender and rates include for material, labour, overhead & supervision, wastages on material & labour, also specified otherwise.
- b. The final base prices, wherever mentioned in the Annexure-I includes the cost of Material at shop + Applicable Taxes + Cartage + Material handling at both ends + Cost of storing of the Material till use at site.
- c. The final prices for materials would be approved after finalization of all samples with the Owner / Owner's representative.
- d. For any difference of opinion for agreement on the base rates of the material submitted by the Contractor, the Owner shall reserve the right to supply the same or nominate the Vendor from where the material shall have to be procured by the Contractor.
- e. The quantities mentioned as per Annexure-I are for reference only, however the payment would be released as per the ACTUAL Work executed & accepted by the Owner's authorized representative.
- f. The Contractor shall submit the bills on actual measurement as executed to be certified by our Project Architects M/s. First Principle Designs Pvt. Ltd. Designs Pvt. Ltd. and countersigned by our Representative.
- g. All extra works executed not listed below shall be payable at costs of Material (FOR at site) + Labour + Service Tax and 15% (profit & overhead) to be approved by the Architects / Project Manager.
- h. No escalation towards material & labour is payable as a part of this service order, except for price variation on Reinforcement & Structural Steel, Ready Mix Concrete & Cement over the base rates agreed.



- i. Nothing extra shall be payable for scaffolding for any item except for the scaffolding included as a part of the rate for shuttering of concrete.
- j. The Contractor is responsible for End-to-End functionality of the works mentioned under the work order. No extra items pertaining to any of the scheduled items is payable to the Contractor.
- k. The total work which is mentioned in this order is the FINAL WORK which is to be done; if any additional work will be required the same will be informed by the Owner in writing. No extra payment will be payable for any work that is mentioned along with this order.
- l. Construction Water and Power shall be provided by the Owner at one point, free of cost. However, the distribution from that point to support the ongoing works shall be the responsibility of the Contractor and no extra payments shall be payable on this account.
- m. No payments shall be payable on account of workers hutments that shall have to be created by the Contractor at his own cost. The toilets as existing at site can be used by the Contractor's workers. However, the maintenance of the same shall be the responsibility of the Contractor.

## **5. Performance Guarantee**

- i. The contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent) of the Tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement (not withstanding and/or without prejudice to any other provisions in the contract within period specified in Schedule "F" of 'BID Data Sheet' from the date of issue of letter of acceptance. This period can be further extended by The Director upto a maximum period as specified in Schedule 'F' on written request of the contractor stating

the reason for delays in procuring the Performance Guarantee to the satisfaction of The Director. This Guarantee shall be in the form of Cash, in case Guarantee amount is less than Rs. 10,000/- or Deposit at Call receipt of any Scheduled Bank / Banker's Cheque of any Scheduled Bank /Demand Draft of a Scheduled Bank of a Scheduled Bank of any Scheduled Bank /Pay Order of any Scheduled Bank (in case of Guarantee amount is less than Rs.1,00,000/- or Government Securities or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the Form annexed hereto In case the Guarantee amount is more than Rs One lakh.

- ii. The Performance Guarantee shall be initially valid upto the stipulated date of completion plus 60 days beyond that, in case the time for completion of work gets extended, the contractor shall get the validity of Performance Guarantee extended to cover such extended time for completion of work. After recording of the completion certificate for the work by the competent authority, the Performance Guarantee shall be returned to the contractor without any interest.
- iii. The Director shall not make a claim to unearth Performance Guarantee except for amounts to which the BISHOP COTTON SCHOOL, SHIMLA is entitled under the contract (not withstanding and /or without prejudice to any other provisions in the contract agreement) in the event of:-
  - a. Failure by the contractor to extend the validity of the Performance Guarantee as described hereinabove, in which event The Director may claim the full amount of the Performance Guarantee.
  - b. Failure by the contractor to pay BISHOP COTTON SCHOOL, SHIMLA any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the Agreement, within 30 days of the service of Notice to this effect by Director, BISHOP COTTON SCHOOL, SHIMLA.
- iv. In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the

Performance Guarantee shall stand forfeited in full and shall be absolutely at the disposal of the BISHOP COTTON SCHOOL, SHIMLA.

## **6. Payment Terms**

- a. Mobilization advance of 10% against Bank Guarantee. The Mobilization advance is recoverable against the running bills on a pro-rata basis.
- b. Upto 75% against Equipment /Steel/ Cement/ RMC as per agreed conditions. The Contractor's bill shall be cleared within 7 days of presentation after recommendation by the Project Architects.
- c. Balance Amount within 21 days after final checking of the bill.
- d. Five percent (5%) security will be deducted from every bill that shall be refunded back after satisfactory completion of the Project against BG valid for the Defect Liability Period, after due certification by the Project Architects i.e., 12 months after the date of actual completion.
  - i. All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from his Security Deposit or from any sums which may be due to or may become due to the contractor by BISHOP COTTON SCHOOL, SHIMLA on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions, the contractor shall within 10 days make good.
  - ii. The Director, Bishop Cotton School shall have the rights to forfeit the entire or part of the amount of security deposit lodged by the contractors or to appropriate the security deposit or any part thereof in or towards the satisfaction of any sum due to be claimed for any damages, losses charges, expenses or costs that may be suffered or incurred by the BISHOP COTTON SCHOOL, SHIMLA. The decision of Director, Bishop Cotton School in respect of such losses, damages, charges, costs or expenses shall be final and binding on the contractors.

## **7. Taxes and Deductions**

- a. The final prices include all taxes at the prevailing rates.
- b. TDS and other taxes as applicable shall be deducted from the Contractor's invoice as per the actual as per Govt. Norms for which a certificate shall be issued as per government norms.

## **8. Compliance with Labour Laws**

- a. The Contractor shall comply with all the statutory compliance including but not limited to labour laws, such as ESI Act, PF Act, Minimum Wages Act, Contract Labour (Regulation & Abolition) Act, Factories Act, payment of wages Act, any other statutory requirements etc. required under any law as applicable from time to time.
- b. The Contractor shall manage all compliance issues including necessary liaisons with all the Government Agencies related to the Labour and other such issues till the handing over of the premises to the Client for full use.
- c. The Contractor shall ensure the compliance of all Labour Laws enforced by the State / Central Governments throughout the working period.
- d. The Client shall not hold any responsibility in this regard.
- e. The Contractor shall be fully responsible for any accident or damages done to any person caused during the course of Construction activity being carried out under his supervision. The Client shall not be liable for any compensation for such an accident or damage.

## **9. Insurance**

- a. The validity of this Letter of Intent is subject to your submission of the following certificates: -

Contractors All Risk Policy (CAR Policy) covering the following but not limited to -

- Public liabilities insurance
- Workers compensation insurance;
- Third Party insurance;

The submitted certificates shall be subjected to the approval of our procurement department.

- b. All Risks policies shall be your responsibility and you will produce the Certificate of Insurance to us within 7 days of issuance of LOA.

## **10. Time of Completion & Penalties for Delay**

- a. The time allowed for carrying out the work will be reckoned from 15 days after the date of written order to commence the work.
- b. 60 days from commencement of the work, with any possible delays to be reported to Architect and Client in advance, justifying the cause of the possible delays. If approved by the Architect, the date can be re-scheduled.
- c. In case of any undue delay, liquidated damages of 1 % of total contract value per week or part there of delay after scheduled date of completion subject to a maximum of 5% of the contract value will be levied subject to approval of the Architect and Authorized representative of The Client. Time is the essence of the Contract.

## **11. Records and Measurements**

- a. The Contractor shall maintain proper Measurement books and record all the measurement of all the work regularly. The measurements recorded shall be verified by the Project Manager.

## **12. Responsibilities during work Implementation**

- a. The Contractor shall provide a dedicated Project Manager / Site Engineer / requisite Supervisors to supervise the works and to coordinate all activities at site with other Contractors as and when required for the work to keep going as scheduled.
- b. The Contractor shall be responsible for keeping the site clean at all times. He shall make all arrangements for lighting up the site for all works to be facilitated.
- c. Good housekeeping practice shall be ensured by the Contractor such as cleaning of debris, mortar droppings etc. spread mats / P.V.C sheet as required to protect existing flooring, wall plaster etc. shall be provided. Nothing Extra will be paid on this account.
- d. The Contractor or his authorized representative shall attend the periodic review meetings with Owner & Project Architects for reviewing status in respect of work Planning & scheduling, mobilization of manpower, materials, day to day organization, execution & supervision of work, quality assurance, project monitoring & progress, Quantity survey billing functions.
- e. Contractor has to make his own arrangement for storage of materials & their safety.
- f. Watch & ward shall be the responsibility of the contractor till the installations are handed over to the Owner. Nothing extra will be paid on this account.
- g. The Contractor shall be responsible for protection of electrical, mechanical fittings, sanitary fixtures against pilferage & breaking during period of installation & thereafter until work is duly handed over after completion.

- h. The staff, employees and personnel employed or deployed by the Contractor for the performance of the works pursuant to this LOA / contract remain shall not claim any employment from the Owner and the Contractor shall be solely liable for the payment of all their wages, charges, fees, and such contributions, statutory or otherwise, as may be required to be paid to such employees from time to time.
- i. Contractor shall submit AS-BUILT drawings for the works carried out by him after the completion of works at site.

### **13. Minimum Billing Amount**

No payment shall be made for work, estimated to cost Rs. Twenty Lakh or less till after the whole of the work shall have been completed and Certificate of Completion given. For works estimated to cost over Rs. Twenty Lakh, the interim or running account bills shall be submitted by the contractor for the work executed.

### **14. Coordination with other Contractors**

In the course of performing your works under this Letter of Appointment, you are expected to coordinate your work with other specialized Contractors and appointed Consultants as appointed by us for completing the Project.

These Contractors includes but not limited to the following trades:-

- Mechanical Infrastructure including Heating and Cooling Works
- Any other Contractor as specified by the Architect / Project Manager

### **15. Supervisions**

Contractor Superintendence, Supervision, Technical Staff & Employees

- i. The contractor shall provide all necessary superintendence during execution of the work and as along thereafter as maybe necessary for proper fulfilling of the obligations under the contract.

The contractor shall immediately after receiving letter of acceptance of the Tender and before commencement of the work, intimate in writing to The Director the name, qualifications, experience, age, address and other particulars along with certificates, of the principal technical Representative to be in charge of the work.

## **16. Warranties**

Warranty of the equipment / products supplied for the above-mentioned job shall be as per manufacturer's standard terms for products supplied and 12 months for the services rendered.

## **17. Defect Liability Period**

- a. The possession of site and date of commencement shall be immediate on receipt of notice from us.
- b. The Contractor is liable for any repair/replacement/rectification of items covered under this contract (as per annexure I) for 12 months from the date of Completion of the Project Site Acceptance by the Architect.
- c. You shall be rectifying all defects identified by our consultants and us relating to your works during the construction period and defect liability period respectively.

## **18. Indemnification**

- a. The Contractor shall indemnify The Owner and its representatives and keep fully indemnified on demand, loss, cause or damage to any property including the subject material / equipment, or injury or death of any person caused by any negligent act or omission or misconduct of the Contractor or its employees, labourers, agents in the process of job.
- b. The Contractor will indemnify and hold harmless Owner and its representatives., its affiliates, directors, employees, agents,



(collectively Owner parties) against, and hold them harmless from expenses (including without limitation, all settlements, judgments, fines, damages, legal fees, court costs, expert fees, etc.) by reason of any claim demand tax. Penalty or judicial or administrative proceeding or investigation arising from – breach by The Contractor for confidential obligation under the agreement, breach of Agreement damage, theft or misappropriation of property / funds of The Owner, any claims for damages to property or death or personal injury to the extent caused by the acts or omission of contractor.

## **19. After Completion**

- i. After completion of the work and also at any intermediate stage in the event of non- reconciliation of materials issued, consumed and in balance theoretical quantity of materials issued by the EMPLOYER for use in the work shall be calculated on the basis and method given here under: -
  - a) Quantity of cement & bitumen shall be calculated on the basis of quantity of cement & bitumen required for different items of work as CPWD Schedule. In case any item is executed for which standard constants for the consumption of cement or bitumen are not available in the above-mentioned schedule/statement or cannot be derived from the same shall be calculated on the basis of standard formula to be laid down by Project Manager.
  - b) Theoretical quantity of steel reinforcement or structural steel sections shall be taken as the quantity required as per design or as authorized by The Project Manager, including authorized lap pages, chairs etc. plus 3% wastage due to cutting into pieces, such theoretical quantity being determined and compared with the actual issues each diameter wise, section wise and category wise separately.
  - c) For any other material as per actual requirements.

- ii. The said action under this clause is without prejudice to the right of the EMPLOYER to take action against the contractor any other conditions of contract for not doing the work according to the prescribed specifications.

## **20. Termination**

This contract / work order may be terminated prior to the said expiration period

- a. By mutual consent given in writing and signed by both the parties here to or.
- b. Due to Non-performance: The Owner shall reserve the right to terminate this order with effect from such date, if any case of inefficient performance by the Contractor or its staff and any advance paid on this account would be returned to The Owner.
- c. Due to Malpractice: The Owner shall reserve the right to terminate this order with effect from such date, if any case of any malpractice by the Contractor.
- d. Effect of Termination: In case of termination because of any reason '20(a)' or '20 (b)' above, the amount paid as advance to The Contractor for which services have not utilized, would be returned to the Client with IMMEDIATE effect.

## **21. Dispute Resolution**

- a. If any dispute or difference arises to this letter of intent weather during the progress of the work or after its completion or weather before or after the termination, abandonment or breach of the Contract as such dispute or difference can't be resolved between both parties, either party shall, within (30) Gregorian calendar days, give notice in writing to the other party of the existence of such dispute.

- b. The notice shall include a detailed description of the facts of the dispute with relevant date, name of personnel involved, references to relevant documentation (with copies attached) the pertinent Contract provision (s), and a statement of contentions and conclusions.
- c. Upon providing such notice, the parties shall first try to settle the dispute or differences in an amicable manner through direct discussion between its Directors / Seniors Management Personnel. On such direct discussion if either party believes, for any reason whatsoever, that a satisfactory solution of the matter can't be resolved, either party may give a written notice of that belief to the other party and proceed to arbitration in the manner hereinafter provided.
- d. In the event of any dispute between the parties, the same shall be referred to the Director of the Employer. If the parties still fail to arrive at an agreed settlement within one Gregorian calendar month, then the dispute shall be referred to an arbitral tribunal.
- e. It is agreed and understood that the existence of any claim or dispute will not entitle you to stop or delay the work and you will keep the work / Services continued in accordance with the provisions of the work order with all due diligence and shall perform all the consultant's obligations under the said work order.

## **22. Arbitration:**

Any disputes arising out of this order shall be settled on terms of the provisions of Indian Arbitration and Conciliation Act, 1996 and its statutory amendments, modifications as applicable at the time of dispute.

The arbitral tribunal shall be constituted of three arbitrators, one arbitrator to be appointed by each party. The two arbitrators shall appoint the third independent arbitrator through consensus before proceeding with arbitration. The arbitral tribunal shall give the award within 3 (three) calendar months of entering upon the reference. Time may be extended only through mutual consent of both parties

failing which the arbitrator shall be appointed afresh in the manner detailed above, shall govern the Arbitration. The venue for the Arbitration shall be Delhi / New Delhi. The Delhi / New Delhi courts shall have the overall jurisdiction against any such dispute arising out of these terms. The cost of arbitration / legal proceeding shall be borne by you, the decision of the tribunal / court shall be final and binding on both parties to the contract.

### **23. Duty of Care**

With the performance of the works by you under this Letter of Intent, you are expected to undertake reasonable care and skill to execute the works in a professionally acceptable and timely manner as required by us. Any breach of such duty of care of your part, may give rise to a claim in negligence against you.

## 9. ANNEXURE – II: GENERAL CONDITIONS OF CONTRACT

### 1.0 DEFINITIONS

The following terms or expressions, as used in these General Conditions specification shall have the meanings defined hereunder, except where the context otherwise requires.

- 1.1 Contractor: The contractor shall mean “the individual or Firm or Company, whether incorporated or not undertaking the work and shall include the legal personal Representatives of such individual or the persons comprising such firm or company, or the successors of such company and the permitted assignees of such individual or firm or firms or company.
- 1.2 Contract: The term “Contract” shall mean a **written and signed** Letter of Intent / Work order between the Contractor and the Sub-Contractor for the execution of the project, Letter of Intent, understanding, memoranda, minutes of documents, if any, made between the parties in relation to the contract will be part of the work order.
- 1.3 Site: The site shall mean the land or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
- 1.4 'Works' means the works to be carried out in accordance with this Contract and tender specifications including all subsequent revisions, inclusions, exclusions, site instructions or additional works as specified by the Architect.
- 1.5 Contract Price' means the amount mentioned in the Bill of Quantities of the sub-contractor.

- 1.6 Temporary Works' means all temporary works of every kind required during the construction work and maintenance of the Works.

## **2.0 SPECIFICATIONS**

Tender specification or any modification in specification by the Client/Architect shall be prevail.

## **3.0 ASSIGNMENT & SUB-LETTING**

- 3.1 The Contractor shall not assign or sub-contract without the written consent of the Owner or its representatives and such consent even if given shall not in any way relieve the Contractor from any of his liabilities or obligations under the Contract and the Contractor shall be responsible for all act, defaults and neglects of any work, his agents, Servants or workmen as fully as if they were acts, defaults or Neglects of the Contractor or his agents, servants or workmen.
- 3.2 The Contractor should settle all claims from the Sub-Contractor and no liability on this account will devolve on Owner. The Contractor will ensure that any dispute between the Contractor and the Sub-Contractor will not affect the progress of the work or entitle the Contractor to suspend the same.
- 3.3 The Contractor shall also ensure and be absolutely responsible to comply with the provisions of all-statutory obligations and regulations for all labourers employed or engaged by him or by his sub-Contractors in connection with the work.

## **4.0 EXTENT OF CONTRACT.**

### **4.1 Extent of Contract: -**

As/BOQ and Drawings to be prepared and issued by First Principle Designs Pvt. Ltd., including revisions during the Project execution.

## **5.0 GENERAL OBLIGATIONS**

### **5.1 Inspection of Site.**

The Contractor is deemed to have inspected and examined the Site and its surroundings and has satisfied himself as to the nature of the ground and sub-soil, the form and nature of the site, the quantities and nature of the work and materials necessary for the completion of the works, the means of access to the site, entry and exit restrictions regarding labour, materials, equipment etc, The local labour conditions, the accommodation he may require and in general shall himself obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect this Contract.

### **5.2 Sufficiency of tender**

The Contractor is deemed to have satisfied himself as to the correctness and sufficiency of his works and of the rates and prices stated in the price and the schedule of rates and prices (if any) which rates and prices shall cover all his obligations under this Contract and all matters and things necessary for the proper completion and maintenance of the work.

### **5.3 Works to the satisfaction of the Project Manager**

The Contractor shall execute, complete and maintain the works in strict accordance with this Contract to the satisfaction of the Project Manager and shall comply with and adhere strictly to the Project Manager's instructions and directions on any matter (whether mentioned in this Contract or not) touching or concerning the work.

### **5.4 Programme to be furnished**

Within seven working days after the acceptance of this Work order the Sub-Contractor shall submit the programme to the Project Manager & the Contractor

for his approval a programme in the form of critical path network showing the order of procedure and method in which he proposes to carry out the Works. The Sub-Contractor shall also whenever required by the Project Manager furnish further detailed programme as well as particulars of the Sub-Contractor arrangements for carrying out of the Works and of the Constructional Plant and temporary works which the Sub-Contractor intends to do, use or construct as the case may be. The submission to and approval, if any by the Project Manager of such Programme or particulars shall not relieve the Sub-Contractor of any of his duties or responsibilities under this contract. The programme prepared shall get synchronized with related works of other Sub-Contractor.

#### **5.5 Contractor employees**

The Contractor shall provide and employ on the site in connection with the execution and maintenance of the Works:

- a. Only such technical assistance as is skilled and experienced in their respective callings and such sub-agents, foreman and leading hands as are competent to give proper supervision to the work they are required to supervise, and
- b. Such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution and during completion of the Works.

#### **5.6 Removal of Workman.**

The Project Manager or the Owner shall be at liberty to object to and require the Contractor to remove forthwith from the works any person employed by the Contractor in or about the execution or maintenance of the works who in the opinion of the Project Manager or the Sub-Contractor misconduct himself or is incompetent or negligent in the proper performance of his duties or whose employment is otherwise considered by the Project Manager or the Sub-Contractor to be undesirable and such person shall not be again employed upon the works without the written permission of the Project Manager.

Any person so removed shall be replaced by the Sub-Contractor immediately by a competent substitute approved by the Project Manager.



### **5.7 Setting out.**

The Contractor shall be responsible for the true and proper setting-out of the works and for the correctness of the Positions, levels, dimensions and alignments of work, works and for the provision of all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of the works any error shall appear or arise in the positions, levels, dimensions or alignments of any part of the works, the Sub-Contractor on being required to do so by the Project Manager, shall at his own expense rectify such error to the satisfaction of the Project Manager. The checking of any setting out or of any Line or level by the Project Manager shall not in any way relieve the Contractor of his responsibility for the correctness thereof. The Contractor shall carefully protect and preserve all benchmarks, reference pillars, and pegs and other things used in setting-out the work.

### **5.8 Watching and lighting.**

The Contractor shall in connection with the works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Project Manager or the Contractor or by any duly constituted authority for the protection of the works or for the safety and convenience of the public and others.

### **5.9 Care of Works.**

From the commencement to the completion of the works the Contractor shall take full responsibility for the care thereof and of all temporary works and in case any damage, loss or injury shall happen to the works or to any part thereof or to any temporary works from any cause whatsoever (save and except the excepted risks shall at his own cost repair and make good the same so that at completion the works shall be in good order and Condition and in conformity in every respect with the requirements of this Contract and the Project Manager's instruction. In the event of any such damage, loss or injury happening from any of the excepted risks the Contractor shall if and to the extent required by the

Project Manager repair and makes good the same as aforesaid at the cost of the Contractor. The Contractor shall also be liable for any damage to the works performed by him, or on his behalf in the course of any operations carried out by him for the purpose of complying with his obligations.

#### **5.9 Excepted risk.**

The "excepted risks" are war hostilities (whether war is declared or not), invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war or (otherwise than among the Contractor's employees) riot, commotion or disorder or any such operation of the forces of nature as reasonable foresight and ability on the part of the Contractor could not foresee or reasonably provide against (all of which are herein Collectively referred to as the "excepted risks").

#### **5.10 Damage to persons & property.**

The Contractor shall indemnify and keep indemnified the Owner and its representatives against all losses and claims for injuries or damages to any person or any property whatsoever which may arise out of or in Consequence of the erection, completion and maintenance of the Works or any other actions or inaction of the Contractor and against all Claims demands, proceedings, damages, costs charges and expenses whatsoever in respect of or in relation thereto. Provided always that nothing herein contained shall be deemed to render the Owner liable for or in respect of or to indemnify the Owner against and compensation or damages for or with respect to:

- a. The permanent use or occupation of land by the Works or any part thereof.
- b. The right of the Owner to Execute the Works or any part thereof on, over, under in or in or through any land.
- c. Interference whether temporary or permanent with any right of light air way or water or other easement or Quasi-easement which is the unavoidable result of the Construction of the works in accordance with this Contract.
- d. Injuries or damages to persons or property resulting from any willful misconduct or Gross negligent act done or committed during the currency

of this Contract by the Contractor, his agents, servants or other Contractors or for or in respect of any claims, demands, proceedings, damages, Costs, charges and expenses in respect thereof or in relation there.

#### **5.11 Accident or injury to workmen.**

The Owner shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or his sub-Contractors and third party Personnel save and except an accident or injury resulting from any act of the Contractor, his agents or servants and the Contractor shall keep indemnify and keep indemnified the Owner against all such damages and compensation (save and except as aforesaid) and against all claims demands, proceedings, costs, and charges and expenses whatsoever in respect thereof or in relation thereto. The Contractor himself shall arrange for fulfillment of all police and Legal formalities in case of any accident.

#### **5.12 Giving of notice & payment of fees.**

The Contractor shall give all notices and pay all fees required to be given or paid by any Central or State statute ordinance or other Law or any regulations or by law of any local or other duly constituted authority in relation to the execution of the Works or of any temporary Works and by the rules and regulations of all public body and companies whose property or rights are affected or may be affected in any way by the works or any temporary Works.

#### **5.13 Compliance with statutes, regulations etc.**

The Contractor shall conform in all respects with the provisions of any such statute Ordinance or Law as aforesaid and the regulations or by laws of any local or other duly constituted authority which may be applicable to the works or to any temporary works and with such rules and regulations of public bodies and Companies as aforesaid and shall keep the Owner indemnified against all penalties and liabilities of every kind for breach of any such statute, ordinance or by-law. No delay on this account shall be acceptable.

#### **5.14 Fossils etc.**

All fossils, coins, articles, minerals of value or antiquity and structures and other remains or things of geological or archaeological interest discovered in the site shall as between the Owner and the Contractor be deemed to be the absolute property of the Owner. The Contractor shall take all reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article of things and shall immediately upon discovery thereof and carry out at the expense of the Contractor the Project Manager's orders as to the disposal of the same.

#### **5.15 Liability for loss or damage to constructional plant**

The Owner shall not at any time be liable for the loss of or damage to any of the Constructional Plant, temporary works, materials, consumables etc which have been brought to the site by the Contractor.

#### **5.16 Movement of constructional plant in operating plant.**

The Contractor shall take sufficient care in moving his Constructional Plant and Equipment from one place to another so that they may not cause any damage to the property of the Owner or any third party, Particularly to the roads, overhead and underground cables, pipes and/or any other services, equipment and building and in the event of the Contractor's failure to do so, the cost of such damages including eventual loss of working hours as estimated by the Project Manager is to be borne by the Contractor.

#### **5.17 Progressive clearance of site**

The Sub-Contractor shall keep the site in a neat and workmanlike condition and shall daily clear away the rubbish, debris etc which are accumulated at site and dispose them off suitably at places specified by the Project Manager / Owner.

#### **5.18 Clearance of site on completion.**

On the completion of works the Contractor shall clear away and remove from the site all constructional plant, rubbish, debris and temporary Works of every kind and leave the whole of the site and works clean and in a workmanlike condition to the satisfaction of the Project Manager and the Owner. Rubbish

and debris shall be disposed off by the Contractor away from the site only at areas specified by the Project Manager and Owner. All other materials including dismantled materials belonging to the Contractor and 'non-recoverable' scrap generated from materials supplied by the Owner shall be transported and stacked by the Contractor at any place within the Owner's site as directed by the Project Manager & Owner.

#### **5.19 Final payments subject to site clearance on completion.**

No final payment in settlement of accounts for the works shall be held to be due or shall be made to the Contractor until such site clearance has been effected by the Contractor. In the event of the Contractor failing to comply with the aforesaid provision within Seven (7) days after receiving notice from the Project Manager or Owner to the effect, such clearance effect may be made by the Contractor and all expenses incurred by the Owner for such clearance shall be recovered from the Contractor. The Owner shall not be liable for any loss or damage to the Sub-Contractor's property due to any such removal, which may be effected by means of public sale or in such way as the Owner deems fit and which is most convenient to him.

### **6.0 LABOUR**

#### **6.1 Contractor to abide by all labour rules and regulations**

In respect of each and every labour directly or indirectly engaged on the Works in connection with the execution of the Contract the Sub-Contractor shall be fully responsible to comply with and fulfill the provisions of the Factories Act 1948, Contract Labour (Regulation & Abolition) Act 1970, Minimum Wages Act, 1948, payment of wages Act, 1936, Provident Fund Act, 1952, Payment of Gratuity Act 1972 and any amendment and/or future enactment thereof and all other legislation and rules of the State and/or Central government or other local authority, framed from time to time governing the protection of health, sanitary arrangements, wages, welfare and safety for labour employed on building and construction Works. The rules and other statutory obligations with regard to fair wages, welfare and safety measures, maintenance of register etc will be deemed part of this Contract.

## **6.2 Claim under labour etc.**

If any money shall as a result of any claim or application made under the labour acts be directed to be paid by the Contractor such money shall be deemed to be money payable to the Contractor by the Contractor and on failure by the Contractor to repay the Contractor any money paid by the Contractor as aforesaid within seven days after the same shall have been demanded from the Contractor the Contractor shall be entitled to recover the same from any sum due or accruing to the Contractor under this or any other Contract with the Contractor without prejudice to any other remedy of the Contractor for such recovery.

## **6.3 Provision of workmen's compensation etc.**

The Contractor shall at all times indemnify and keep indemnified the Owner against all claim for compensation under the provisions of the Workmen's Compensation Act 1923 or any other law for the time being in force for or in respect of any workmen engaged by the Contractor or by any of his sub-Contractors in carrying out this Contract and against all costs and expenses or penalties incurred by the Owner in connection therewith. In every case in which, by virtue of the provisions of the said act, the Contractor is obliged to pay compensation to a workman engaged by the Contractor or any of his Sub-Contractor in executing the works, the Owner shall recover from the Contractor the amount of the compensation so paid and without prejudice to the rights of the Owner under the said act or any other law the Owner shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by the Contractor to the Owner, whether under this Contract or otherwise without prejudice to any other remedy of the Contractor for such recovery. The Contractor shall not be bound to contest any claim made against him under the said act, except on the written request of the Owner and upon his giving to the Contractor full security for all costs for which the Contractor might become liable in consequences of contesting such claim.

**6.4 Preservation of Peace.**

The Contractor shall take requisite precautions to prevent any riotous or unlawful behavior by or amongst the workmen and/or others employed on the Works by him or by his sub-contractors and for the preservation of peace and protection of the inhabitants and security of property in the neighborhood of the works.

**6.5 Use of intoxicants.**

The sale or disposition of ardent spirits, drugs or other intoxicating beverages in the site or in any of the buildings, encampments or tenements occupied by or within the control of the Contractor or any of his employees or Contractors is forbidden and the Contractor shall secure strict compliance in this regard.

**6.6 Age limit of labour.**

The age limit for employment of labour shall be in strict accordance with the existing labour rules and regulations.

**6.7 Return of labour.**

The Contractor if required by the Project Manager or Owner shall submit returns in detail in such form and at such interval as the Project Manager may prescribe showing number of different classes of labour employed on the Works from time to time by the Contractor.

**6.8 Observance by sub-contractors.**

The Contractor shall ensure and be responsible for the observance of the provisions of aforesaid clauses by the sub-Contractors employed by him in the execution of this contract.

## **7.0 WORK MATERIALS AND PLANT**

### **7.1 Quality of material and workmanship and tests**

All materials required for erection and workmanship shall be of the respective kinds described in this Contract and in accordance with the Project Managers instruction and shall be subjected from time to time to such inspection and/or tests as the Project Manager may direct at the place of manufacture or fabrication or on the site or at such other place or places.

The Contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for examining, inspecting, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the Works for approval as may be required by the Project Managers.

### **7.2 Default of Contractor in compliance.**

In case of default on the part of the Contractor in carrying out such order the Owner shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be borne by the Contractor and shall be deducted by the Contractor from any money due or which may become due to the Contractor.

### **7.3 Way leaves etc.**

The Contractor shall bear all expenses and charges for special or temporary way leaves required by him about access to the site.

### **7.4 Time for completion.**

Subject to any requirement in this Contract as to the completion of any portion of the Works before completion of the whole of the Works, the whole of the Works shall be completed within the time stated in the Contract or within such extended time as may be allowed by the Owner or its representatives.



## **7.5 Rate of Progress.**

The whole of the materials, constructional plant and labour to be provided by the Contractor under hereof and the mode, manner and speed of execution and maintenance of the works are to be of a kind and conducted in a manner to the satisfaction of the Project Manager. Should the rate of progress of the Works or any part thereof be at any time in the opinion of the Project Manager too low to ensure the completion of the Works by the prescribed time for completion the Project Manager shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as are necessary and the Project Manager may approve to expedite progress so as to complete the works by the prescribed time for completion. The Contractor shall not be entitled to any additional payment for taking such steps.

## **8.0 MAINTENANCE AND DEFECTS.**

### **8.1 Cost of execution of work of repair etc**

All such work shall be carried out by the Contractor at his own expense if the necessity thereof shall in the opinion of the Project Manager be due to the use of materials or workmanship not in accordance with the Contract or to neglect or failure on the part of the Contractor to comply with any obligation expressed or implied on the Contractor's part under this Contract. If the aforesaid repair work involves materials which are issued by the Contractor as 'free issue', the cost of the same will be borne by the Contractor. If in the opinion of the Project Manager such necessity shall be due to any other cause the value of such work shall be ascertained and paid for as if it were additional work as per the conditions stipulated in the letter of Appointment.

## **9.0 FORCE MAJEURE**

9.1 The terms and conditions mutually agreed upon this contract shall be subject to Force Majeure.

- 9.2 The Contractor shall not be considered in default in the performance of its obligations hereunder for such period , if such performance is prevented or delayed because of war, hostilities, revolution, civil commotion, epidemic, fire wing, flood, earthquake, non-supply of water or electricity from Government authorities or because of any law or order proclamation, regulation or ordinance by any Government or of any sub division thereof or an order by court of Law, any act of God and state or any other cause.
- 9.3 In the event of occurrence of any of the eventualities mentioned in clause above, the party affected shall by a notice in writing, intimate the other party within 10 days of occurrence of such event. Similarly a notice will be sent within 7 days of cessation of Force Majeure.

Should one or both parties be prevented from fulfilling their contractual obligations by a state of force majeure lasting continuously for a period of six months the parties shall consult each other regarding future course of action under this contract.

## **10.0 CANCELLATION OF THE CONTRACT**

The Owner shall be entitled at any time of his discretion to cancel the Contract if in the opinion of the Owner; the cessation of the work becomes necessary owing to any cause whatsoever.

The Contractor shall not be entitled to any compensation in addition to the payment for the work actually performed by the Contractor and accepted by the Owner calculated on the basis of Job performed rates as a result of such cancellation as mutually agreed upon.

## **11.0 TERMINATION OF CONTRACT**

Notwithstanding anything elsewhere provided under the Contract and in addition to any other right or remedy of the Owner under the Contract or otherwise including the right of the Owner to claim compensation for delay in completion of work, the Owner shall be entitled to terminate the contract by written notice at any time during its currency on or after the occurrences of any one or more of the following events contingencies, viz.

- I. Default or failure by the Contractor of any of the obligations under the contract including but not limited to :
  - a. Failure to execute the works in accordance with the Contract.
  - b. Disobedience of the instruction of the Owner/Project Manager.
  - c. Negligence in carrying out the works.
  - d. Abandonment of the works or any part thereof.
  - e. Suspension of the work for 7 days without information of the Owner/Project Manager.
  - f. Committing breach of any terms conditions or provisions of the contract.
  - g. If the Contractor becomes incapable of carrying out the work.
  - h. If the Contractor misconduct himself in any manner.
  - i. Commencement of liquidation or winding up proceedings against the Contractor or insolvency of the Contractor or any Director of the Contractor.
  - j. Distress execution or other legal process levied upon Sub-Contractor goods and / or assets.

- k. If the Contractor shall assign his interests or any part thereof in the Contract to a Third party without prior approval from the Owner in writing.

The decision of the Owner as to whether any event mentioned above entitles the Contractor to terminate the contract has occurred or not, shall be final and conclusive and binding upon the Contractor.

## **12.0 GOVERNING LAW**

The terms and provision of this Contract shall be governed and interpreted in accordance with the laws of India.

## **13.0 SECRECY**

The Contractor shall treat this document and any other drawings/ documents that will be passed on to him for the purpose of execution of this contract as confidential documents. The Contractor shall prevent duplication or disclosure of any such information made available to him by the Project Manager/ Owner's representative and make access to such information only to those who shall be involved in executing the works.

## **14.0 STATUTORY REGULATIONS**

The Contractor shall strictly abide by all the applicable laws and regulations which may be applicable to the Works and shall keep the Owner indemnified against all liabilities and penalties in respect thereof. No delay on this account shall be acceptable.

## **15.0 SAFETY & SECURITY**

The Contractor throughout the progress of work shall take all precautions and comply with all statutory requirements in respect of safety as per Factories Act/ Contract Labour Act, Indian Electricity Act, Explosive Act and any other relevant Act, upped the latest amendment. The Contractor shall provide to their worker's / Employee's necessary and proper safety equipment including wearing of.

## **16.0 JURISDICTION**

All disputes, difference arising out of, connected with and/or in any way related with this Contract and/or interpretations of any of the clause contained therein and/or conforming part of the Contract shall be subject to exclusive jurisdiction of the court at New Delhi.

## **17.0 NOTICES**

### **SERVICE OF NOTICE ON CONTRACTOR / SUB-CONTRACTOR**

Any notice to be given to the Contractor under the terms of the Contract shall be served by sending the same by post to or delivering the same at the Contractors Registered Office.

## **18.0 SUPERVISION BY ARCHITECT / PROJECT MANAGER.**

The Contractor shall carry out the work under the General supervision and to the satisfaction of the Owner. The Contractor shall receive instructions and direction from Owner through its representatives in connection with the work and shall strictly abide by the same.

## **19.0 INSURANCE**

The Contractor shall insure all machinery, equipment, material belonging to him and labour employed under all risks including Workmen Compensation act, and Third-Party Liability and indemnify the Contractor from any claim arising out of it. The Insurance Policy in original shall be produced to our Project Manager for verification and record.

## **20.0 ACCIDENT OR INJURY TO WORKMEN**

The Contractor shall be solely liable for any accident or injury that may happen to any of his personnel engaged in connection with work according to the contract. The Owner shall not be liable for, or in respect of any, damage or compensation payable at law in respect of, or in consequence of and accident or injury to any personnel in the employment of the Contractor and the Sub-Contractor shall indemnify and keep indemnified the Owner against all such claims, damages, compensations and proceedings.

The Contractor shall forthwith report in writing to the Owner all cases of accidents to any of his personnel and shall make every arrangement to render complete assistance and aid to the victims of the accidents.

#### **21.0 COMPLIANCE WITH STATUTORY AND OTHER REGULATIONS**

The Contractor shall in all matters arising in the performance of the Contract. Conform at his own expenses with the provisions of all State regulations, statutes, ordinances or laws and the rules, or bye-law or any local or other duly constituted authority and shall keep the Owner indemnified against all penalties and liabilities of every kind for breach of any such statute, ordinance, law, rule, regulation or bye-law.

#### **22.0 LABOUR RULES**

In respect of all labour directly or indirectly, employed by the Sub-Contractor shall comply with the provisions of all legislations and rules of the Site or other local authority, framed from time to time governing the protection of health, sanitary requirements, wages, welfare, amenities like drinking water, first aid and other medical help and safety for labour employed in such work.

The rules and other statutory obligations with regard to fair wages, welfare and safety measures, maintenance of registers, workmen's compensation etc., will be deemed to be part of the contract and shall be strictly completed with by the Contractor. The Contractor shall at all times keep indemnified the Owner against all claims for compensation under the various rules and regulations.

#### **23.0 ACCOMODATION**

The Contractor shall, at his own expense, make adequate arrangements for housing, supplying of drinking water and provision of latrines and urinals for his staff and labour and disposal of sewerage and sullage. On completion of the contract, if required to the Sub-Contractor same shall be handed over free of cost neat and clean shape or dismantle the same.

#### **24.0 MEDICAL FACILITIES AT SITE.**

The Contractor shall provide medical facilities at the site and render immediate medical help to the victims of accidents, if any, a site.

## **25.0 SAFETY AND SECURITY REGULATIONS.**

The Contractor shall abide by all the security regulations at site as is required under regulations and/or laid down by the Owner. The Contractor shall also arrange all safety general provisions for his labour and personnel engaged in carrying jobs as specified in the provisions of the contract and/or is required as per standard practice.

## **26.0 DAMAGE TO PERSONS OR PROPERTY**

The Contractor shall indemnify and keep indemnified the Owner against all losses and claims for injuries or damages to any person or any property whatsoever which may arise out of, or in consequence of, the work at site carried out by the Contractor and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereof.

## **27.0 GENERAL LIABILITY**

Neither party shall not be liable for any consequential losses such as but not limited to additional production cost, loss or production, loss of profit.

**For BISHOP COTTON SCHOOL, SHIMLA**

**For Contractor**

**Authorized Signatory**

**Authorized Signatory**

**Add address**





## 10. SAFETY CODE

- (i) Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground or from solid construction except such short period works as can be done safely from ladders. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying material is well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than  $\frac{1}{4}$  to 1 (4 horizontal and 1 vertical).
- (ii) Scaffolding or staging more than 12 ft. Above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have guard rail properly attached bolted, braced and otherwise secured at least 3 feet high above the floor or platform of such scaffolding or staging and extending along with entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding shall be so fastened as to prevent it from swaying from the building or structure.
- (iii) Working platform, gangways, and stairways should be so constructed that they should not sag unduly or unequally and if the height of the platform or the gangway or the stairway is more than 12 feet above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened, as described in (ii) above.
- (iv) Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 3'-0".
- (v) Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed; no portable single ladder shall be over 30 feet in length while the width between side rail in rung ladder shall in no case be less than 11-1/2" for ladder upto and including 10 feet in length. For longer ladders this width should be increased at least  $\frac{1}{2}$ " for each additional foot or length. Uniform step spacing shall not exceed 12. Adequate precautions shall be taken to prevent danger from electrical equipment's. No materials on any of the sites of work shall be so stacked or placed as to cause danger or

inconvenience to any person of the public. The contractor shall provide all necessary fencing and lights to protect the public from accidents, and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and costs which may be awarded in any such suit, action or proceedings to any such persons or which may with the consent of the contractor be paid to compromise any claim by any such persons.

- (vi) **Excavations and Trenching** All trenches four feet or more in depth, shall at all times be supplied at least one ladder for each 100 feet in length or fraction thereof ladder shall be extended from bottom of trench to at least 3" above the surface of the ground, the side of trench which are 5", or more in depth shall be stepped back to give suitable slope or security held by timber bracing so as to avoid the danger of side to collapse. The excavated material shall not be placed within 5 feet of the trench or half of the depth of trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.
- (vii) **Demolition:** Before any demolition work is commenced and also during the process of the work:
  - (a) all roads and open areas adjacent to the work site shall either be closed or suitably protected;
  - (b) no electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
  - (c) all practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be over-loaded with debris or materials as to render is unsafe.
- (viii) All necessary personal safety equipment as considered adequate by the Chairperson should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by those concerned.

- (a) Worker employed on mixing asphaltic materials, cement and lime mortar shall be provided with protective footwear and protective goggles.
- (b) Those engaged in white washing and mixing or staking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.
- (c) Those engaged in welding works shall be provided with welder's protective eye shields.
- (d) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- (e) When workers are employed in sewers and manholes, which are in used, the contractor shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into the manholes and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.
- (f) The contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 years are employed on the work of lead painting the following precautions should be taken.
- (g) No paint containing lead or lead products shall be used except in the form of paste or ready-made paint.
- (h) Suitable face masks should be supplied for use by the workers when paint applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
- (i) Overalls shall be supplied by the contractors to the Workmen and adequate facilities shall be provided to enable the working painters to wash during the course of work.
- (j) When the work is done near any place where is risk of drowning, all necessary equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue at any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

- (k) Use of hoisting machine and tackle including their attachments anchorage supports shall be conform to the following standards or conditions:
1. (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defect and shall be kept in good repair and in good working order.
  - (b) Every rope used in hoisting or lowering, materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
  2. Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in-charge of and hoisting machine including any scaffolding winch or give signals to operator.
  3. In case of every hoisting machine and of every chain ring hook, stickle, swivel any pully block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load, each safe working load of the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
  4. In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in- Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Project Manager whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.
- (ix) Motors, gearing transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum, the risk of accidental decent of the load, adequate precautions should be taken to reduce and to minimise; the risk of any part of a suspended load becoming accidentally displaced. When workers employed on electrical installations which are already energised insulting mats, wearing apparel, such as gloves, sleeves and boots as

may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

- (xi) All scaffolds, ladders and safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
- (xi) These safety provisions should be brought to the Notice of all concerned by display on a Notice board at prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
- (xii) To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangement made by the contractor shall be open to inspection by the Labour Officer, Architect for their Representatives.
- (xiii) Notwithstanding the above clauses from (i) to (xiv) there is nothing in these to exempt the contractor from the operations of any other Act or rule in force in the Republic of India.



## 11. PROFORMA FOR INDENTURE FOR SECURED ADVANCES

### BISHOP COTTON SCHOOL, SHIMLA INDENTURE FOR SECURED ADVANCES

(PROFORMA)

(For use in cases in which the contract is for finished work and the contractor has entered only into an agreement for the execution of a certain specified quantity of work in given time)

THIS INDENTURE made on this.....(day) of.....(month).....  
(year) between M/s. ....  
hereinafter called the Contractor which expression shall where the context so admits or implies be deemed to include his executors, administrators and assigns) of the one part and BISHOP COTTON SCHOOL, SHIMLA having its registered office at Shimla Bypass, near Khalini, New Shimla, Shimla, Himachal Pradesh 171002

and acting of the other part hereinafter called the **“EMPLOYER”**

WHEREAS by and agreement dated ..... (hereinafter called the said agreement) the Contractor has agreed to execute the work of ..... **AND WHEREAS** the Contractor has requested the EMPLOYER that he may be allowed advances on the security of materials absolutely belonging to him and brought by him to the site of the works and subject of the said agreement for use in the construction of such of the works as he has undertaken to execute at rates fixed for the finished work (inclusive of the cost of materials and labour and other charges) and WHEREAS the BISHOP COTTON SCHOOL, SHIMLA has agreed to advance to the Contractor 75% of the value of the materials collected at the site and certified by the Project Manager on the security of materials and quantities and other particulars of which are detailed in a running account bill signed by the Contractor and the EMPLOYER has reserved to itself the option of making any further advance or advances on the security of other materials brought by the Contractor to

the site of the said works. NOW THIS INDENTURE WITNESSETH that in pursuance of the agreement and in consideration of payment of the sum of Rs..... on or before the executive of those presents paid to the contractor by the BISHOP COTTON SCHOOL, SHIMLA (the receipt whereof the contractor does hereby acknowledge) and of such further advances (if any) as may be made to him as aforesaid, the contractor both hereby conversant and agree with the EMPLOYER and declare as follows:

1. That the said 75% payment paid by the BISHOP COTTON SCHOOL, SHIMLA to the Contractor as aforesaid shall be employed by the Contractor in or towards expediting the execution of the said works and for no other purpose whatsoever.
2. That the materials detailed in the said Running Account Bill which have been offered to and accepted by the BISHOP COTTON SCHOOL, SHIMLA as security are absolutely the Contractor's own property and to free from encumbrances of any kind and the Contractor will not make any application for or receive a further advance on the security of Materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnifies the EMPLOYER against all claims to any materials in respect of which 75% advance payment has been made to him as aforesaid.
3. That the materials detailed in the said Running Account Bill and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Director, BISHOP COTTON SCHOOL, SHIMLA and in the terms of the said agreement.
4. That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and on his own responsibility and shall be all times be open to inspection by the Director, BISHOP COTTON SCHOOL, SHIMLA, or any Officer authorized by him.



In the event of the said materials getting damaged or becoming deteriorated in a greater degree than is due to reasonable use and were thereof, the Contractor will forthwith repair and make good the same as required by the Project Manager.

5. That the said materials shall not on any account be removed from the site of the said works except within the written permission of the Director, BISHOP COTTON SCHOOL, SHIMLA or an officer authorized by him in that behalf.
6. That the advances shall be repayable in full when or before the contractor receives payment from the BISHOP COTTON SCHOOL, SHIMLA of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done then on the occasion of each such payment the BISHOP COTTON SCHOOL, SHIMLA will be at liberty to make recovery from the Contractor's bill for such payment by deducting therefrom the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.
7. That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing to the EMPLOYER shall immediately on the happening of such default be repayable by the Contractor to the BISHOP COTTON SCHOOL, SHIMLA together with interest thereon at twelve percent per annum from the date or respective dates of such advance or advances of the date of repayment and with all costs, charges, damages and expenses incurred by the BISHOP COTTON SCHOOL, SHIMLA in or for the recovery thereof or the enforcement of this security or otherwise by reasons of the default of the Contractor and the Contractor hereby Covenants and agree with the BISHOP COTTON SCHOOL, SHIMLA to repay and pay the same respectively to BISHOP COTTON SCHOOL, SHIMLA accordingly.

8. That the contractor hereby charges all the said materials with the repayment to the BISHOP COTTON SCHOOL, SHIMLA of the said sum advanced and any further sum or sums advanced as aforesaid and all cost, charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the Powers contained therein, if and whenever the covenant for payment and repayment hereinbefore contained shall become enforceable and the money owing shall and repayment hereinbefore contained shall become enforceable and the money owing shall not be paid in accordance therewith the Director, BISHOP COTTON SCHOOL, SHIMLA. may at any time thereafter adopt all or any of following courses as he may deem best:
- (a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the Contractor in accordance with the provisions in that behalf contained in the said agreement debiting and contractor with the actual cost of effecting such completion and the amount due in respect of advance under 'these presents and crediting the Contractor with the value of work done as if he had carried it out in accordance with said agreement and at the rates thereby provided. If the balance is against the Contractor, he is to pay the same to the EMPLOYER on demand
  - (b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retained all the sums aforesaid repayable or payable to the EMPLOYER under these presents and pay over the surplus (if any) to the Contractor.
  - (c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.
9. That except in the event of such default on the part of the Contractor as aforesaid interest on the said advance shall not be payable.
10. That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of

any dispute or difference arising over the construction or effect of these presents the settlement of which has not been herein before expressly provided for the same shall be referred to the Director, BISHOP COTTON SCHOOL, SHIMLA whose decision shall be final, I witness whereof the parties have executed these presents in duplicate the day and year first above written.

Signed and delivered for and on behalf of .....  
(Contractor) (Office Seal)

In the presence of  
WITNESSES:

1.Signature  
Name  
Address

2.Signature  
Name  
Address

Signed by and delivered and on behalf of the Director, BISHOP COTTON SCHOOL,  
SHIMLA  
(Employer) (Office Seal)

In the presence of  
WITNESSES:

1.Signature  
Name  
Address

2.Signature  
Name  
Address



## 12. PERFORMANCE GUARANTEE/BANK GUARANTEE BOND

### PERFORMANCE GUARANTEE / BANK GUARANTEE BOND

In consideration of the BISHOP COTTON SCHOOL, SHIMLA having offered to accept the terms and conditions of proposed agreement between ..... and ..... (hereinafter called the said contractor(s) for the work ..... (herein after called “the said agreement”) having agree to production of an irrevocable bank guarantee for Rs..... (Rupees.....only) as a security/ guarantee from the Contractor (s) for Compliance of his obligations in accordance with the terms & Condition in the said agreement.

1. We..... (herein after referred to as the “Bank”) hereby undertake to pay to the BISHOP COTTON SCHOOL, SHIMLA an amount not exceeding Rs..... (Rupees..... only) on demand by the Government.
2. We..... do hereby undertake to pay the amounts due and payable (indicate the name of the Bank) under this Guarantee without any demur, merely on a demand from the BISHOP COTTON SCHOOL, SHIMLA stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). 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 BISHOP COTTON SCHOOL, SHIMLA any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under, and the contractor(s) shall have no claim against us for making such payment.

4. We ..... further agree that the Guarantee herein contained shall (indicate the name of bank remain full force and effect during tile period that would be taken for the performance of the said agreement and it shall continue to be enforceable till all the dues of the BISHOP COTTON SCHOOL, SHIMLA under for by virtue if the said agreement have been fully paid and its claims satisfied or discharged till the Architect on behalf of the BISHOP COTTON SCHOOL, SHIMLA certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee.
5. We ..... further agree with the BISHOP COTTON SCHOOL, SHIMLA that the BISHOP COTTON SCHOOL, SHIMLA (indicate the name of the Bank shall have the fullest liberty without our Consent and without effecting in any manner obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor from time to time or to postpone for any time or from time to time of the powers exercisable by the BISHOP COTTON SCHOOL, SHIMLA against the said contractor (s) and to forbear) 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 for any forbearance act of omission on the part of the BISHOP COTTON SCHOOL, SHIMLA or any indulgence by the BISHOP COTTON SCHOOL, SHIMLA to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision or have effect of so relieving us
6. The Guarantee will not be discharged due to the change in the constitution of the bank of the Contractor(s).
7. We..... lastly undertake not to revoke this Guarantee except with (indicate the name of the Bank) the previous consent of the BISHOP COTTON SCHOOL, SHIMLA in writing.

8. This Guarantee shall be valid up to unless extended on demand by the BISHOP COTTON SCHOOL, SHIMLA notwithstanding anything mentioned above, our liability against this guarantee restricted to Rs..... (Rupees..... Only) and unless a claim in writing is lodged liabilities under Guarantee shall stand discharged.  
Dated the..... Day Of ..... For.....

Indicate the name of the Bank





### **13. GUARANTEE TO BE EXECUTED BY CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION**

Name of work:

This Agreement made this ..... day of ..... Two thousand ..... and .....between.....son of..... (here in after called the Guarantor of the one part) and the BISHOP COTTON SCHOOL, SHIMLA (hereinafter called EMPLOYER of the other part.

WHEREAS this agreement in supplementary to a contract (hereinafter called the Contract) dated ..... and made between the GUARANTOR of the one part and the EMPLOYER of the other part whereby the Contractor, inter-alia undertook to rehabilitate & strengthen structures in the said contract.

AND WHEREAS GUARANTOR agreed to give a guarantee to the effect that the said structures will remain structurally stable, safe & sound for five years from the date of completion of work.

NOW THE GUARANTOR hereby guarantees that work undertaken by him will render the repaired structures completely safe and the minimum life of such work executed by the GUARANTOR treatment shall be five years to be reckoned from the date after the maintenance period prescribed in the contract.

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render the building structurally safe to the satisfaction of the the Project Manager at his cost, and shall commence the work for such rectification within seven days from the date of issue of the notice from the Project Manager calling upon him to rectify the defects, failing which the work shall be got done by the Department by some other contractor at the GUARANTOR'S cost and risk. The

decision of the THE DIRECTOR, BISHOP COTTON SCHOOL as to the cost payable by the Guarantor shall be final and binding.

That if GUARANTOR fails to execute the defected work or commits breach there under then the GUARANTOR will indemnify the Director and his successors against all loss, damage, cost, expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and/or cost incurred by the BISHOP COTTON SCHOOL, SHIMLA, the decision of the THE DIRECTOR, BISHOP COTTON SCHOOL will be final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed by the Obligor ..... and by ..... and for and on behalf of the BISHOP COTTON SCHOOL, SHIMLA on the day, month and year first above written.

Signed, sealed and delivered by OBLIGOR in the presence of :

1.

2.

Signed for and on behalf of BISHOP COTTON SCHOOL, SHIMLA

In the presence of

1.

2.



## TENDER DRAWINGS

FOR

### JUNIOR SCHOOL BUILDING BISHOP COTTON SCHOOL AT

Shimla Bypass, near Khalini, New Shimla, Shimla  
Himachal Pradesh 171002

VERSION 01  
04<sup>TH</sup> NOVEMBER 2023



ARCHITECTURE & INTERIOR SOLUTIONS

FIRST PRINCIPLE DESIGNS PVT. LTD.

3/19, Basement Floor, Kalkaji Extension, New Delhi - 110019



## 15. LIST OF TENDER DRAWINGS

S No.	Drawing No.	Sheet Title
01	BCS-JS-01	Floor Plans
02	BCS-JS-02	Furniture Layout Plans
03	BCS-JS-03	Roof and Loft Plans with Sections
04	BCS-JS-04	Dorm Layout
05	BCS-JS-05	Dorm Layout
06	BCS-JS-06	Toilet Plan and Elevation
07	BCS-JS-07	Warden's Quarter Plan and Elevations
08	BCS-JS-08	Smaller Warden's Quarter Plan and Elevations
09	BCS-JS-09	TV Room
10	BCS-JS-10	Overnight Room First Floor
11	BCS-JS-11	Overnight Room Second Floor
12	BCS-JS-12	Plumbing Drawing

Drawings can be downloaded from the link below:

[https://drive.google.com/drive/folders/1TNVEs\\_8Xeuz5h1yNmVScMpl4Glb7kNo5?usp=drive\\_link](https://drive.google.com/drive/folders/1TNVEs_8Xeuz5h1yNmVScMpl4Glb7kNo5?usp=drive_link)



## 16. LIST OF APPROVED MAKES

S.No	PRODUCT	APPROVED BRAND
<b>A</b>	<b>CIVIL WORKS</b>	
<b>1</b>	<b>Civil and Structural works</b>	
1.01	Anti-termite Emulsifiable Concentrate	Lindane 20% E.C., Chloropyriphos 20% E.C.,Equivalent of any ISI approved brand
1.02	Bricks	Good quality available from approved Local source
1.03	Cement - Admixtures	Fosroc, Roff, Cico, Mc-bauchemie, Choksey
1.04	Cement - O.P.C.(43/53 grade)	L&T, ACC,Ultratec, Ambuja
1.05	Cement - PPC	L&T, ACC, L&T, ACC,Ultratec, Ambuja
1.06	Cement - White	JK white, Birla white
1.07	Coarse Aggregates	From approved local source
1.08	Sand	From approved local source
1.09	Steel - Reinforcement -16mm & above	Tata,Sail,JSW
1.10	Steel - Reinforcement - upto 16mm	Tata,Sail,JSW,Kamdenu,Rathi
1.11	Steel - Structural Section	Kamdhenу, Rathi
1.12	Steel - Rectangular/Square/hollow tube sections	Tata,Sail,Apollo
1.13	Waterproofing chemicals	Sika,Fosroc,Dr.Fixit
1.14	Stone for WBM	As/ per samples to be approved
1.15	Chicken wire mesh	As/ per samples to be approved
1.16	GI corner beading for corner protections	As/ per samples to be approved
1.17	Anchor fastner	Hilti
1.18	Polycarbonate sheet	GE-Lexan, Supreme
1.19	Colour coated sheeting & accessories	Tata bluescope,JSW steel
1.20	Insulation for PEB	UP Twiga,Supreme
<b>2</b>	<b>Skins</b>	
2.01	Aluminum Section	Jindal, Hindalco. Indal,
2.02	Alunimum Tape	Johnson / 3m
2.03	Fasteners	Hilti, Fischer, Bosch
2.04	Glass - Float	Saint Gobain,Gujarat Guardian, Asahi
2.05	Tempered/ toughened glass	Mico, Trutuff, Equivalent
2.06	Hardware - Anodized Aluminum Matt finished Hardware fitting (Heavy)	Heltich,Ebco,Ozone
2.07	Paint - Exterior Texture	Berger,Asian,Unitex
2.08	Stone - Granite	Lakha Red, RBI Red,TelephoneBlack,Perl Black
2.09	Stone - Sand stone	Gwalior white,Agra red,Equivalent
2.10	Paint - Exterior Emulsion	Apex-Asian Weathershield-ICI, Nerolac, Berger,
2.11	Heat reflective paint	Dulux, Asian paints, Excel coating
<b>B</b>	<b>INTERIOR WORKS</b>	
<b>3</b>	<b>Partitions &amp; False Ceilings</b>	
3.01	GRG Tiles	Armstrong,Daikin,Saint Gobain,LaGyp
3.02	Partitions and Panelling	Saint Gobain,LaGyp
3.03	Boards - Block ( IS 303, IS 710)	Euro,Star, green
3.04	Board - Gypsum	India Gypsum , Saint Gobain
3.05	Boards - Laminate	Merino, Green, Century
3.06	Board - MDF	Deco Board, Eco board, Novapan
3.07	Boards - Ply ( IS 303 / IS 710)	Euro, Century, Star.
3.08	Boards - Pre Laminated Particle	Duratuff, Novapan, Nuwood (Exterior EWP Grade)
3.09	Boards - Soft	Sitapur,Deco Board, Eco board, Novapan or Appr.

S.No	PRODUCT	APPROVED BRAND
3.10	Boards - Veneer	Green, Durian, Donear
3.11	Board - Mineral Fiber	Armstrong, Nittobo
3.12	Boards - Particle ( IS 303 / IS 710)	Sitapur, Deco Board, Eco board, Novapan or Appr.
<b>4</b>	<b>Doors &amp; Glazings</b>	
4.01	Doors - Flush( IS 2202)	Euro, Century
4.02	Hardware - Brass Hardware fittings (Heavy)	As per approved sample
4.03	Hardware - Cylindrical Locks	Godrej, Europa, Yale, Dorset, Ozone
4.04	Hardware - Doors closer	Godrej, Everite, Hardwin, EBCO, Ozone, Doorking
4.05	Hardware - Mortice Locks / Latch	Godrej, Europa, Yale, Dorset
4.06	Hardware - Screws	GKW, RK, Nettlefold
4.07	Hardware - S.S. Hinges (Heavy duty)	Royal, Suzu, Honda
4.08	Hardware - Floor Springs	Godrej, Ozone, Everite, Hardwin
4.09	Hardware - Key board Trey	Earl bihari
4.1	Tempered glass doors	Mico, Trutuff, Equivalent
4.11	Hardware - Glass doors	Ozone, Heltich, Dorser
4.12	Silicon sealant	G.E, Dow Corning, Fischer, Sika
4.13	Aluminium sections	Jindal, Hindalco
<b>5</b>	<b>Internal Wall Finishing</b>	
5.01	Paint - Acrylic Emulsion	Asian, ICI, Nerolac, Berger
5.02	Paint - Cement Based	Snow-cem, Indo-cem, Berger
5.03	Paint - Cement Based wall putty	Birla white, NCL-Alltek, Berger
5.04	Paint - Distemper (Oil Bound & Acrylic)	Asian, ICI, Nerolac, Berger
5.05	Paint - Interior Texture	Asian, ICI, Unitex, NCL-Alltek, Berger
5.06	Paint - Plastic Emulsion	Asian, ICI, Nerolac, Berger
5.07	Paint - Primers	Asian, ICI, Nerolac, Berger, J&N
5.08	Paint - Red Oxide	Asian, ICI, Nerolac, Berger, J&N
5.09	Paint - Synthetic Enamel Paint/	Asian, Nerolac, ICI, Berger, J&N,
5.10	Colour Backed Glass	Saint Gobain/Modiguard
5.11	Adhesives	Fevicol, Vamicol
5.12	Putty	Birla, Shalimar
<b>6</b>	<b>Internal Floor Finishing</b>	
6.01	Stone - Marble	As per specifications from the Mines/Wholesalers
6.02	Tiles - Glazed /Ceramic	Kajaria, Johnson, Nitco, Asian, Somany
6.03	Tiles - Vitrified	Kajaria, Johnson, Nitco, Asian, Equivalent
6.04	Tile Grout	Bals / Saint Gobain / Kerakoll
6.05	PVC Tiles/Roll	Armstrong, Tusker,
<b>7</b>	<b>Miscellaneous Interior Works</b>	
7.01	Blinds - Venetian Blinds	Vista-Levolor, Aerolux, Mac
7.02	Blinds - Vertical Blinds	Vista-Levolor, Aerolux, Mac
7.03	Blinds - Roller Blinds	Vista-Levolor, Aerolux, Mac
7.04	Toilet Signages	Kitch, Dunex
<b>C</b>	<b>INTERNAL ELECTRICAL WORKS</b>	
<b>8</b>	<b>UPS Low Side Works/ Electrical/ Lighting-Routing/ Conduiting</b>	
8.01	MS upto 150 mm	Jindal Ghaziabad / Tata
8.02	MS 200 to 600 mm	Jindal / Tata



S.No	PRODUCT	APPROVED BRAND
8.03	G.I.	Jindal Ghaziabad / Tata / Zenith Ambuja
8.04	PVC Conduits	AKG / BEC / Setia
8.05	Steel Conduit	AKG, BEC, RMCON
<b>9</b>	<b>Point Wiring</b>	
9.01	Wires	Finolex,Havells,RR-Kabel
9.02	Switch & Sockets	Legrand/Panasonic/Crabtree / MK,Roma
<b>10</b>	<b>Lighting Fixtures</b>	
10.01	Light Fixtures	Philips,Wipro,Havells,Crompton,Equivalent
10.02	Fans	Usha,Havells,Crompton,Equivalent
10.03	Exhausts	Havells,Crompton,Equivalent
<b>11</b>	<b>Distribution Boards</b>	
11.01	M.C.C.B	L&T, MDS, Schneider
11.02	Voltmeter/Ammeter	AE, IMP
11.03	Switches	L&T, Siemens,ABB, Schneider
11.04	HRC fuse and fittings	L&T, Siemens,ABB
<b>12</b>	<b>Wires/cables/Earthing</b>	
12.01	Power Cables	Finolex,Havells,Gloster,CCI,Polycab,Empire, Skytone
12.02	Control Cables	Finolex,Havells,Gloster,CCI,Polycab,Empire, Skytone
<b>13</b>	<b>Structural Cabling</b>	
13.01	Data Cabling / Components	D-Link/ Molex / Amp -CAT 6
13.02	ACD Components	ELID / HID / BEL / Secura / GE Interlogix
13.03	Telephone Cables	Finolex,Delton,Polycab
13.04	Cable trunking in telecom/AV areas	Legrand / L&T
<b>14</b>	<b>Fire Alarm System</b>	
14.01	Steel Conduit	AKG, BEC, RMCON
14.02	FRLS and Twisted Cables	Finolex, Havell's, RR Kable
14.03	Microprocessor based Photo electric smoke / Heat Detector	Honeywell, Siemens, Simplex, Bosch, UL listed approved
14.04	Microprocessor based Manual Call Box	Honeywell, Siemens, Simplex, Bosch, UL listed approved
14.05	Microprocessor based Control Module	Honeywell, Siemens, Simplex, Bosch, UL listed approved
14.06	Fire Alarm Control Panel	Honeywell, Siemens, Simplex, Bosch, UL listed approved
14.07	Hooter	Honeywell, Siemens, Simplex, Bosch, UL listed approved
<b>D</b>	<b>EXTERNAL ELECTRICAL WORK</b>	
<b>15</b>	<b>LT Panels Manufacturer's</b>	<b>Sudhir/Jakson/Tricolite/C&amp;S</b>
15.01	Switches, MCCB, Contactors, Aux. contactors & Overload,Relays, Starters	L&T,ABB,Siemens,Legrand, Schneider, GE
15.02	Fuse link	L&T, Siemens, GE Power
15.03	Electronic Digital Meter	Enercon, Ducatti
15.04	CT / PT Transformer	AE, Kappa

S.No	PRODUCT	APPROVED BRAND
15.05	S.F. Unit	L&T,ABB,Siemens,Legrand, Schneider, GE
15.06	Cable Trays	Slotco, Pilco, Indiana, Venus,OBO , MK
15.07	Indicating Lamps (LED type) / Push	L&T, Siemens, GE power, BCH, Vaishno
15.08	Buttons	
15.09	Terminal	Elemex, Tosha
15.10	Indicating Instruments	AE, Equivalent
15.11	Selector Switch	Kaycee, Salzer
15.12	Change Over Switch	HH Elcon, HPL-Socomec
15.13	MCB	Legrand, Seimens, Haiger, ABB, Schneider, GE
15.14	Starter Contactor	Schneider Electric (TE), L&T, Siemens-Sicop
15.15	Air Circuit Breaker	L&T, ABB, Siemens, Schneider, GE
15.16	Over load relay with built in single phase preventer	Schneider Electric (Telemecanique), ABB, L&T
15.17	Voltmeter / Ammeter	AE/ IMP
15.18	Switched	L&T / Siemens / ABB / Schneider
15.19	HRC Fuse and Fittings	L&T / Siemens / ABB
15.20	Power Cables	Havells, Finolex, Mescab, Polycab
15.21	Control Cables	Havells, Finolex, Mescab, Polycab
15.22	Single Phase Preventor	L&T, GE, Siemens, Legrand, Schneider
15.23	SDFU / SFU with HRC Fuses	L&T, GE, Siemens, Legrand, Schneider
15.24	Starters / Control	L&T, GE, Siemens, Legrand, Schneider
<b>16</b>	<b>Power Cables</b>	Finolex, KEI, RR Kabel,Batra Henley, Skytone, Polycab.
<b>17</b>	<b>External Lighting Fixtures</b>	Philips,Wipro,Havells,Crompton,Equivalent
<b>E</b>	<b>INTERNAL PLUMBING WORKS</b>	
<b>18</b>	<b>Sanitary Fixtures &amp; Accessories</b>	
18.01	European Water Closet & Low	Hindware,Cera ,Kohler,Roca,Asian
18.02	Indian water closet	Hindware,Cera ,Kohler,Roca,Asian
18.03	Foot Rests	Hindware,Cera ,Kohler,Roca,Asian
18.04	Wash Hand Basin	Hindware,Cera ,Kohler,Roca,Asian
18.05	Urinals	Hindware,Cera ,Kohler,Roca,Asian
18.06	Urinal sensor	UTEC system,Jaquar,Hindware
<b>19</b>	<b>Kitchen &amp; Pantry</b>	
19.01	Stainless Steel Sink	Nirali,Neelkanth,Jayna
19.02	Counters & storages	Modular to be sourced from local Vendors to be got approved
<b>20</b>	<b>C P Fittings/Bathroom Accessories</b>	
20.01	C P Grating for Floor Trap	Chilly , GMGR, ACO, Jayna
20.02	C.P. brass flush valve for WC and Urinals	Jaquar,Hindware,Asian
20.03	C.P. brass fittings such as pillar cocks, stop cocks angular stop cocks, C.P. flexible pipes, C.P. brass waste, C.P. brass cast bottle trap, C.P. brass shower rose, long body bib taps, C.P. brass health faucets, single lever mixing fittings etc.	Jaquar,Hindware,Asian
20.04	SS floor gratings	Chilly,GMGR, Neer, Jayna
<b>21</b>	<b>Others</b>	

S.No	PRODUCT	APPROVED BRAND
21.01	Drinking Water Cooler	USHA, Blue Star, Voltas, Ion Exchange
21.02	Domestic R.O. System	Eureka Forbes, Ion Exchange, Kent
21.03	Automatic hand drier	Kopal, Blue Circle, TOTO, Toshi
21.04	Automatic flushing system for Urinals	Jaquar, AOS, Toshi
21.05	Floor Drain Fixture, Rain Water Outlets & Channel Gratings	Chilly, GMGR, ACO, Jaina
21.06	Mirror	Modiguard
21.07	Hotwater heaters	Crompton, Venus, Racold
21.08	Cleanouts, funnels	GMGR, Neer, Jayna
<b>F</b>	<b>EXTERNAL PLUMBING WORKS</b>	
<b>22</b>	<b>Piping</b>	
22.01	UPVC Pipes/ Fittings	Supreme, Astral, Prince, Jain, Ashirwad, AKG
22.02	CPVC Pipes/ Fittings/ Valves	Supreme, Astral, Prince, Jain, Ashirwad, AKG, Finolex
22.03	SWR Pipes/Fittings	Supreme, Astral, Prince
22.04	Composite Pipes/Fittings	Kitec, Equivalent
22.05	Pipes & fittings - C.I.	NECO, RIF
22.06	CI (LA) Pipes and fittings	Electrosteel, Kesoram as per IS:1537
22.07	Pipes & Fittings - C.P. Fittings (water	Jaquar, Esco, ESS, Aquel
22.08	Pipes & fittings - CPVC /UPVC	Astral, Supreme, Ashirwad
22.09	Pipes & Fittings- G.I. ( B class Pipes)	Tata, Asian, Prakash
22.10	GI/MS Pipes (I.S : 1239 and I.S : 3589)	Tata Steel, Jindal (Hissar), Sail, Nizon
22.11	Pipes & Fittings - G.I.fittings	Zoloto M, Kartar, Kirloskar as per IS:5312
22.12	Non Return Valves	Supreme, Prince
22.13	Pipes & Fittings - Gun Metal Wheel Valves	Zoloto
22.14	Pipes & Fittings - PVC (6 kg & Above )	Supreme, Prince
22.15	H.C.I. Soil Waste Pipes:	Confirming to I.S.I. 1729-1954, having I.S.I.Mark.
22.16	RCC Pipe	K K, Pranali, approved equivalent ISI marked
22.17	Stoneware Pipes, Gully Traps	Perfect Potteries, JABALPUR Approved equivalent ISI marked
22.18	Insulation for Hot Water Pipes	Armacel – Armaflex (UK), Eurobatex –Union Foam (Italy), Easyflex
22.19	Flanges	Class 150 Table H
22.20	Pypcoat for Burried Piping	IWL, Coaltek
22.21	Painting of pipes	Asian, Shalimar, Rajdoot, Berger
22.22	Gi pipes	Jindal, Tata, Prakash, Equivalent
22.23	GI fittings	UNIK, Zoloto, Equivalent
22.24	Hubless pipes	SRIF, Neco, BIC, Equivalent
22.25	Lead	Hindustan Zinc. Co, Equivalent
<b>23</b>	<b>Water Mains</b>	
23.01	Water Meter (Mechanical Type)	Sant, Kranti, Capstant, Kaycee
23.02	Water Level Indicator	Sant, Sigma, Gelco, Active Controls, Minilec, Technika, Advance auto
23.03	Water Level Controller	Grundfos, Active Controls, Minilec, Technika, Advance auto
23.04	Pressure Gauge	Emerald, Fiebig, HGURU
23.05	Anti Vibration Mounting	Dunlop, Resistoflex
23.06	Couplings	Lovejoy

S.No	PRODUCT	APPROVED BRAND
23.07	Sluice Valve	IS:14846: Kirloskar, Leader, H.Sarker, Zoloto, (ISI Marked), SKS
<b>24</b>	<b>Tanks and Accessories</b>	
24.01	PVC - Water tank	Sintex, National, Frontier
24.02	MH/ Water Tank Plastic Steps	KGM
24.03	Ball Valve	Sant, Zoloto, Leader, C&R, Advance
24.04	Gun Metal Wheel Valve	Sant, Zoloto, Leader
24.05	Pressure Reducing Valve	Sant, Zoloto, Leader
24.06	Butterfly Valve	Sant, Zoloto, Leader, Cim, NVR
24.07	Gun Metal Non Return valve	Sant, Zoloto, Leader
24.08	C.I. Manhole Covers ( heavy )	NECO, SKF, RIF,Bharat, Kaplesh,Sushila Industries , Prabhat Iron Foundry, East India Steel make confirming to ISS 7.26
24.09	GM / Forged Brass Valves	Zoloto, Deepak, Cim, AIP
24.10	Sluice Valves	Zoloto, Cim, NVR
24.11	Check Valve	Zoloto, Cim, NVR
24.12	Air Release Valve	Zoloto, Cim, NVR
24.13	Y Strainer	Emerald, Zoloto, ITT, KSB
24.14	Pumps	Grundfos, Wilo, Kirloskar
24.15	Hot Water Generators	Heatex, Olympia, AO Smith
24.16	Electrical Pump Panels.	Adlec, Amptech, RST Electrical, SUGEL, Sudhir/Jakson/Tricolite/C&S
24.17	Flush valve	Jaquar
<b>25</b>	<b>Irrigation works</b>	
25.01	Irrigation	Jain irrigation Rainboard
<b>G</b>	<b>FIRE FIGHTING WORKS</b>	
<b>26</b>	<b>Piping and Fittings</b>	
26.01	M.S. Pipe	IS:1239 : Tata, Jindal Hissar, SAIL, Surya Roshni, Nizon/ (ISI Marked)
26.02	Pipe Fittings	Unik, VS
26.03	GI/MS Pipes (I.S : 1239 and I.S : 3589)	Tata Steel, Jindal (Hissar), Sail, Nizon
26.04	Pipes & Fittings - G.I.fittings	Zoloto M, Kartar, Kirloskar as per IS:5312
26.05	Non Return Valves	Supreme, Prince
26.06	Butterfly valve	BS:5155, Make - Zoloto, H. Sarker, Karta, Audco
26.07	Ball Valve	Zoloto, SKS, Audco
26.08	Water Solenoid Valve	Kirloskar / Leader /H.Sarker/Zoloto/(ISI Marked
26.09	Cushy Foot Mountings	ISI Marked
26.10	Weld Rods	Advani
26.11	Pipes Supports (Band Hanger)	Chilly, Targa, Hilti
26.12	Enamel Painting of pipes etc	Asian, Goodlas, Nerolac, ICI
26.13	Paint Primer	Asian, Jenson Nicholson
26.14	Coal Tar Treatment for pipes	IWL, Coatek
<b>27</b>	<b>Fire Fighting Accessories</b>	
27.01	Internal/External Hydrant (Landing Valve )	Cosmos, Newage, Jayshree, GETECH
27.02	Single headed Hydrant valves, three way Fire Brigade inlet, branch pipe & shut off nozzle	Superex, Neewage, Omex



S.No	PRODUCT	APPROVED BRAND
27.03	Hose Reel 20 mm Dia rubber pipe	Superex, Neewage, Omex, Cosmos, Newage, Jayshree, GETECH
27.04	Thermoplastic hose reel	Kasera, Maitras
27.05	Rubber Gaskets	CIC, Varuna
27.06	Installation Control Valve	Cosmos, Newage, Jayshree, GETECH
27.07	Fire Bridge Intel / Connection	Cosmos, Newage, Jayshree, GETECH
27.08	Sprinkler	Tyco, Viking, HD, UL Listed
27.09	RRL Hose pipe 63 mm Dia	Superex, Neewage, Omex, Minimax, Safex, Kartar, Supremex
27.10	GM Branch Pipe 63mm x 20mm dia	Minimax, Safex, Kartar, Supremex
27.11	First Aid Hose Drum	Minimax, Safex, Kartar, Supremex, Neewage
27.12	Fire Extinguishers	Superex, Neewage, Omex
<b>28</b>	<b>Pumps and Accessories</b>	
28.01	Pump	Kirloskar / ABB / Mather & Platt
28.02	Motor	Kirloskar / ABB / Mather & Platt
28.03	Diesel Engine driven Pump	Kirloskar / ABB / Mather & Platt
28.04	Electrical Panel / System Controller & Control Console	From CPRI approved panel manufacture
28.05	Pressure Switch	ISI Marked
28.06	Pressure Gauge	H Guru, Fiebig
28.07	Batteries	OEM/OEA
<b>H</b>	<b>HVAC</b>	
<b>29</b>	<b>Equipment &amp; accessories</b>	
29.01	VRV Equipment	Hitachi / Daikin / Mitsubishi Heavy Industries/Voltas (Media) / LG / MEI /Toshiba
29.02	Copper Y joints and fittings	Hitachi / Daikin / Mitsubishi heavy Industries/LG / MEI / Toshiba
29.03	Ceiling Indoor AC Units	Hitachi / Daikin / Mitsubishi heavy Industries/Voltas (Media) / LG / MEI / Toshiba
29.04	Central Remote Controller	Hitachi / Daikin / Mitsubishi heavy Industries/Voltas / LG / MEI /Toshiba
29.05	Hi-Wall Split AC (Non VRF)	Hitachi / Voltas / Bluestar / Daikin
29.06	Energy Recovery Ventilator Units	Caryaire / Desiccant Rotors International
29.07	Airwasher / Air Scrubber	Waves / Zeco / Edgetech
29.08	Exhaust Fan	Systemair / Caryaire / Kruger / Humidin / Crompton
<b>30</b>	<b>Piping and Accessories</b>	
30.01	Copper Refrigerant Piping	Rajco / Hindustan / Karan Metal / Totaline
30.02	Refrigerant & Drain Pipe Insulation	Trocellin / Supreme
30.03	Adhesive for Pipe Insulation	Pidilite SR-505
30.04	Drain Pipe High DinsityPolystrene	Poly pack / Supreme / Astral
<b>31</b>	<b>Ducting and Accessories</b>	
31.01	Factory Fabricated Ducting (SMACNA)	Zeco / Ductofab / Dustech
31.02	GI Sheet	Sail / Tata / Jindal
31.03	Powder Coated Aluminium Grills/ diffusers	Carryaire / Ravistar / Dynamic / Systemair
31.04	Duct insulation	Supreme / Trocellin / Thermobreak
31.05	Dash Fasteners	Canon / Fisher / TKS
31.06	Tar felt / CPRX compound	Shalimar tar product
31.07	Paints	ICI / Asian

S.No	PRODUCT	APPROVED BRAND
<b>32</b>	<b>Electricals for HVAC</b>	
32.01	Make of Electrical Panel,	KEPL/ Tricolite/ Milestones Switchgears Sub Panel
32.02	M.C.B. & MCCB	GE / Schneider / Siemens
32.03	Power Cable	Havells / Polycab / Skytone
32.04	Control / Transmission Cable	Havells / Polycab / Skytone
32.05	Voltmeter / Ammeter	A.E. / IMP.
32.06	Switches	L&T / Siemens / GE
32.07	HRC Fuse and Fittings	L&T / Siemens / GE
32.08	Current Transformer	A.E./ Kappa/ Precise
32.09	Contactors	L&T / Siemens / GE
32.10	Starter	L&T / Siemens / GE
32.11	Overload Relays	L&T / Siemens / GE
32.12	Indicating Lights	Siemens / L&T
32.13	Selector/ Toggle switch	Kaycee / L&T
32.14	Change Over switch	Elecon / L&T
32.15	Time Delay Device	Siemens / L&T
32.16	Single Phase Device	L&T
32.17	Three phase motors	C. G / Siemens / Kirloskar / ABB
32.18	Vibration Isolation Spring	Resistoflex
32.19	MS Coated Cable Tray	System Steel / Slotco / Pilco / Ricco

17. SUMMARY OF COSTS			
SCHEDULE OF QUANTITIES FOR RETROFITTING OF JUNIOR SCHOOL BUILDING AT BISHOP COTTON SCHOOL, Shimla Bypass, near Khalini, New Shimla, Shimla, Himachal Pradesh			
Version - 02: Dated 3rd November, 2023, finalized as per discussions with BCS			
SUMMARY OF COSTS			
S.No.	DESCRIPTION	AMOUNT (Rs.)	Unit Rate per sq.ft.
<b>PART - I CIVIL WORKS</b>		-	
1	CIVIL ALTERATION WORKS	-	
2	EARTH WORK	-	
3	PLAIN & REINFORCED CEMENT CONCRETE	-	
4	MASONARY WORK	-	
5	FLOORING WORKS	-	
6	PLASTERING WORKS AND WALL FINISHES	-	
7	MISCELLANEOUS BUILDING WORKS	-	
8	BUILDING SKINS	-	
9	WATER PROOFING	-	
10	TOILET & PANTRY FINISHING WORKS	-	
11	INTERIOR WORKS	-	
<b>PART - III SITE DEVELOPMENT WORKS</b>		-	-
12	HARDSCAPING WORKS	-	
<b>PART - IV PLUMBING SERVICES</b>		-	-
13	SUPPLY OF SANITARY & PLUMBING FIXTURES	-	
14	INSTALLATION OF SANITARY & PLUMBING FIXTURES	-	
15	COLD / FLUSHING WATER SUPPLY (INTERNAL / EXTERNAL):	-	
16	INTERNAL DRAINAGE (SOIL, WASTE & VENT)	-	
17	EXTERNAL SEWAGE/ STORM WATER DRAINAGE AND WATER SUPPLY SYSTEM.	-	
18	MISCELLANEOUS PLUMBING AND SEWERAGE WORKS	-	
<b>PART - V ELECTRICAL WORKS</b>		-	
19	INTERNAL WIRING	-	
20	SUPPLY OF FIXTURE AND FANS	-	
21	INSTALLATION OF FIXTURE AND FANS	-	
22	DISTRUBUTION BOARDS	-	
23	WIRING FOR TELEPHONE, TV & DATA	-	
24	EARTHING	-	
25	FIRE ALARM SYSTEM	-	
26	CCTV	-	
<b>PART -VI FIRE FIGHTING WORKS</b>		-	
27	HYDRANTS, SPRINKLER, PIPING & ACCESSORIES	-	
28	FIRE EXTINGUISHERS & MISC	-	
<b>TOTAL FOR THE ABOVE WORKS</b>		-	
<b>GST ( NOT TO BE PAID EXTRA)</b>			NA
<b>TOTAL FOR THE ABOVE WORKS</b>			-
Total in Words -			







## BILL OF QUANTITIES

FOR

## JUNIOR SCHOOL BUILDING BISHOP COTTON SCHOOL AT

Shimla Bypass, near Khalini, New Shimla, Shimla  
Himachal Pradesh 171002

VERSION 01  
04<sup>TH</sup> NOVEMBER 2023

**first principle**

ARCHITECTURE & INTERIOR SOLUTIONS

FIRST PRINCIPLE DESIGNS PVT. LTD

3/19, Basement Floor, Kalkaji Extension, New Delhi - 110019



## 18. BILL OF QUANTITY

### SCHEDULE OF QUANTITIES FOR RETROFITTING OG JUNIOR SCHOOL BUILDING AT BISHOP COTTON SCHOOL, Shimla Bypass, near Khalini, New Shimla, Shimla, Himachal Pradesh

Version - 02: Dated 3rd November, 2023, finalized as per discussions with BCS

<b>NOTE:</b>	
<b>a</b>	All quantities are provisional
<b>b</b>	Water and Electricity is available at site at specified points. Extension from these points is within the scope of the Contractor
<b>c</b>	GST shall be added extra over the Summary of Costs. Hence all base rates to be provided above that shall be considered for quoting shall be without GST
<b>d</b>	Approx time for completion shall be 3 months for the complete project after issue of Work Order

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
<b>1</b>	<b>CIVIL ALTERATION WORKS</b>					
1.01	Dismantling of the following works as per drawing including breaking, collection of the dismantled items and storing them at a location designated by the Project Manager for removal from Site					
a)	230 mm Brickwall	Cum.	8		-	
b)	115 mm Brickwall	sqmt	1000		-	
c)	Floor Tiles	sqmt	10		-	
d)	PCC	sqmt	690		-	
e)	RCC	Cum.	25		-	
1.02	Dismantling of the following works as per drawing including breaking, collection of the dismantled items and storing them at a location designated by the Project Manager for reuse / scrap at another location / within the Project					
a)	Windows/ Doors (upto 3 sq.m.)	Nos	10		-	
	Windows/ Doors (from 3-5 sq.m.)	Nos	1		-	
b)	Loose Furniture					
i.	Bed	Nos	0		-	
ii.	Chair	Nos	0		-	
iii.	Cupboard	Nos	0		-	
iv.	Dressing Table	Nos	0		-	
v.	Mandir	Nos	0		-	
vi.	Table	Nos	0		-	
vii.	Sofa	Nos	0		-	
c)	Fixed Furniture					
i.	Cupboards	Sq.ft.	0		-	
d)	Plumbing Fixtures					
i.	Water Closet	Nos	55		-	
ii.	Wash Basin	Nos	60		-	
iii.	Shower	Nos	55		-	
iv.	Urinals	Nos	30		-	
v.	Faucets	Nos	55		-	
e)	Exposed infrastructure lines					
i.	Plumbing Lines	Rmt	450		-	
ii.	Sewerage Lines	Rmt	180		-	
f)	Concealed infrastructure lines					
i.	Plumbing Lines	Rmt	720		-	
ii.	Sewerage Lines	Rmt	510		-	
g)	Electrical Fixtures					
i.	Geyser	Nos	0		-	
ii.	Washing Machine	Nos	2		-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
iii.	Water Purifier	Nos	2		-	
iv.	Switch Plates / TV Point / Plug Points	Nos	75		-	
v.	Wall Mounted Lights	Nos	50		-	
vi.	Distribution Boards	Nos	5		-	
vii.	Ceiling Mounted Lights	Nos	50		-	
h)	Stone Pavers	sqmt	280		-	
1.03	Malba Disposal from the designated location within the School to the nearest authorized dumping site. ( The location of the Site shall need to be informed to the Project Manager for seeking prior approval ). The number of trucks/trolleys and their capacities to be certified by the Gate Office at the premises.					
a.	Trolleys ( carrying capacity of 5 cu.mt. )	nos.	135.00		-	
1.04	Civil repairs to the Jambs including refinishing the Brickwork and plastering the same of the affected areas after removal of door windows as per instructions of the Project Manager.	R.mt.	25.00		-	
1.05	Dismantling of the existing Grill fencing between the Hockey field and the School and storing it for reuse	Sq.mt.	0.00		-	
1.06	Dismantling MS work for re use	MT	6.00		-	
1.07	Dismantling Wooden flooring for re use	Sq.mt.	0.00		-	
<b>TOTAL FOR CIVIL ALTERATION WORKS</b>					-	
<b>2</b>	<b>EARTH WORK</b>					
2.01	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30cm in depth, 1.5M in width as well as 10sqm on plan) including getting out and disposal of excavated earth lead upto 50 mt.lead in all kinds of Soil, as directed by Project Manager . (Payment shall be made on the basis of net dimensions shown on drawing. Rate shall include for extra space required for shuttering and / or working / and dewatering if any.)					
a)	Upto 2.0m depth	Cum.	325		-	
b)	From 2m - 4m depth	Cum.	0		-	
c)	From 4m - 6m depth	Cum.	0		-	
2.02	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc., in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming, watering, lead upto 50 m and lift upto 1.5 m					
a)	Available earth (excavated at site)	Cum.	150		-	
2.03	Disposal of available surplus earth outside the premises with the help of mechanical transport including loading unloading etc. complete.	Cum.	0		-	
2.04	Supplying and stacking of good earth at site obtained from approved borrow pits including including carriage by mechanical means from within a specified Lead from from the site, including loading, unloading to approved dumping ground or as approved /directed by Engineer-in-charge, including cost of equipments/ labour, conveyance, royalty, T&P etc. as per the direction of Engineer-in-charge. (earth measured in stacks will be reduced by 20% for payment).	Cum	0		-	
2.05	Supply and filling of Yamuna Sand / River sand as per directions of the Project Manager below the flooring	Cum.	0		-	
2.06	Supplying chemical emulsion in sealed containers including delivery as specified.		0		-	
2.07	Chlorpyrifos / Lindane emulsifiable concentrate 20%	litre	0		-	
2.08	Dilutting 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 at 2.25 liters per sq.m including drilling and plugging holes etc.					

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
	With chlorpyrifos/Lindane E.C. 20% with 1% concentration	Sqm.	0		-	
<b>TOTAL OF EARTHWORK</b>						-
<b>3</b>	<b>PLAIN &amp; REINFORCED CEMENT CONCRETE</b>					
3.01	Providing, laying compacting and curing plain cement concrete in foundations, footings and bases of columns and under floors, excluding the cost of centering & shuttering - all works upto plinth level					
a)	With 1:1.5:3 ( 1 cement : 1.5 coarse sand : 3 graded crushed stone 10 to 12.5 mm nominal size) under floors of 20 to 50mm thickness.	Cum.			-	
b)	With 1:2:4 ( 1cement : 2 coarse sand : 4 graded crushed stone 10 to 12.5 mm nominal size) under floors of 20 to 50mm thickness.	Cum.	70.00		-	
c)	With 1:4:8 ( 1cement : 4 coarse sand : 8 graded crushed stone 40 mm nominal size)	Cum.	30.00		-	
d)	With 1:5:10 ( 1cement : 5 coarse sand :10 graded crushed brick aggregate 40 mm nominal size)	Cum.			-	
3.02	Providing and laying M 25 grade / equivalent cement concrete in retaining walls, return walls(any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses,string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc. upto floor five level, excluding the cost of centering, shuttering and finishing (Machine Mixed at Site).	Cum.	5.00		-	
3.03	Providing & laying in position machine batched and machine mixed design mix M-25 grade Cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement , including admixtures in recommended proportions as per IS:9103 to accelerate, retard setting of Concrete, improve workability without impairing strength and durability as per direction of Project Manager.( Cement content considered in this item is 330Kgs/cu.m. Excess / less cement used as per design mix is payable/recoverable separately )					
a)	All works upto plinth level	Cum.			-	
b)	All works above plinth level upto floor V level	Cum.	10.00		-	
c)	All works above V level upto floor X level	Cum.			-	
3.04	Extra for providing richer mixes at all floor levels. Note: Excess/Less cement over the specified cement content used is payable/recoverable separately.					
a)	Providing M-30 grade concrete instead of M-25 gradeBMC/RMC(Note:- Cement concrete considered in M-30 is at 340Kgs/cum)	Cum.	10.00		-	
b)	Providing M-35 grade concrete instead of M-25 gradeBMC/RMC(Note:- Cement concrete considered in M-35 is at 350Kgs/cum)	Cum.			-	
c)	Providing M-40 grade concrete instead of M-25 gradeBMC/RMC(Note:- Cement concrete considered in M-40 is at 360Kgs/cum)	Cum.			-	
3.05	Add for using extra cement in the items of design mix over and above the specified cement concrete therein.	Bags			-	
3.06	Centering and shuttering including strutting, propping etc. and removal of form for -					
a)	Foundations, footings, bases of columns, etc. for mass concrete	Sqm.			-	
b)	Walls ( any thickness ) including attached pilasters, buttresses, plinth and string courses etc.	Sqm.	200.00		-	
c)	Suspended floors, roofs, landings, balconies and access platform	Sqm.			-	
d)	Shelves ( cast in situ )	Sqm.			-	
e)	Lintels, beams, plinth beams, girders, bressummers and cantilevers	Sqm.	5.00		-	
f)	Columns, pillars, Piers, abutments, posts and struts etc.	Sqm.			-	
g)	Stairs, ( excluding landings ) except spiral staircases	Sqm.	0.00		-	
h)	Folded plate staircase.	Sqm.			-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
i)	Small lintels not exceeding 1.5 M clear span, moulding as in cornices, window cills, string courses, bands, copings, bed plates, anchor blocks and the like	Sqm.	0.00		-	
3.07	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at all levels, over a height of 4.0 m, for every additional height of 1metre or part thereof ( Plan area to be measured )	Sqm.			-	
3.08	Extra over and above for providing exposed ply shuttering with 12mm waterproof ply to R.C.C. works.	Sqm.			-	
3.09	Providing and placing high yield strength Thermo-mechanically treated bars for reinforcement RCC work including straightening, cutting, bending and placing in position, binding with 18 gauge annealed steel wire and including cost of binding wire complete at all levels.	MT.	2.00		-	
3.10	Supplying and applying Non pigmented Wet curing compound - pre tested and approved water based concrete curing compound to concrete / masonry surface, all as per manufacturer's specifications and direction of Project Manager	Sqm.			-	
<b>TOTAL OF PLAIN &amp; REINFORCED CONCRETE WORK</b>					-	
<b>4</b>	<b>MASONARY WORK</b>					
	Bricks used to be of selected quality burnt clay FPS bricks of class designation 75, preferably flyash bricks					
4.01	P/L 230 mm thick brick masonry above plinth for superstructure, for walls, pillars, parapet, etc., in cement mortar in true line, level and plumb including raking the joints upto 20mm depth, rubbing and cleaning the surface, with necessary scaffolding, curing etc., complete as directed and specified.					
a)	In mortar 1:6, (1cement : 6 coarse sand )	Cum.	20		-	
b)	In mortar 1:4, (1cement : 4 coarse sand )	Cum.			-	
4.02	P/L 115mm thick brick partition walls, in cement mortar 1:4 (1 cement : 4 coarse sand ) including providing hoop iron reinforcement 25mmx1.5mmmm at every 4th course, including scaffolding, curing, rubbing the surface, raking out the joints etc (cost of reinforcement included in this item only )	Sqm.	850		-	
4.03	P/L brick masonry work, in cement mortar 1:6 ( 1 cement : 6 coarse sand ) in true line level and plumb for wall foundations, trenches, pedestals, columns, compound wall, steps, pillars etc., complete as directed and specified upto plinth level.	Cum.	5		-	
<b>TOTAL OF MASONARY WORK</b>					-	
<b>5</b>	<b>FLOORING WORKS</b>					
	<b>Cement Flooring</b>					
5.01	Providing and laying cement concrete ( <b>Indian Patent Stone</b> ) for flooring, treads of steps etc.. using cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 aggregate 20mm and down gauge) for floors, flooring bands, cills, treads of steps and other similar locations, tamped, spaded, trowelled and top finished neat , smooth with a floating coat of cement or finished to non-skid top surface as directed, laid in alternate panels of area not more than 2.00 sqm and laid to water level or proper slope as directed with necessary shuttering , providing and fixing 40mm x 2mm thick PVC dividing strips, curing etc., complete at all heights & levels as per details shown in the drawing over a base of Brick ballast 50 to 75mm.					
a)	40 mm thk	Sqm.	20		-	
b)	50 mm thk	Sqm.			-	
c)	P/F PCC skirting 100 mm ht. including finishing as per manufacturer's specifications	Rmt.	10		-	
	<b>Tiles Flooring</b>					
5.02	Providing and laying 100mm uniform thick Tremix / VDF	Sqm			-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
	flooring with cement concrete or M-30 grade in alternate panels of 4M x 3M using with 20mm and down grade black hard granite crusher broken stone chips including the cost of screed board vibrator, placing of filter mat, top mat, Vacuum process, power troweling, brooming, T & P charges including power, loading, unloading and hire charges, making grooves of 6mm wide and 25mm deep @ 1.5 M C/C bothways, filling the joints with approved quality sealing compound "Grade A" including the cost of all materials, cost of labours, conveyance, royalty, labour cess, etc., complete as per the specifications and direction of Engineer -in-charge.					
5.03	Providing KAJARIA/ equivalent as per design for flooring / walls as per specifications complete.					
a)	Tile Type - 01 ( GVT )	Sqm.			-	
	(Base price of Tile = Rs. 500/- per sq.m.).					
b)	Tile Type - 02 (GVT)	Sqm.	500		-	In Warden areas
	(Base price of Tile = Rs. 600/- per sq.m.).					
5.04	Extra for Fixing the above supplied Tiles with spacers including epoxy grout filling as per design as per specifications complete.					
a)	On Floors	Sqm.	400		-	550
b)	On Walls	Sqm.			-	
c)	For Skirting upto 150mm high	Rmt.	30		-	
	<b>Stone Flooring</b>					
5.05	Providing Pre polished Stone for being fixed in flooring / walls as per approved samples					
a)	Stone Type -01 :Indian Granite-16-18 mm thk.(Base price-Rs.1000/-per Sqm)	Sqm.	20		-	
b)	Stone Type -02 :Indian Granite-16-18 mm thk.(Base price -Rs.1500/-per Sqm)	Sqm.			-	
c)	Stone Type -03 :Indian Granite-16-18 mm thk.(Base price -Rs.1800/-per Sqm)	Sqm.			-	
5.06	Laying the above supplied stone as per design, over 20mm thick or more ( to make up the required levels ) in base mix 1:4, the joints shall be jointed with white cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing as maybe required for finishing the joints complete.					
a)	For Flooring	Sqm.	15		-	
b)	On Walls	Sqm.			-	
c)	In Skirting	Rmt.			-	
5.07	Providing Unpolished Stone for being fixed in flooring / walls as per approved samples					
a)	Stone Type -01 :Sandstone-16-18 mm thk.(Base price -Rs. 550/-per Sqm )	Sqm.			-	
b)	Stone Type -02 :Sandstone -16-18 mm thk.(Base price -Rs. 850/-per Sqm )	Sqm.			-	
c)	Stone Type -03 :Kota Stone-25-30 mm thk.(Base price -Rs.350/-per Sqm)	Sqm.	75		-	
5.08	Laying the above supplied stone as per design, over 20mm thick or more ( to make up the required levels ) in base mix 1:4, the joints shall be jointed with white cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete.					
a)	For Flooring	Sqm.	60		-	
b)	On Walls	Sqm.			-	
c)	In Skirting	Rmt.	5		-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
5.09	Providing and laying 20mm thick Pre-polished Granite counter 600mm width for wash basins fixed on M.S framework true to line and level all as per detail drawing including Skirting, Fascia band & verticals wherever required, and making openings in the Granite counter for seating washbasins and pillar cock. Rate to include providing and fixing necessary MS frame work as per drawings, polishing, bull nosing and polishing of edges as approved. Rate to include double edging (16mm+ 16mm). around periphery of counter and Sealing the stone surfaces with PU sealants for making them impermeable.. Plan area shall be measured, with all lead and lift at all levels and as directed by the Designer. For wash basins in Toilets at all levels. ( Base Price of Granite = Rs. 2000/ per Sqm )	Sqm.	50.00		-	
	<b>Epoxy Flooring</b>					
5.10	P/L upto 2mm thick layer of Epoxy coating on the laid concrete floor, where required	Sqm.	0.00		-	
	<b>Staircase Flooring</b>					
5.11	P/L 25mm thick Kota stone flooring over 20mm (average) thick base and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base cement mortar 1:4 ( 1 cement : 4 coarse sand)	Sqm.	10.00		-	
5.12	P/L 25mm thick Kota stone slabs in steps, skirting, dado and pillars laid on 12mm thick cement mortar 1:3 ( 1 cement, 3 coarse sand ) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete.	Sqm.	10.00		-	
5.13	P/L 18mm thick Granite stone flooring over 20mm (average) thick base and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base cement mortar 1:4 ( 1 cement : 4 coarse sand) (Base Price= Rs 80 per sq.ft.)	Sqm.	10.00		-	
5.14	P/L 18mm thick Granite stone slabs in steps, skirting, dado and pillars laid on 12mm thick cement mortar 1:3 ( 1 cement, 3 coarse sand ) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete. (Base Price= Rs 80 per sq.ft.)	Sqm.	10.00		-	
<b>TOTAL OF FLOORING WORKS</b>					-	
<b>6</b>	<b>PLASTERING WORKS AND WALL FINISHES</b>					
6.01	Rates to include works at all heights including scaffolding. P/L 12-15 mm thk. Cement plaster on to, walls, columns etc., in cement mortar 1:6 ( 1cement: 6fine and coarse sand mixed in equal proportion), complete with smooth finishing and curing . Chiken mesh and grooves to be provided, wherever required. (For internal works)	Sqm.	2800.00		-	
6.02	P/L 15-18mm thk. Cement plaster in external works, on to, walls, columns etc., in cement mortar 1:5 (1cement:5 coarse sand ), complete with smooth finishing and curing. (For external works, at all heights )	Sqm.	30.00		-	
6.03	P/L 6 mm thk. Cement plaster on to,ceiling., in cement mortar 1:4, complete with smooth finishing and curing.	Sqm.			-	
6.04	Providing ' V' groove in plaster, 25mm wide and 12 mm deep, at all levels as directed.	Rmt.			-	
6.05	Providing 40x10 mm drip moulds in S.F. plaster for chajjas, canopies etc.,at all levels and positions and as directed including scaffolding etc. complete.	Rmt.			-	
6.06	Providing and mixing waterproofing material CICO or approved equivalent in the proportion recommended by the manufacturers for plaster work.	Kgs			-	
6.07	P/L Chiken wire mesh in external plaster	Sqm.	10.00		-	
6.08	Applying 2 or more coats of Apex/equivalent exterior paint of approved shade to walls, applied evenly to produce uniform even surface to approved finish including cleaning and preparing the surface as per manufacturer's specification, complete with wetting and curing.	Sqm.	20.00		-	



S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
6.09	Applying 2 or more coats of white wash to walls, applied evenly to produce uniform even surface to approved finish including cleaning and preparing the surface.	Sqm.	0.00		-	
6.10	Providing and applying 2 coats of Oil bound distemper of approved quality and shade over a coat of putty & wall primer of approved quality to surfaces (interior) including thoroughly brushing the surface free from foreign materials, sand papering smooth the intermediate coats,including of all materials, labour, conveyance, royalties, scaffolding, watering, curing, sundries, tools and plants etc as per the direction of Engineer-in-charge. (colour & shade to be approved before procurment & use)	Sqm	10120.00		0.00	
6.11	Providing and applying 8-10mm thick POP punning in the specified areas for an even finish in Line and level as per the directions of the Engineer in Charge	Sqm	100.00		0.00	
6.12	Applying 2 or more coats of Satin enamel paint to walls, applied evenly to produce uniform even surface to approved finish including cleaning and preparing the surface with base of birla putty. Work to be carried out as per manufacturers recommendation.	Sqm.	2780.00		-	
6.13	Applying 2 or more coats of Plastic Emulsion to walls, applied evenly to produce uniform even surface to approved finish including cleaning and preparing the surface with base of birla putty. Work to be carried out as per manufacturers recommendation.	Sqm.	10.00		-	
6.14	Applying 2 or more coats of texture paint ( nerotex / sandtex matt or equivalent ) to walls, applied evenly to produce uniform even surface to approved finish including cleaning and preparing the surface with base of birla putty and a primer coat, at all levels as per details below-					
a)	Roller based finish Type -1 (Base Price Rs.25 per sq.ft.)	Sqm.			-	
b)	Roller based finish Type - 2 (Base Price Rs. 30 per sq.ft. )	Sqm.			-	
c)	Trowel based finish Type -1(Base Price Rs. 25 per sq.ft. )	Sqm.			-	
d)	Trowel based finish Type -2(Base Price Rs. 35 per sq.ft. )	Sqm.	20.00		-	
TOTAL OF WALL FINISHES					-	
7	MISCELLANEOUS BUILDING WORKS					
Works for Services and provisions for Services						
7.01	Providing all materials & applying Expansion Joint Treatment by following Operations					
	Surface Preparation: All surfaces shall be dry and free from frost, surface laitance and contamination, cavities and projecting nibs & should be prepared to a width of 50 mm greater than that of the membrane. The flexible epansion joint membrane should be turned up to parapets or other vertical surfaces to create a minimum 10 mm splay using epoxy resin fairing coat & filler of compressive strength of 70 mpa & soli-100%					
	System: Stage 1- Membrane Preparation: The mebrane having tensile strength of 7 mpa and minimum elongation of 400% and density of 1.7 should be laid red face upwards, on a clean surface and lightly buff the red face using an abrasive flap wheel, fitted to a standard electric drill. The membrane is ready when a matt finish is achieved. The surface of the membrane is cleaned with a brush followed by wiping with solvent.					

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
	<p>Stage 2- Mixing and Adhesive Application:</p> <p>The two component adhesive is to be mixed thoroughly using a slow speed drill and paddle stirrer for 4 minutes, stopping to scrape down the sides of the container. When mixed, the adhesive should be a uniform grey colour. Masking tape should be used at extremities and along centre line of joint. The mixed adhesive is to be applied using a serrated spreader then the masking tape is to be removed and the membrane is to be positioned on to the adhesive and roled firmly to displace trapped air and to ensure extrusion of the adhesive through the edge perforations. The second coat of the adhesive is to be applied to the full width of the top surface of membrane then the central release film from membrane is removed along with the outer edge masking tape and then feather the edges using the adhesive.</p>					
	The cost will include the entire process along with the cost and conveyance of all materials cost of all labours, T & P, sundries etc. as required for the work complete as per the direction of the Engineer-in-charge.	Rmt			-	
	<p>Providing and fixing <b>sheet covering over expansion joints</b> Aluminium fluted strips 3.15 mm thick.with iron screws as per design including cost, conveyance, of all materials, cost of all labours, T &amp; P, sundries etc. as required for the work complete as per the direction of the Engineer-in-charge.</p>	Rmt	10		-	
7.02	Providing and fixing <b>M.S. chequered plate</b> in walkways over structural steel work, including providing and applying 2 coats of epoxy paint including necessary surface preparation, etc. complete as per drawings. including welding/ bolting as required at all levels.	MT	0.5		-	
7.03	Providing and fixing 25mm dia and 250mm wide <b>M.S rungs</b> of approved design, including providing and applying 2 coats of enamel paint over a coat of zinc chromate paint etc.. complete as per detailed drawings at all levels.(The cost should include the cost of embedding in RCC/Brickwork )	Nos.	0		-	
7.04	Providing and fixing 40mm dia <b>M.S. spout pipes</b> ( 300mm long app.) in planters of approved quality, including necessary chasing, grouting with anti-shrinkage cement, 2 coats of synthetic enamel paint over a coat of steel primer etc.. Complete as per detailed drawings.	Nos.	0		-	
7.05	Only fixing Puddle pipes of all diameters with flanged ends in RCC works with all necessary anchors and drilling etc, done and the flange holes properly oriented.	Kgs	0		-	
7.06	<b>Core cutting in RCC slab / wall</b> and other locations, including finishing the same with antishrinkage grouting, water proofing, applying sealant if required etc. complete as required for the pipes of the following internal diameter					
a)	75mm dia	Nos.	10		-	
b)	100mm dia	Nos.	100		-	
c)	150mm dia	Nos.			-	
d)	200mm dia	Nos.			-	
7.07	Providing and leaving <b>PVC sleeves</b> during formwork in RCC wall, slabs, beam, parapets, and other locations as called for, sleeves cut to required sizes, complete as per detailed drawings at all levels.(Length - upto 400mm)					
a)	75 mm dia	Nos.			-	
b)	100 mm dia	Nos.			-	
c)	150 mm dia	Nos.			-	
d)	200 mm dia	Nos.			-	
	<b>Structural Works</b>					
7.08	Providing and applying over surfaces, bonding compound such as Sikadpur 32/ Nitobond of Fosroc or any other approved equivalent as per manufactures specifications.	Kgs			-	
7.09	P/M Groove cutting in RCC 25mm x 5mm	Rmt.			-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
7.10	<b>Suppling, Drilling/Cleaning hole and fixing HILTI</b> make heavy duty ETA Approved HIT-V Rod with RE-500 Chemical Anchor of appropriate length and fixing plates subsequently. Anchor comprises of Hilti RE-500 chemical and HIT-V theaded rod of minimum 5.8 steel grade, galvanised to minimum 5 microns. The chemical must have long term approval for minimum 50 years along with approvals for creep and corrosion. Manufacture should submit Anchor Design report based on design loads & other parameters as provided by consultants. Chemical anchors should be designed in accordance with EOTA-TR-029 "guidelines for anchorage of chemical anchors for use in concrete" for approval. Application at site should be done as per manufacturer guidelines					
a)	HIT-RE 500 with Anchor rod HIT-V- 5.8 M8X110	Nos.	10		-	
b)	HIT-RE 500 with Anchor rod HIT-V-5.8 M10X125	Nos.	10		-	
c)	HIT-RE 500 with Anchor rod HIT-V- 5.8 M12X150	Nos.	10		-	
d)	HIT-RE 500 with Anchor rod HIT-V- 5.8 M16X200	Nos.	10		-	
e)	HIT-RE 500 with Anchor rod HIT-V- 5.8 M20X240	Nos.	10		-	
f)	HIT-RE 500 with Anchor rod HIT-V- 5.8 M24X300	Nos.	10		-	
7.11	Repairing of RCC cover upto 25 mm with sika polymer modified one compound repair mortar - sikatop-122 hs including erecting& removal of scaffolding ( to be measured in running meter for the face of the member )	Rmt.	10		-	
	<b>Finishing Works</b>					
7.12	Providing and fixing GI corner beading as per the sizes below for the corners in all public areas					
a)	50mm x 50mm	Rmt.	0		-	
b)	75mm x 75mm	Rmt.	0		-	
7.13	Providing and fixing wire mesh 50mm x 50mm of required gauge	Sqm.	100		-	
7.14	Providing & Painting two or more coats with heat Reflective (S.R.I) paint of required shade after preparation of surfaces including brushing the surface to make free from foreign materials, sand papering, Priming, etc. including cost, conveyance, transportation of all materials, cost of all labour, sundries, T&P etc. complete as per direction of Project Manager.	Sqm	0		-	
7.15	Fabrication, Supply & Installation of Side mounted SS 304 Grade satin finished Railing for staircase area made by using SS Top Rail of 50mm dia with 1.5mm wall thickness mounted on SS round tube baluster - 38 mm dia with 1.5mm wall thickness with SS modular swivel neck to hold the Top Rail. The total height of the installed rail including the Top Rail shall be a minimum of 900mm from the top of the Staircase / as specified by the Architect. Further the baluster will be mounted on 6mm thick SS 304 grade side base plate fixed on the side of the RCC floor with 3 nos. of M8 x 100 mm long HRD anchors or chemical based anchors. The baluster will hold upto 4 nos. of SS round tube of 12mm dia with 1.5 wall thickness as	sqm	25		-	
	horizontal/diagonal mid rails connected to the baluster with the help of CNC made modular adjustable connectors. Only argon welding shall be permitted at site for making the necessary connetions. The average spacing of the baluster will be 900mm. All material shall be SS 304 grade with Satin finish only. Make - Ozone / Equivalent				-	
7.16	Fabrication, Supply & Installation of Side mounted SS 304 Grade satin finished Railing for staircase area made by using SS Top Rail of 50mm dia with 1.5mm wall thickness mounted on 38 mm dia with 1.5mm wall thickness tube fixed to 6mm thick SS 304 grade side base plate fixed on the side of the Staircase wall with 3 nos. of M8 x 100 mm long HRD anchors or chemical based anchors shaped as per Design with SS modular swivel neck to hold the Top Rail. The height of the installed rail shall be matching the height of the Staircase railing at the other end.	r.mt.	15		-	
	<b>Steel Works</b>					

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
7.17	Structural hollow tube steel section works riveted or bolted in built up sections , trusses and frames work including cutting , hoisting , fixing in position and applying a priming coat of approved steel primer all complete for creating a cover around the construction area.	MT	1.5		-	
7.18	P/F colour coated MS sheet 0.55mm tct Profiled RIB type Roof Sheeting having 1060mm width and 30mm crest at 205 c/c manufactured out of 0.47mm TCT AZ 150-550MPA for creating a cover around the construction area.	Sqm.	10		-	
7.19	Providing & Fixing mild Steel work welded in built up sections / framed work including cutting hoisting, fixing in position and applying priming coat of approved steel primer using structural steel etc. as required.					
a)	In stringers, treads, landings, etc. of stair cases including use of chequered plate wherever required; all complete.	MT	5		-	
b)	In gratings, trench covers, frames, guard bar, ladders, inserts, M.S doors etc. and other similar works. Including fixing in C.C bed blocks wherever required.	MT	0.5		-	
c)	In grills, railings, gates and other works involving smaller sections and detailing, including fixing in C.C bed blocks wherever required.	MT	2		-	
7.20	Providing & Fixing mild Steel work welded in factory made MS tubes & pipes of sizes upto 6" including cutting hoisting, fixing in position and applying priming coat of approved steel primer as required.					
a)	In Pergolas/Purlins/Structural members for canopy supports	MT	3		-	
b)	Refixing of grills, railings, gates and other works involving smaller sections and detailing, including fixing in C.C bed blocks wherever required.	MT	5		-	25000
<b>Other Works</b>						
7.21	Providing Workers for carrying out miscellaneous works for supporting the functioning of the Building as per instructions of the Project Manager as per details below					
a.	Mason	Nos.	10		-	
b.	Labour	Nos.	10		-	
7.22	Providing & Laying 300 Micron LDPE film	Sqm	300		-	
7.23	Providing and fixing External SS signages, with lighting provisions, permanently fitted to the Building Structure as sizes provided in the 3D views / Detailed drawings including the cost of all the hardwares, adhesive,labour etc. complete in all respect as per the direction of Project Manager.	Sqm	0		-	
<b>TOTAL FOR MISCELLANEOUS BUILDING WORKS</b>					-	
<b>8 BUILDING SKINS</b>						
	<i>For all items as mentioned in 8.01 to 8.08, the vendor shall prepare a shop drawing for approval before starting manufacturing the same and certify the installation for water tightness.</i>					
	<i>Rates to include works at all heights including scaffolding.</i>					
	<i>All paint material shall be low VOC and Green Certified</i>					
8.01	P/F Aluminium sub frame to opening of 40 x 25 mm x 1.5 mm section .	Kgs	10.00		-	
8.02	Supply and fixing of uPVC Sliding glazed Window made out of hollow multi-chambered uPVC sections having isolated drainage system with the design 2 Track 2 Panel System. The 2 track outer frame of the window having over all size of 98 x 52 mm (with mosquito mesh) having internal wall thickness of 2.50 mm. The glass sashes / shutters shall be made out of Upvc sections with over all size of 42 x 70 mm with internal thickness of 2.50 mm. The mosquito mesh shutter having over all size of 25 x 52 mm with internal wall thickness of 2.50 mm. Reinforcement of galvanised mild steel with thick ness of 1.50 mm has to put through out the Frame, glass shutter and mesh shutter. Glass support beading make of upvc sections will be fixed with EPDM gasket to keep glass tight and unmoved. Single point locking system (called touch lock) made out of casted zamac with white powder coated and locking hook will make of SS 304	Sqm.	236		-	To be discussed.

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
	grade material. Aluminum guide rail will be fixed on the Bottom part of frame on which the glass shutters will run. The roller will make of nylon an having capacity of 40 - 120 kg depends on glass weight. Finseal will be provided to protect the dust in between closing point & interlocking point of glass & mesh shutters. The Interlock of the uPVC window should be approved by the Engineer-in- charge before fixing. Glass thickness and colour can be changed as per requirement.					
8.03	Supply and fixing of uPVC fixed glazed ventilators made out of hollow multi-chambered uPVC sections having isolated drainage system with the design Casement (Outside open coupled with fixed) The window frame having over all size of 60 x 52 mm having internal wall thickness of 3.00 mm. There will be no additional glass panel to the, glass will be fixed with the frame itself. Reinforcement of galvonised mild steel with thickneness of 1.50 mm will have throughout the frame. Glass support beading making of Upvc sections will be fixed with EPDM gasket to keep glass tight. Glass thickness and colour will be change as per requirement.	Sqm.	100.00		-	
8.04	P/F Aluminium Glazing ( panel size upto 1m x 0.8m ) using 12+1.5mm+12mm PVB bonded glass with 25% openable panels in a slope over the skylight areas as per shop drawings to be approved by the Project Manager / Architect	Sqm.	40.00		-	
<b>TOTAL OF BUILDING SKINS</b>					-	
<b>9</b>	<b>WATER PROOFING</b>					
9.01	Providing and laying damp proof course 40mm thick with cement concrete 1:2:4 ( 1 cement : 2 coarse sand : 4 graded stone aggregate 12mm nominal size )	Sqm.	0.00		-	
9.02	Extra for providing and mixing Waterproofing material in cement concrete work in doses by weight of cement as per manufacturer's specifications	per 50Kgs cement bag	100.00		-	
9.03	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7Kgs per square metre on damp proof course after cleaning surface with brushes anf finally with a piece of cloth lightly soaked in kerosene oil.	Sqm.	150.00		-	
9.04	Providing and layering water proofing treatment in sunken portion of WC's bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : (a) First layer of slurry of cement @0.488Kgs/sqm mixed with water proofing cement compound @0.253Kgs/sqm. This layer will be allowed to air cure for 4 hours. (b) Second layer of slurry of cement @0.242Kgs/sqm mixed with water proofing cement compound @0.126Kgs/sqm. This layer will be allowed to cure for 4 hours followed with water curing for 48 hours.	Sqm.	410.00		-	
	( The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.)					
9.05	Providing and laying AAC Block filling in sunk slabs under toilet floors.	Cum.	50.00		-	
9.06	Providing and laying water proof cement plaster in 1:3 ratio with cement slurry and neat cement finish including water proofing compound CICO NO:1 as per manufacturers specifications.	Sqm.			-	
9.07	Providing and laying water proof compound DR. Fixit in R.C.C. works, like Gutter, as per manufacturer's specifications.	Kgs	10.00		-	
9.08	Providing and Laying Fibre Mesh in water Proofing	Sqm.	410.00		-	
<b>TOTAL OF WATERPROOFING</b>					-	-
<b>10</b>	<b>TOILET &amp; PANTRY FINISHING WORKS</b>					

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
10.01	Providing 6mm thick / equivalent tiles as per design for <i>toilets / balconies / terraces / kitchens - walls and floors</i> )					
a.	Base price of Tile = Rs. 45/- per sq.ft.	Sqm.	100		-	
b.	Base price of Tile = Rs. 60/- per sq.ft.	Sqm.	1599		-	
10.02	Laying the above supplied Tiles with spacers including epoxy grout filling as per design over 15 mm (average) thick base of cement mortar 1:4 (1 cement:4 coarse sand) / adhesives jointed with white cement slurry mixed with pigment to match the shade of tiles / as specified complete -					
a)	On Floors	Sqm.	430		-	
b)	On Walls	Sqm.	800		-	
10.03	Providing and fixing Prefabricated Modular Toilet cubicles of Make - Merino FMRSCUBTTN18BX00002 (HSN CODE: 48239019) / Equivalent BESCO TITAN CUBICLE 18MM BOX UP 2100M Thickness of Compact Laminate : 18mm Color of HPL Boards: Single Standard Compact Color Special Remarks For Customization :In This Quote SS Top Rail consider above the Front Partition Size of Cubicle : As per Drawing (W) & (D) x 2100mm (H) Door Size : 1925mm (H) x 600mm (W) Divider Size : 1945mm (H) Overall Height Of Cubicle : 2100mm (Including bottom Gap of 100mm) Accessories: Standard - Merino Make Stainless Steel - 304 Grade accessories) a) SS "U" Channel b) SS "F" Channel (Only Corner Unit) c) SS Door Stopper Channel d) SS Coat Hook e) SS Privacy Thumb turn c/w Occupancy Indicator f) SS Door Knob g) SS Spring Loaded Butt Hinges with Cover h) SS Shoe Box - 316 Grade i) Rubber Lining for Door Stopper j) Screws & Wall Plugs SPECIAL NOTE - Warpage Criteria is 3.0 mm/1000mm for MRS panels as per EN standard- 438.					
	Toilet Cubicles	cubicles	50		-	
10.04	Providing and fixing Factory fabricated Shower Cubicles of Make - MerinoFMRSCUBTTN18BX00002 (HSN CODE: 48239019) /Equivalent BESCO TITAN CUBICLE 18MM BOX UP 2100M Thickness of Compact Laminate : 18mm Color of HPL Boards: Single Standard Compact Color Special Remarks For Customization :In This Quote SS Top Rail consider above the Front Partition i. Size of Cubicle : As per Drawing (W) & (D) x 2100mm (H) ii. Door Size : 1925mm (H) x 600mm (W) iii. Divider Size : 1945mm (H) iv. Overall Height Of Cubicle : 2100mm (Including bottom Gap of 100mm) v. Accessories: Standard - Merino Make Stainless Steel - 304 Grade accessories) a) SS "U" Channel b) SS "F" Channel (Only Corner Unit) c) SS Door Stopper Channel d) SS Coat Hook e) SS Privacy Thumb turn c/w Occupancy Indicator f) SS Door Knob g) SS Spring Loaded Butt Hinges with Cover h) SS Shoe Box - 316 Grade i) Rubber Lining for Door Stopper					

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
	j) Screws & Wall Plugs					
	SPECIAL NOTE - Warpage Criteria is 3.0 mm/1000mm for MRS panels as per EN standard- 438.	cubicles	40		-	
10.05	Providing and fixing Urinal Modesty Panels of Make - Merino FMRSUMPPNLZZSS00001 (HSN CODE: 48239019) / Equivalent					
	URINAL MODESTY SS					
	Thickness of Compact Laminate : 12mm					
	Color of HPL Boards: Single Standard and Plain Compact Color					
i.	Size of UMP : 500mm (W) X 1200mm (H)					
ii.	Overall Height Of UMP : 1850mm (Including bottom Gap of 650mm)					
iii.	Accessories: Standard - Merino Make Stainless Steel - 304 Grade accessories) - SS					
	a) SS Right Angle Brackets					
	b) Screws & Wall Plugs					
	SPECIAL NOTE - Warpage Criteria is 3.0 mm/1000mm for MRS panels as per EN standard- 438.	nos.	20		-	
<b>TOTAL FOR TOILET &amp; PANTRY FINISHING WORKS</b>					-	
<b>11</b>	<b>INTERNAL FINISHING WORKS</b>					
	Note:					
	<i>All measurements less than 0.3 m in girth shall be paid on r.ft. basis</i>					
11.01	Standard Suspended Ceiling : (Gyproc India Board) Providing & fixing at all height false ceiling of 9 mm thick boral / gypsum board including frame work made of special sections power pressed from M.S. sheet and galvanised in accordance with zinc coating consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 22 mm and 37 mm at 1200 mm c/c to centre one flange fixed to the ceiling with dash fastner 12.5 mm dia x 40 mm long with 6 mm dia. bolts to the angle hangers of 25 x 25 x 0.55 mm of required length, and other end of angle hanger being fixed with nut and bolts to G.I. channels 45 mm x 15 mm x 0.9 mm running at the rate of 1200 mm centre to centre to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having clips of 10.5 mm at 450 mm centre to centre shall be fixed in a direction perpendicular to G.I channel with connecting clips made out of 2.64 mm dia. x 230 mm long G.I. All including the cost of cutting , making cutouts/ openings for HVAC , light fixtures with suitable Gypsom India section framing as per design/ instructions.	Sq.mt.	2700		-	
11.02	P/F Gypsum Board Verticals as per specs above	R.ft.	50		-	
11.03	Ribbed Ceiling - Providing & fixing of "Nittobo" Double layered false ceiling system comprising of secondary layer of 12mm thick linear Nitobo Solation Accoustical Mineral Fiber Tiles in size 600X600mm having density of 350 kg/m3 and NRC value of 0.50 in approved design stuck and stapled on primary layer of 9.5mm thick Gypsum Board. The Gypsum Board is fixed on the frame comprising of GI perimeter channels of size 0.55mm thick having one flange, one flange of 30mm and a web of 27mm along with perimeter screw fixed to wall with nylon sleeves and screws, then suspending GI intermediate channels of size 45mm, 0.9mm thick with two flanges of 15mm each fixed to soffit @1220mm c/c with ceiling angle of 25mmX10mmX0.55mm fixed to bottom of MS angle members, ceiling section of 0.55mm thickness having knurled web of 51.5mm and two flanges of 26mm each with lips of 10.5mm are then fixed to the intermediate channel with the help of connecting clips and indirection perpendicular to the intermediate channel at 457mm c/c, Gypboard is then screw fixed to 230mm centre complete in all respects and as per drawings.	Sq.mt.			-	
11.04	Pelmet - Providing & fixing of pelmet made in 19 mm thk commercial board and laminate on external and enamel paint on internal as per site requirements.	Rmt	RO			

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
	P/Fixing 12 mm thick Bison board / Calcium Silicate Board ceiling with GI section hanger system as per gypsum board ceiling requirements.	Sq.mt.	10		-	
11.05	Gypsum Board Cove : Providing & fixing cove light pelmet/trough: 300mm high, 150 - 200mm wide in ceiling made of Lagyp board with GI framing complete as per design. (Note :- Cove to be complete from inner non - visible side as well)	Rmt	RO			
11.06	P/F 8-10 mm POP Punning over roofing in line and level as per the dircetions of the Engineer in Charge	Sq.mt.	RO			
11.07	Reinstallation of Wooden flooring	Sq.mt.	350		-	x
11.08	Providing and fixing wooden flooring matching the existing flooring at the Junior School	Sq.mt.	100		-	x
	<i>The measurement of the partitions shall only be given upto the Boarded area</i>					
11.09	Providing and fixing <b>100mm thick Gypboard Partitons</b> with 2 nos. x 12.5mm thick tapered edge Gypsum Board of approved make confirming to IS: 2095-1982 & IS: 2542-1981 sides screw fixed on both sides with LGS framecore of LGS framing of 47mm studs of 0.55mm thickness having one flange of 34mm and other flange of 36mm made of GI steel, placed at 610mm c/c in 47mm floor and ceiling channel of 0.55mm thickness having two equal flanges of 32mm made of GI steel ,including all fixing accessories,scaffolding, material, labour and rate to include the cost of additional support required near the door frames&window frame openings, etc complete.	Sq.mt.	100		-	
	Finally square and tapered edges of the boards are to be jointed and finished so as to have a flush look which includes filling and finishing with butt joint, jointing compounds, paper tape for plaster board, flush finish with gypsum putty following the practices recommended by the manufacturer India Gypsum, making opening for electrical fittings and fixtures wherever required complete as per manufacturer specifications, drawings and as directed, conducting material testing with records time to time as per specifications complete al as per specification including staging, scaffolding, lead and lift and technically satisfaction of engineer incharge. (The height of wall is varying 2.8m to 3.6m)				-	
11.10	Providing and fixing of composite thickness of 50mm thk with <b>glass wool of 32kg/m3</b> including all necessary fixing material of approved make wherever required complete as per manufacturer specifications, drawings and as directed, conducting material testing with records time to time as per specifications complete al as per specification including staging, scaffolding, lead and lift and technically satisfaction of engineer incharge.	Sq.mt.	100		-	
11.11	Providing fitting and fixing in proper position factory made wooden polymer composite (WPC) door frame having waterproof, termite & borer Proof, no rotting, swell & crack proof, bend & warp resistant properties of size 62 mm x 100 mm (dimension torelance 5 mm, subjected to approval of the EIC, no extra payment will be made for diiference in sizes) conforming to relevant IS specifications, of approved design and drawing fitted to the masonry/ concrete wall with anchor bolts of required size including cost of all materials, labour, conveyance, taxes, T&P etc. complete as per direction of Engineer-in-charge. Make:- Ecoste/ Century Ply / equivalent	Rmt	20		-	



S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
11.12	Providing and fixing ISI marked both side laminated flush door shutters confirming to IS 2202(Part 1) of 35 mm thickness with approved colour paint over a coat of primer etc including ISI marked necessary hardware fittings such as, SS Concealed Hinges (5"), stopper, Door eye & magnet, SS Tower bolt-8", Mortise lock Handle, Cylinder coin & knob key & knob, SS lock body etc. including cost of all labours, materials, conveyance, hardware fixing, loading and unloading and royalties, sundries and T&P etc all complete as per direction of the Engineer -in-charge.	Sq.m	20		-	
11.13	Providing and fixing ISI marked Double Leaf both side laminated flush door shutters confirming to IS 2202 (Part1) of 35 mm thickness including ISI marked necessary hardware fitting with approved colour paint over a coat of primer etc and hardware fittings such as, SS Concealed Hinges (5"), stopper, top pivot, top patch, bottom patch, Door magnet, SS Tower bolt-8", Mortise lock Handle, Cylinder coin & knob key & knob, SS lock body and Floor Spring etc. including cost of all labours, materials, conveyance, hardware fixing, loading and unloading and royalties, sundries and T&P etc all complete as per direction of the Engineer -in-charge.	Sqm	10		-	
11.14	Providing and fixing of 46mm thick fully flush double skin Hollow metal 2Hrs fire rated doors with vision panel as per IS 3614 part-1 & part-2 for stability and integrity. Pressed Galvanized steel confirming to IS 277 with the following specification. The internal construction of the door should be rigid reinforcement pads for receiving appropriate hardware. The infill material shall be resin bonded honeycomb core. Recommended fire door shall have doors tested at CBRI or ARAI for maximum rating of 2hrs with vision panel. Test certificates should be available for vision lites / panels as part of the fire door assembly. Independent glass test certificates will not be accepted. Proper label confirming the type of door and the hourly rating is mandatory. Door leaf shall be manufactured from 1.2mm (18guage) minimum thick galvanised steel sheet. Vision panel wherever applicable should be provided as per manufacturers recommendation with a bedding and screws from inside. The glass should be 6mm clear borosilicate fire rated glass of relevant rating of the door. All doors and frames shall be finished with polyurethane aliphatic grade paint of approved colour. The door leaf and frame shall have passed minimum 250 hours of salt spray test. Rate should include supply and installation of door and hardware set as mentioned in the door and hardware schedule.	Sqm	30		-	
<b>TOTAL FOR INTERIOR FINISHING WORKS</b>					-	
<b>PART - III SITE DEVELOPMENT WORKS</b>						
<b>12 HARDSCAPING WORKS</b>						
12.01	Providing and laying 60mm thick factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand.	Sqm	30		0	
	<i>The rates shall be including the cost of all materials, cost of all labour, conveyance, royalties, loading, unloading, sundries, watering and curing, T&amp;P, etc. complete as per the direction of the Project Manager.</i>					
12.02	Installation of existing pavers as per specifications provided in item above.	Sqm	200		-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
12.02	Providing and laying grass paver of size 500 x 500 x 40 mm thick laid over 150 gsm geotextile soil separator membrane on 150 mm thick sub grade of compacted bed of 20 mm thick nominal size stone aggregate and base course and filling with 150 mm thick sand, including spreading, well ramming, consolidating and finishing smooth etc. all complete as per direction of Engineer-in-charge. Make - Turfpave XD/ Equivalent	Sqm			0	
12.03	Providing and laying 80 mm thick fine dressed stone flooring over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand), including cutting to size, laying and filling the joints with white cement slurry mixed with colouring pigment to match the shade and colour, cleaning the surfaces with oxlaic acid, machine grinding, mirror polishing including the cost of all materials, cost of all labour, conveyance, royalties, loading, unloading, sundries, watering and curing, T&P, etc. complete as per the direction of the Project Manager. (Note- Sample of tiles shall be approved before procurement and use.					
i)	Red sandstone	Sqm	10		0	
ii)	White sand stone	Sqm	10		0	
12.04	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8mm having water absorption less than 0.5% and conforming to IS: 15622, of approved make in all colours and shades in outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. including the cost of all materials, cost of all labour, conveyance, royalties, loading, unloading, sundries, watering and curing, T&P, etc. complete as per the direction of the Project Manager.	Sqm			0	
12.05	Coloured concrete: 52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 Kgs of cement or as per manufacturer's specifications including the cost of all materials, cost of all labour, conveyance, royalties, loading, unloading, sundries, watering and curing, T&P, etc. complete as per the direction of the Project Manager.	Sqm			0	
12.06	Providing & laying granite stone tiles in Coping/cladding using 10mm thick granite stone slab of approved quality, colour and size upto 0.4 Sqm to proper line, level and slope laid over 12mm thick cement mortar (1: 3) confirming to including cutting to size, laying and filling the joints with white cement slurry mixed with colouring pigment to match the shade and colour, cleaning the surfaces with oxlaic acid, machine grinding, mirror polishing including the cost of all materials, cost of all labour, conveyance, royalties, loading, unloading, sundries, watering and curing, T&P, etc. complete as per the direction of the Project Manager. (Note- Sample of tiles shall be approved before procurement and use.)	Sqm			0	
<b>TOTAL FOR HARDSCAPING WORKS</b>					-	
<b>PART - IV PLUMBING SERVICES</b>						
<b>13</b>	<b>SUPPLY OF SANITARY AND PLUMBING FIXTURES ( w/o any connecting accessories )</b>					
	NOTE:-					
i.	Detail of Sanitary fixture are for the information of the Contractor, however model/makes of all sanitary fixtures shall be selected by Architect/Interior designer/Project manager and the same shall be binding for execution.					

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
ii.	No additional fixing cost shall be paid for change in type of sanitary fixtures.					
iii.	Contractor to receive all the above mentioned items & store at place as directed at site in case supply is by Client .					
13.01	EWC with Concealed Cistern ( Base price - Rs. 13000/ - )	Nos	8		-	
13.02	EWC with Built in Cistern ( Base price - Rs. 11000/ - )	Nos	80		-	
13.03	Health Faucet ( Base price - Rs. 800/ - )	Nos	88		-	
13.04	Wash Basin type - 01 ( counter type )( Base price - Rs. 3000/ - )	Nos	8		-	
13.05	Wash Basin type - 02 ( wall mounted type )( Base price - Rs. 4000/ - )	Nos	80		-	
13.06	Pillar Tap ( Base price - Rs. 800/ - )	Nos	8		-	
13.07	Toilet Paper Holder( Base price - Rs. 550/ - )	Nos	88		-	
13.08	Twin Coat Hook( Base price - Rs. 550/ - )	Nos	130		-	
13.09	Wash Basin Mixer( Base price - Rs. 2900/ - )	Nos	88		-	
13.10	Kitchen Mixer( Base price - Rs. 4000/ - )	Nos	10		-	
13.11	Angle Valves( Base price - Rs. 400/ - )	Nos	284		-	
13.12	Concealed Valves( Base price - Rs. 600/ - )	Nos	88		-	
13.13	Long Braided Hoses( Base price - Rs. 210/ - )	Nos	284		-	
13.14	Soap Dispensor( Base price - Rs. 1200/ - )	Nos	84		-	
13.15	SS Grating( Base price - Rs. 4000/ - )	Nos	30		-	
13.16	Kitchen Sink - single bowl( Base price - Rs. 4000/ - )	Nos	10		-	
13.17	Kitchen Sink - double bowl( Base price - Rs. 9000/ - )	Nos	4		-	
13.18	Urinal( Base price - Rs. 4200/ - )	Nos	8		-	
13.19	Towel Rails ( Base price - Rs. 1800/ - )	Nos	20		-	
13.20	Towel Rings ( Base price - Rs. 1200/ - )	Nos	20		-	
13.21	Overhead Shower ( Base price - Rs. 2500/ - )	Nos	55		-	
13.22	Divertors with mixer for the Shower ( Base price - Rs. 5500/ - )	Nos	55		-	
13.23	Spout ( Base price - Rs. 1250/ - )	Nos	55		-	
<b>TOTAL FOR SUPPLY OF SANITARY AND PLUMBING FIXTURES ( w/o any connecting accessories )</b>					-	
<b>14</b>	<b>INSTALLATION OF SANITARY AND PLUMBING FIXTURES ( rates including all connecting accessories )</b>					
14.01	Fixing, testing and commissioning of Ivory/white colour vitreous wall hung European water closet with concealed type cistern comprising of actuator button facia assembly including brass / SS screws and washer ,C.P. bolts, nuts, C.I. chair or other hanging arrangements, bakelite seat & cover with C.P. hinges & rubber buffers, C.P. brass screw, washer with all accessories including cutting & making good the walls & floors slab wherever required.	Nos.	8		-	
14.02	Fixing, testing and commissioning of Ivory/white colour vitreous Floor mounted European water closet with Exposed type cistern comprising of actuator lever including brass / SS screws and washer ,C.P. bolts, nuts, C.I. chair or other hanging arrangements, bakelite seat & cover with C.P. hinges & rubber buffers, C.P. brass screw, washer with all accessories including cutting & making good the walls & floors slab wherever required.	Nos.	80		-	
14.03	Fixing, testing & commissioning of ABS Heath Faucet (complete with hook and flexible SS tube min. Length 1.0 m) as required. (Preferred make-Vitra)	Nos.	88		-	
14.04	Fixing, testing and commissioning of white/Ivory colour vitreous china wall hung flat back Counter Wash Basin with CI / MS brackets duly painted, C.P. brass waste, C.P. brass chain with rubber plug, Polypropylene Silent Bottle trap 32 mm dia. with 75 mm clear water seal fitted with built-in Air Admittance valve of adequate capacity (Make: McAlpine Model - A31AV) with factory supplied extension piece, including cutting and making good the walls floors wherever required.	Nos.	8		-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
14.05	Fixing, testing and commissioning of white/ivory colour vitreous china counter top Wash Basin C.P. brass waste, C.P. brass chain with rubber plug, Polypropylene Silent Bottle trap 32 mm dia. with 75 mm clear water seal fitted with built-in Air Admittance valve of adequate capacity (Make: McAlpine Model - A31AV) with factory supplied extension piece, including cutting and making good the walls floors wherever required.	Nos.	80		-	
14.06	Fixing, testing & commissioning of C.P. brass pillar tap.	No.	8		-	
14.07	Fixing CP brass toilet paper holder.	Nos	88		0.00	
14.08	Fixing CP brass twin coat hook.	No.	130		0.00	
14.09	Fixing, testing and commissioning of C.P. brass Single hole basin mixer including connecting pipe complete as required.	No..	88		-	
14.10	Fixing, testing and commissioning of C.P. brass angle valve with C.P. wall flange, Nut and Washer etc. complete as required.	Nos.	284		-	
14.11	Fixing, testing and commissioning of C.P. brass angle <b>concealed</b> valve with C.P. wall flange, Nut and Washer etc. complete as required.	Nos.	88		-	
14.12	Fixing, testing and commissioning of Long Braided Hoses 450 mm long including nuts and washers and making connection to fixtures and fittings complete as required.	Nos.	284		-	
14.13	Fixing SS liquid soap dispenser complete as required.	Nos.	84		-	
14.14	Fixing Shower channel with SS grating size 600 mm long with trap to suit side connection or bottom connection.	Each	30		-	
14.15	Fixing of stainless steel kitchen sink with R.S. or CI bracket (painted white), 40 mm dia C.P. brass waste of standard pattern, C.P. brass chain and rubber plug, 40 mm dia swivel trap of PP with air admittance valve of adequate air flow capacity (McAlpine, UK, Model: TP31V) complete with cutting and making good the walls where required.					
a	Single bowl	Each	10		-	
b	Double bowl	Each	4		-	
14.16	Fixing, testing and commissioning of Ivory colour white vitreous china large flat back / half stall urinal supported by CI / MS bracket duly painted, including CP brass piping, spreaders, CP brass waste with dome type grating, CP cast brass bottle trap with extension piece, wall flanges complete with all accessories.	Each	8		-	
14.17	Fixing Towel Rails complete as required.	Nos.	20		-	
14.18	Fixing Towel Rings complete as required.	Nos.	20		-	
14.19	Fixing Overhead Shower complete as required.	Nos.	55		-	
14.20	Fixing Divertors with mixer for the Shower complete as required.	Nos.	55		-	
14.21	Fixing Spout complete as required.	Nos.	55		-	
14.22	Providing & fixing beveled edge mirror 5.5mm thick of superior quality plate glass complete with 6mm thick marine ply sheet ground fixed to wooden cleats with CP brass screws and washers with 40 mm wide teak wood frame as per design including polishing (MODI FLOAT GLASS) or approved equivalent.	sq.m	40		-	
<b>TOTAL FOR INSTALLATION OF SANITARY AND PLUMBING FIXTURES ( including all connecting accessories )</b>					-	
<b>15</b>	<b>COLD / FLUSHING WATER SUPPLY (INTERNAL / EXTERNAL)</b>					

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
15.01	Providing and fixing Chlorinated polyvinyl Chloride (CPVC) pipes-SDR-11,havings 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 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,fixing at wall/ceiling level supported by clamps, hangers, structural steel supports, etc.Cost shall include making connections with G.I. pipes & fittings.					
	a) 15 mm outer dia	RM			-	
	b) 20 mm outer dia	RM			-	
	c) 25 mm outer dia	RM	360		-	
	d) 32 mm outer dia	RM	418		-	
	e) 40 mm outer dia	RM	242		-	
	f) 50 mm outer dia	RM			-	
	g) 65mm inner dia-sch 40 with sch 80 fittings	RM			-	
	h) 80 mm inner dia-sch 40 with sch 80 fittings	RM	QR			
15.02	Providing and fixing Chlorinated polyvinyl Chloride (CPVC) pipes-SDR-11,havings 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 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.Cost shall include excavation in all kind of soil, dewatering, refilling, watering, ramming & removing the surplus excavated material and making good the same complete as required.					
	a) 20 mm outer dia	RM			-	
	b) 25 mm outer dia	RM			-	
	c) 32 mm outer dia	RM			-	
	d) 40 mm dia	RM			-	
	e) 50 mm dia	RM			-	
	f) 62.5 mm inner dia-sch 40 with sch 80 fittings	RM	QR			
15.03	Providing & fixing gun metal lever operated ball valve. Tested to a pressure of 15 Kg / Sqcm. Including flanges/union, nuts, bolts, washer etc. Complete as required.					
	a) 15 mm dia	NOS			-	
	b) 20 mm dia	NOS			-	
	c) 25 mm dia	NOS			-	
	d) 32 mm dia	NOS	1		-	
	e) 40 mm dia	NOS			-	
	f) 50 mm dia	NOS			-	
15.04	Providing & fixing gunmetal non return valve including all accessories suitable for working pressure of 15 Kg/sqcm of the following sizes:					
	a) 32mm dia	NOS	1		-	
	b) 50mm dia	NOS			-	
	c) 65 mm dia	NOS			-	
	d) 80 mm dia	NOS	QR			
	e) 100 mm dia	NOS	QR			
15.05	Providing and fixing M.S. puddle flanges fabricated out of 6 mm thick M.S. plate of size 200 x 200mm plus dia of pipe of 600 mm long pipe pieces to R.C.C. water tanks / R.C.C. walls. The entire fitting shall be hot dipped galvanised.					
	a) 25 mm dia	NOS	1		-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
	b) 32 mm dia	NOS	1		-	
	c) 40 mm dia	NOS	1		-	
	d) 50 mm dia	NOS			-	
	e) 65 mm dia	NOS			-	
	f) 80 mm dia	NOS			-	
	g) 100 mm dia	NOS			-	
	h) 150 mm dia	NOS			-	
	i) 200 mm dia	NOS			-	
15.06	Providing and fixing in position of approved quality G.M. float valve with copper ball float and brass rods of required length suitable for working pressure of 5 Kg/sqcm of the following sizes:					
	a) 20 mm dia	NOS			-	
	b) 25 mm dia	NOS			-	
15.07	Constructing brick masonry chamber (for housing valves, Meters etc.) of brick work with bricks of class designation 75 in cement mortar 1 : 5 (1 cement:5 finesand) plastering internal face with cement mortar 1 : 3 (1 cement: 3 fine sand and rough plaster on outer face with a floating coat of neat cement. R.C.C top slab with heavy duty SFRC manhole cover and frame of 600 mm dia. Including excavation, dewatering, refilling, watering, ramming and removing the surplus excavated material complete as required. (All sizes are clear internal sizes).					
	a) Size 600 x 600 x 900 mm deep	NOS.	6		-	
15.08	Making connection from Existing Water Supply line including necessary excavation & making good the same including cutting, boring and tapping the Existing line by providing and installing ferrule / Tee connections with necessary fittings as required and making good the same. The rate for this item also includes complete services from the contractor for liasoning works such as filing necessary applications submission of forms for approval to the municipal of the authorities depositing the fees other amounts as required getting the premises / installations, inspected and approved and all other formalities required till the water connection is obtained. All the expenses incurred in authorities, following up this regard shall be borne by the Contractor except for the payments to be made for any security deposit etc. which will be reimbursed on production of original voucher.	JOB			-	
15.09	Supplying, installing, testing and commissioning of triple layer HDPE water storage tank including holes for inlet, outlet, overflow level indicator drain and vent points, manhole cover suitable supporting structure complete.					
	a) Capacity 5000 Lts.	SET	QR			
15.10	Providing and fixing electronic type level indicator for water tank mounted in panel with level display, alarm when water level is low or high, full range from one level to four level display and manual reset for alarm etc. with electrical wiring conduit supports from wall & ceiling probs and all other accessories complete as required.	NOS.			-	
15.11	Disinfection of water supply pipes with 50ppm of chlorine solution and flushing the entire pipeline complete as required.	JOB			-	
15.12	Providing & fixing 6mm thick nitril rubber insulation on hot water pipes-15 to 62.5 mm dia pipes buried inside walls.	RM			-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
15.13	Providing & fixing 12mm thick nitril rubber insulation on hot water pipes-15 to 54 mm dia exposed pipes.	RM			-	
15.14	Providing & fixing of butterfly valve suitable for pressure 15 Kg/Sqcm. with flanges, nut bolts & gaskets complete required.					
	a) 65 mm dia	NOS			-	
	b) 80 mm dia	NOS			-	
15.15	Providing & fixing automatically operated air release valve 25 mm dia with isolation valve.	NOS			-	
15.16	Providing & fixing electrically operated Motorized Butterfly Valves with by pass piping & all fittings, by pass valves (3nos) for filling of overhead tanks complete with High & Low level control switches to control the valves. The level controllers shall be installed in overhead tanks. The system should be complete in all respect with accessories, 220 volt V AC/24 volt DC, IP67 electrical water level control unit, copper control wiring in weather proof casing etc. from butterfly valves to control unit.					
	a) 50 mm dia	NOS			-	
15.17	Providing & fixing digital water flow meter on pipes of following diameter.					
	a) 32 mm dia	NOS	QR			
	b) 40 mm dia	NOS	QR			
	c) 50 mm dia	NOS	QR			
	d) 65 mm dia	NOS	QR			
<b>TOTAL FOR COLD / FLUSHING WATER SUPPLY (INTERNAL / EXTERNAL)</b>					-	
<b>16</b>	<b>INTERNAL DRAINAGE (SOIL, WASTE &amp; VENT)</b>					
16.01	Providing, fixing, jointing and testing in position of ISI marked UV stabilized <b>UPVC pipes for soil, waste and vent, Type-B</b> as per IS : 13592 suitable for rubber ring joints, including all necessary specials and fittings (confirming to IS:14735) i.e. bends, tees, junctions (with or without doors), reducers, WC connectors, couplers, cowls, clamps, rubber rings, clean outs, access pieces at ends of main pipes (for roding) etc. fixing at wall/ ceiling/ floor level supported by clamp, hangers & structural steel supports etc. in concealed / inside duct / under floor & basement ceiling / external work etc. including chase cutting as required, excavation and back filling in all kind of soils, suspended from floor under false ceiling or embedding the pipes laid under floors / building in 75 mm. around 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including cost of shuttering for proper completion of the work, breaking and making good the walls and floors etc. after pipes have been duly laid and tested. The rubber ring shall confirm to IS:5382. The Pipes will be supported with threaded GI rods & clamps on 50x50x5 mm slotted angle. The cost will include all support arrangements. The work includes commissioning of all pipes lines as per drawings and specifications and as directed by engg-in-charge at site.					
	a) 75 mm outer dia	RM			-	
	b) 110 mm outer dia	RM			-	
	c) 160 mm outer dia	RM			-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
16.02	Providing and laying 1:2:4 cement conc. 100 mm thick all round the pipe including 100mm thick bed concrete for the following M.S./C.I./C.I. class L.A./UPVC pipes and specials below floor including necessary shuttering etc. complete as required.					
	a) 75 mm dia pipe	RM			-	
	b) 100 mm dia pipe	RM			-	
	c) 150 mm dia pipe	RM			-	
16.03	Providing, fixing, jointing and testing in position ISI marked (IS:4985) <b>UPVC pipes</b> of min 6 Kg/ Sqcm rating with fitting for waste pipe from fixtures to floor trap including reduces, enlarger, socket, couplers, bends, tees etc including fixing at wall/ ceiling level supported by clamp & hangers etc. cutting holes in wall/ floors/ slabs and making good the same with cement concrete 1:2:4 complete as required.					
	a) 40 mm outer dia	RM	428.914		-	
	b) 50 mm outer dia	RM	80.713		-	
	c) 63 mm outer dia	RM			-	
16.04	Providing & fixing UPVC <b>Floor trap</b> of self cleansing design with CP Jali complete in all respects. (Make : Supreme / Finolex / Prince).Multi trap connection to be provided with each floor trap.					
	a) 100 mm inlet and 100 mm outlet.	NOS	70		-	
	b) 100 mm inlet and 75 mm outlet.	NOS	70		-	
16.05	Providing & fixing 100m x 50mm PVC waste including cutting chases, the floor / slab complete as required.	NOS			-	
16.06	Providing and fixing PVC clean out plug with suitable inlet key for opening male threaded joint with pipe & socket complete as required.					
	a) 100 mm dia	NOS			-	
16.07	Providing & fixing rain water Khurras of required depth with lead flashing around the pipe with one piece lead sheet of 3 mm thick set on a layer of cold bitumen. Including Heavy duty CI/MS grating as per drawing complete as required.					
	a.Khurras' size 300x300 mm with 150dia leaf strainer	NOS			-	
	b. 'Khurras' size 450x450 mm.250dia CI grating	NOS			-	
16.08	Providing, fixing, jointing and testing in position of ISI marked UV stabilized <b>UPVC pipes</b> for <b>rain water Type-B</b> as per IS : 13592 suitable for rubber ring joints, including all necessary specials and fittings (confirming to IS:14735) i.e. bends, tees, junctions (with or without doors), reducers, WC connectors, couplers, cowels, clamps, rubber rings, clean outs etc. fixing at wall/ ceiling/ floor level supported by clamp & hangers etc. in concealed / inside duct / under floor & basement ceiling / external work etc. including chase cutting as required, excavation and back filling in all kind of soils, suspended from floor under false ceiling or embedding the pipes laid under floors / building in 75 mm. around 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including cost of shuttering for proper completion of the work, breaking and making good the walls and floors etc. after pipes have been duly laid and tested. The rubber ring shall confirm to IS:5382.					



S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
	The Pipes will be supported with threaded G I rods & clamps on 50x50x5 mm slotted angle. The cost will include all support arrangements. The work includes commissioning of all pipes lines as per drawings and specifications and as directed by engg-in-charge at site.					
	a) 75 mm outer dia	RM			-	
	b) 110 mm outer dia	RM	130		-	
	c) 160 mm outer dia	RM			-	
<b>TOTAL FOR INTERNAL DRAINAGE (SOIL, WASTE &amp; VENT)</b>					-	
<b>17</b>	<b>EXTERNAL SEWAGE/ STORM WATER DRAINAGE AND WATER SUPPLY SYSTEM.</b>					
17.01	Providing fixing, jointing and testing in position the following UPVC pipes (working pressure 10 kg/sqcm) conforming to IS: 4985 for drainage cut to required lengths including all necessary fittings and specials such as bends, junctions, offsets, making proper connections. Including providing PCC thrust block at 2 mtr. centre to centre. Pipe to be laid below ground level in trenches upto required depth including excavation in all kind of soil, dewatering, refilling, watering, ramming & removing the surplus excavated material and making good the same complete as required. For external sewer & storm water drainage.					
	a) 110 mm dia	RM	QR			
	b) 160 mm dia	RM			-	
	c) 200 mm dia	RM			-	
	d) 250 mm dia	RM			-	
17.02	Providing and laying 150 mm thick cement concrete 1:4:8 (1 cement:4 fine sand:8 graded stone aggregate 40mm nominal size) around pipes including 150 mm thick bed concrete as per standard design.					
	a) 100 mm dia pipe	RM	QR			
	b) 150 mm dia pipe	RM			-	
	c) 200 mm dia pipe	RM			-	
	d) 250 mm dia pipe	RM			-	
17.03	Providing, laying, jointing and testing socketed and spigotted RCC pipes (NP2 Class) conforming to IS:458 jointed with rubber rings & laid to correct levels below ground in trenches upto required depth including excavation in all kind of soil (hard rock) dewatering, refilling, watering, ramming and removing the surplus excavated material and making good the same complete as required. For external storm water drainage.					
	a) 150 mm dia	RM	QR			
	b) 250 mm dia	RM	QR			
	c) 300 mm dia	RM	QR			

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
17.04	Providing and fixing stoneware gully trap grade 'A' of the following sizes with C.I. grating embedded in brick masonry chamber of required size and trap to be set in cement concrete 1:2:4, both side 12mm thick plastering with floating cast of neat cement. Making necessary connections & providing water tight C.I. cover with frame. Including necessary excavation Including necessary excavation, dewatering, refilling, watering, ramming and removing the surplus excavated material and making good the same complete as required.					
	a) 180X150 mm outlet	NOS			-	
	b) 150X100 mm outlet	NOS	QR			
17.05	Constructing brick masonry inspection chamber of the following sizes in brick work of class 75 in cement mortar 1:5 work in cement mortar 1:5 (1 cement:5 fine sand), R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm. nominal size) foundation concrete 1:4:8 mix(1 cement:4 coarse sand:8 size).Inside plastering 12 mm thick with cement motor 1:3 ( 1 cement : 3 coarse sand) and rough plastering on outside with a floating coat of neat foot rests at 300 mm spacing, banching and making channels with 1:2:4 cement concrete neatly finished, including excavation, in all kind of soil (hard rock), dewatering, refilling, watering, ramming and removing the surplus excavated cement providing MS material making good the same complete as required.					
	a) Inside size 60x45 cm ( upto 60 cm maximum depth).	NO	4		-	
	b) Inside size 90x80 cm ( upto 90 cm maximum depth).	NOS			-	
	c) Extra over 'b'above for depth exceeding 60 cm & upto 90 cm.	RM			-	
	d) Inside size 90x120 cm (91cm starting depth & 167 cm maximum depth).	NOS			-	
	e) Extra over 'd'above for depth exceeding 91 cm & upto 167 cm.	RM			-	
17.06	Constructing brick masonry circular manhole 1.22m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement :4 coarse sand) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement :3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 Cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 mix (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete all complete as per standard design:					
	1.68 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182kg., fixed in cement concrete 1:2:4 mix (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid separately)					
17.07	Extra depth for circular type manhole 1.22 m internal dia (at bottom) with beyond 1.68 m to 2.29m		QR			
17.08	Providing & fixing cast iron manhole cover with frame.					

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
	a) Medium duty double seal of size 500mm internal diameter.Total weight of cover & frame to be not less than 116 Kg.	NOS	1		-	
	b) Heavy duty double seal of size 560mm internal diameter. Total weight of cover & frame to be not less than 208 Kg.	NOS	QR			
17.09	Construction of catch basins of the following sizes in brick work with bricks of class 75 in cement mortar 1:5 (One cement, 5 finesand) necessary foundation concrete (1:4:8). Inside plastering 12mm thick with cement Mortar 1:3 and rough plaster on outside with a floating coat of neat cement. Including the R.C.C. top slab for fixing grating with frame. Including necessary excavation, dewatering, refilling, watering, ramming, removing, the surplus excavated material and making good the same complete as required.					
	a) Internal size 600x600x450 mm to 800mm depth with grating	NOS	10		-	
	b) Internal size 750x750x801 mm to 1200mm depth with grating	NOS			-	
17.10	Providing & fixing SFRC heavy duty grating of size 700 x 700 mm with frame for catch basin of approved design.	NOS	10		-	
17.11	Providing & fixing SFRC heavy duty grating of size 850 x 850 mm with frame for catch basin of approved design.	NOS	QR			
17.12	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12 mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mm X 25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30 X 20 X 15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	NOS			-	
17.13	Providing and fixing over straight or curved drain M.S. grating with fixed frame of angle 60mm x 60mm x 6mm size fixed to concrete with 25mm x 3 mm hold fasts approx. 100 mm long welded at interval of 600 mm and welded cross braced at 1200 mm interval by 50 mm x 6 mm thick MS flats. The removable grating shall be made of with outer frame of size 600 mm long with M.S. angle 50mm x 50mm x 6mm having welded cross members on one direction with M.S. flats of size 44 mm x 6 mm at a spacing of 30 mm c/c. Including two of synthetic enamel paints over a coat of primer complete as required.					
	a) 200 mm wide	RM	QR			
	b) 350 mm wide	RM			-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
17.14	Providing and fixing in position G.I. vent with brass mosquito proof coupling and air filter including return bend, complete as required. The entire fitting shall be hot dipped galvanised.					
	a) 50 mm dia	NOS			-	
17.15	Constructing open surface drain with first class bricks in cement mortar 1:4(1cement:4fine sand)including earth excavation,100mm thick bed concrete1:5:10(1cement:5fine sand: 10graded stone aggregate 40mm nominal size) and 25mm thick cement concrete1:2:4(1cement:2fine sand: 4graded stone aggregate 12.5mm nominal size),12mm cement plaster 1:4(1cement 4coarse sand)with a floating coat of neat cement inside the drain,its top & exposed sides including disposal of surplus earth as directed at site.					
	a) Size 250mmwide & 250mm average depth.	RM	QR			
17.16	Providing,boring,lowering and fixing 160mm dia UPVC (Working pressure-6kg/sqcm) pipes with 3mm size slots upto 5m depth as per drawing & direction of engineer in charge complete in all respects.Cost shall include approval from Ground Water Authority.	RM			-	
17.17	Making connection from Existing Municipal sewer/storm water manhole including necessary excavation & making good the same including all civil works. The rate for this item also includes complete services from the contractor for liasoning works such as filing necessary applications submission of forms for approval to the municipal authorities depositing the fees other amounts as required getting the premises / installations, inspected and approved and all other formalities required till the sewer connection is obtained. All the expenses incurred in authorities, following up this regard shall be borne by the Contractor except for the payments to be made for any security deposit etc. which will be reimbursed on production of original voucher.	JOB	QR			
17.18	Constructing RCC Rain water harvesting tank ( size 5.0mx3.0m & 4.0 m depth ) complete with all associated civil works like RCC walls,RCC top slab,foundation concrete, excavation in all kinds of soil, backfilling , disposal of surplus excavated earth complete as per detail drawing & authority.	NOS			-	
17.19	Providing & fixing in positon precast R.C.C. manhole cover and frame of required shape and approved quality.					
	a) Circular shape 500mm internal diameter Medium Duty .	NOS			-	
17.20	Supplying and filling in Rain water harvesting tank coarse sand 1.5 to 2.0mm including all associated works.	Cum			-	
17.21	Supplying and filling in Rain water harvesting tank stone boulders 50 - 200 mm size including all associated works complete.	Cum			-	
17.22	Supplying and filling in Rain water harvesting tank gravels 5 - 10 mm and down size including all associated works complete.	Cum			-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
17.23	Supply pea-gravel of approved quality in stacks and then packing the same into the annular space between the tubewell assembly and bore hole.	Cum			-	
<b>TOTAL FOR EXTERNAL SEWAGE/ STORM WATER DRAINAGE AND WATER SUPPLY SYSTEM</b>					-	
<b>18</b>	<b>MISCELLANEOUS PLUMBING AND SEWERAGE WORKS</b>					
18.01	Supplying, assembly, erection, testing and commissioning of magnetic level sensors and controllers, CPVC probe tube, PP actuating float ,motorised valves and all other equipment required for the performance of the system to the satisfaction of the engineer in charge complete including providing and fixing wiring from control junction box near the UG tank to probes of required length, interconnection wiring between level controller and the concerned contactor in the starter panel as required. The level controller will perform the following functions (Make-Active Controls )				-	
	To switch on the tube well pump when the level of water in the UG raw water tank is low and to cut off the pump when the level in the underground raw water tank is high.				-	
	To switch on the OH water transfer pump when the level of water in the OH raw water tank is low and to cut off the pump when the level in the OH raw water tank is high.				-	
	To switch on the Filter feed pump when the level of water in the OH treated water tank is low and to cut off the pump when the level in the OH treated water tank is high or the level in the raw water tank is low.	Set			-	
<b>TOTAL FOR MISCELLANEOUS PLUMBING AND SEWERAGE WORKS</b>					-	
<b>PART -V</b>	<b>ELECTRICAL WORKS</b>					
<b>19</b>	<b>INTERNAL WIRING</b>					
	<b>All wiring item including provision of conduit, conduit accessories , circuit wiring, switch, box and all fitting completed as required.</b>					
19.01	Point wiring for switch controlled primary light points with 3x1.5 sq.mm. (P+N+E) FRLS PVC insulated 1100 volt grade stranded copper conductor wires in IS 25mm dia 1.6 mm thick PVC conduit recessed / surface conduiting system including the cost of cutting / making good chases in brick work and including the cost of supplying and fixing modular grid plate mounted 240volt 6Amp. control switch housed zinc chromate passivated MS boxes with moulded cover plate and including the cost of loop earthing with 1.5 sq.mm. FRLS PVC insulated 660/1100 volt grade stranded copper conductor wires complete as per specifications and as required.	Each	20.00		-	
19.02	Point wiring for secondary light points with 3x1.5 sq.mm. (P+N+E) FRLS PVC insulated 1100 volt grade stranded copper conductor wires in IS 25mm dia 1.6 mm thick PVC conduit recessed and / or surface conduiting system including the cost of cutting / making good chases in brick work and including the cost of loop earthing with 1.5 sq.mm. FRLS PVC insulated 1100 volt grade stranded copper conductor wires complete as per specifications and as required.	Each	100.00		-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
19.03	Point wiring for 2 X 6 amp socket outlet points with switch complete with 3x1.5 sq.mm. (P+N+E) FRLS PVC insulated 1100 volt grade stranded copper conductor wires in IS 25mm dia 1.6 mm thick PVC conduit recessed and / or surface conduiting system including the cost of cutting / making good chases in brick work and including the cost of supplying and fixing modular grid plate mounted 240volt 6amp. 5 pin combined shuttered socket outlets alongwith 240 volt 6 amp. controlled switch housed in zinc chromate passivated MS boxes with moulded cover plate and including the cost of loop earthing with 1.5 sq.mm. FRLS PVC insulated 1100 volt grade stranded copper conductor wires complete as per specifications and as required.	Each	120.00		-	
19.04	Point wiring for 16 amp socket outlet points (1 outlet wired on 1 circuit) with 3x2.5 sq.mm. (P+N+E) FRLS PVC insulated 1100 volt grade stranded copper conductor wires in IS 25mm dia 1.6 mm thick PVC conduit recessed or surface conduiting system including the cost of cutting / making good chases in brick work and including the cost of supplying and fixing modular grid plate mounted 220volt 16amp. 6 pin combined shuttered socket outlets alongwith 220 volt 16 amp. controlled switch of housed in zinc chromate passivated MS boxes and including the cost of loop earthing with 2.5 sq.mm. FRLS PVC insulated 660/1100 volt grade stranded copper conductor wires complete as per specifications and as required.	Point	10.00		-	
19.05	Point wiring for 16 amp socket outlet points (2 outlet wired on 1 circuit) with 3x4 sq.mm. (P+N+E) FRLS PVC insulated 1100 volt grade stranded copper conductor wires in upto first outlet and 2.5 wire sq.mm.wire for the looped outlet in IS 25mm dia 1.6 mm thick PVC conduit recessed surface conduiting system including the cost of cutting / making good chases in brick work and including the cost of supplying and fixing modular grid plate mounted 220volt 16amp. 6 pin combined shuttered socket outlets alongwith 220 volt 16 amp. controlled switch of housed in zinc chromate passivated MS boxes and including the cost of loop earthing with 2.5 sq.mm.	Set			-	
	FRLS PVC insulated 660/1100 volt grade stranded copper conductor wires complete as per specifications and as required.					
19.06	Point wiring for fan points with 3x1.5 sq.mm. (P+N+E) FRLS PVC insulated 1100 volt grade stranded copper conductor wires in IS 25mm dia 1.6 mm thick PVC conduit recessed surface conduiting system including the cost of cutting / making good chases in brick work and including the cost of supplying and fixing modular grid plate mounted 240volt 6Amp. control switch with provision for electronic fan regulator, housed in zinc chromate passivated MS boxes with moulded cover plate and including the cost of loop earthing with 1.5 sq.mm. FRLS PVC insulated 660/1100 volt grade stranded copper conductor wires complete as per specifications and as required.	Each	20.00		-	
19.07	Point wiring for Exhaust fan points with 3x2.5 sq.mm. (P+N+E) FRLS PVC insulated 1100 volt grade stranded copper conductor wires in IS 25mm dia 1.6 mm thick PVC conduit recessed or surface conduiting system including the cost of cutting / making good chases in brick work and including the cost of supplying and fixing modular grid plate mounted 240volt 6Amp. 5 pin combined shutters socket outlet near the fan and 240V 6 amps. control switch at convenient location near room entrance, housed in zinc chromate passivated MS boxes with moulded cover plate and including the cost of loop earthing with 2.5 sq.mm. FRLS PVC insulated 1100 volt grade stranded copper conductor wires complete as required	Each			-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
19.08	Point wiring for two way switch controlled light points with 3x2.5 sq.mm. (P+N+E) FRLS PVC insulated 1100 volt grade stranded copper conductor wires in IS 25mm dia 1.6 mm thick PVC conduit recessed and / or surface conduiting system including the cost of cutting / making good chases in brick work and including the cost of supplying and fixing modular grid plate mounted 240volt 6Amp. control switch housed zinc chromate passivated MS boxes with moulded cover plate and including the cost of loop earthing with 2.5 sq.mm. FRLS PVC insulated 660/1100 volt grade stranded copper conductor wires complete as per specifications and as required.	Each	10.00		-	
19.08	Providing and fixing the surface mounted provisions for Cabling as per details below -					
a.	Factory manufactured MS Cable trays as per details below -					
i.	450 mm x 50mm	Meter	20.00		-	
ii.	300 mm x 50mm	Meter	20.00		-	
iii.	150 mm x 50mm	Meter			-	
b.	MS conduits					
i.	50mm dia	Meter			-	
ii.	32mm dia	Meter			-	
iii.	25mm dia	Meter			-	
19.09	Wiring for submains with FRLS PVC insulated stranded copper conductor 660/1100 volt grade wires in surface/concealed conduit including cost of providing saddles etc. as required for surface conduiting and / or the cost of cutting and filling chases complete as per specifications as required and as below.					
a.	4x95sq.mm in provided cable tray with 2 Nos. 10sq.mm. FRLS PVC insulated stranded copper conductor 660/1100 volt grade wires for earthing.	Meter			-	
b.	4x10sq.mm in provided Cable tray and 2 Nos. 6sq.mm. FRLS PVC insulated stranded copper conductor 660/1100 volt grade wires for earthing.	Meter	30.00		-	
c.	4x6sq.mm in 32mm 1.6 mm thick PVC conduit conduit and 2 Nos. 2.5 sq.mm. FRLS PVC insulated stranded copper conductor 660/1100 volt grade wires for earthing.	Meter			-	
d.	2x6sq.mm in 32mm 1.6 mm thick PVC conduit and 1 Nos. 2.5 sq.mm. FRLS PVC insulated stranded copper conductor 660/1100 volt grade wires for earthing.	Meter			-	
19.10	Point wiring for 20/25 amp socket outlet points (1 outlet wired on 1 circuit) with 3x4 sq.mm. (P+N+E) FRLS PVC insulated 1100 volt grade stranded copper conductor wires in IS 25mmdia 1.6 mm thick PVC conduit recessed or surface conduiting system including the cost of cutting / making good chases in brick work and including the cost of supplying and fixing modular grid plate mounted 220volt 20/25amp. 3pin combined shuttered socket outlets alongwith 220 volt 20/25 amp.controlled switch of housed in zinc chromate passivated MS boxes and including the cost of loop earthing with 2.5 sq.mm.	Point			-	
	FRLS PVC insulated 660/1100 volt grade stranded copper conductor wires complete as per specifications and as required.					
<b>TOTAL FOR INTERNAL WIRING</b>					-	
<b>20</b>	<b>SUPPLY OF FIXTURES AND FANS ( without any accessories )</b>					
20.01	Recess / Surface / Wall mounted LED light fixtures - Type 1 ( Base Price - 2500/- )	Each	250		-	
20.02	Recess / Surface / Wall mounted LED light fixtures - Type 2 ( Base Price - 1500/- )	Each	190		-	
20.03	Recess / Surface / Wall mounted LED light fixtures - Type 3 ( Base Price - 1200/- )	Each	45		-	
20.04	Recess / Surface / Wall mounted LED light fixtures - Type 4 ( Base Price - 600/- )	Each	250		-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
20.05	Recess / Surface / Wall mounted LED light fixtures - Type 5 ( Base Price - 300/- )	Each	30		-	
20.06	Ceiling fans (1200/1400mm) ( Base Price - 1800/- )	Each	0		-	
20.07	Exhaust fans ( Base Price - 1200/- )	Each	20		-	
<b>TOTAL FOR INSTALLATION OF FIXTURES AND FANS</b>					-	
<b>21</b>	<b>INSTALLATION OF FIXTURES AND FANS</b>					
21.01	Installation, Testing & Commissioning of Recess / Surface / Wall mounted LED light fixtures with driver, earthing point etc. including the hanging arrangement/supports complete in all respects as required.	Each	765		-	
21.02	Installation, testing and commissioning of Ceiling fans (1200/1400mm) including down rods of required length, canopy, suspending shackle, bladed electronic regulator etc. complete as required.	Each	0		-	
21.03	Installation, testing and commissioning of 300mm dia exhaust fans including the cost of making hole in the wall making good, louvered shutter etc. complete as required.	Each	20		-	
<b>TOTAL FOR INSTALLATION OF FIXTURES AND FANS</b>					-	
<b>22</b>	<b>DISTRIBUTION BOARDS</b>					
22.01	Supply, installation, testing and commissioning of factory fabricated and factory assembled, sheet steel clad powder coated, wall / recess mounting dust and vermin (IP-42) ingress protection) proof double door vertical type Distribution Boards fabricated from 16 SWG sheet steel provided with hinged gasketed door with padlocking facility and including suitably rated PVC insulated copper busbars with interconnections and neutral bar assemblies one per earthing terminals assembly etc. complete as required and as below. sample to be got approved by architectss (Note:- In all distribution boards / panels the control wiring shall be FRLS)					
a.	DB with 1-63 amp. 4P 10 kA RCCB 300mA incoming and 12 nos. 6/16/25 amps. SP 10 kA 'C' category MCB with thermal magnetic protective releases out goings.	Each	5.00		-	
b.	1-40amp.DP 30mA RCBO incoming and 8 nos. 6/16/25 amps. SP 10 kA 'C' category MCB with thermal magnetic protective releases out goings.	Each	1.00		-	
c.	1-32amp.DP 30mA RCBO incoming and 4 nos. 6/16/25 amps. SP 10 kA 'C' category MCB with thermal magnetic protective releases out goings.	Each	1.00		-	
<b>TOTAL FOR DISTRIBUTION BOARDS</b>					-	
<b>23</b>	<b>WIRING FOR TELEPHONE, TV &amp; DATA POINTS</b>					
23.01	Wiring for telephone outlets with 2 pair .61 mm dia cu wire in existing conduits complete as required and as below.	Meter			-	
23.02	Supplying and fixing following modular switch/ socket with modular plate and switch MS box including connections but excluding plate etc .as required.					
	RJ-11	Each			-	
	RJ-45	Each	20		-	
23.03	Supply and fixing of the following sheet steel clad wall / recess mounting telephone tag block of Krone make constructed from 14 SWG sheet steel, finished with red oxide coating of two coats of paint, with hinged gasketed door and complete with adequately rated and sized telephone terminal block to receive incoming and outgoing wires.					
	05 pair	Each			-	



S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
23.04	Supplying & laying CAT 6 for LAN wiring in PVC conduit complete as required.	Mtrs	600		-	
23.05	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.	Mtrs	100		-	
<b>TOTAL FOR WIRING FOR TELEPHONE, TV &amp; DATA POINTS</b>					-	
<b>24</b>	<b>EARTHING</b>					
24.01	Supplying & Grounding Maintenance free chemical filled earthing copper bonded high tensile low carbon rod 17.2mm x 3000mm with 250microns copper coating + 50 kg earth enhancing compound including accessories & providing masonry enclosure with cover plate locking arrangement complete as required. CPRI & UL Certified	Set	1		-	
24.02	Supplying and laying 40x6mm GI strip from earth electrode including connection as required.	Meter	10		-	
24.03	Providing and fixing 8 SWG copper wire in recess or surface for loop earthing with sub-main conduit and L.T. cable from panel to DB 's as required.	Meter	10		-	
<b>TOTAL FOR EARTHING</b>					-	
<b>25</b>	<b>FIRE ALARM SYSTEM</b>					
	SITC of Fire Alarm System with following components. System shall be compatible for Digital Voice Evacuation announcement to all the floors simultaneously and individually.					
25.01	Supply and laying of 2 Core, 1.5 Sq. mm copper conductor cable, low smoke zero halogen, high performance silicon rubber insulated, overall shielded, sheathed fire survival armoured cable complete in all respect.	Meter	500		-	
25.02	Supplying, installation, testing and commissioning of intelligent addressable type photoelectric optical type smoke detector and mounting base with LED light complete as required.	Each	35		-	
25.03	Supplying, installation, testing and commissioning of intelligent addressable type photoelectric optical type rise cum fixed temperature heat detector and mounting base with LED light complete as required.	Each			-	
25.04	Supplying, installation, testing and commissioning of 70db-80db dual tone electronic hooter cum speaker suitable for wall mounted complete as required.	Nos.	6		-	
25.05	Supplying, installation, testing and commissioning of manual call box in suitable enclosure with arrangement to raise the alarm when the glass is manually broken complete as required.	Nos.	6		-	
25.06	Supply, testing and commissioning of Microprocessor based intelligent addressable, modular, expandable 1 Loop (each loop consist of max 300 number of addressable devices) fire alarm control panel integrated with Digital Voice evacuation system with required suitable amplifier/mike etc, with Liquid Crystal Display, multiple access levels with historic event. loop should have be 20% spare. The panel shall have 240 volts AC power supply, automatic battery charger, 24 volts batteries sufficient for operating the system for 60 minutes during emergency condition. The panel shall be Approved to UL Standards.	No.	1		-	
25.07	Repeater Panel as per above	No.	1		-	
<b>TOTAL FOR FIRE ALARM SYSTEM</b>					-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
<b>26 CCTV</b>						
	<b>SITC of the following Digital CCTV System including outlet boxes, cover plates and all necessary connections complete with operation, testing and commissioning works.</b>					
26.01	SITC of Outdoor 2 megapixel wide angle 1080 IP bullet camera with 3.6mm building fixed lens with minimum illumination of 0.1 lux F1.2 50IRE with IR LEDs that can light for making it true day & night camera with intelligent motion detection with weatherproof housing.	Each	6		-	
26.02	SITC of Indoor 2 megapixel wide angle 1080 IP bullet camera / dome camera as per drawings with 3.6mm building fixed lens with minimum illumination of 0.1 lux F1.2 50IRE with IR LEDs that can light for making it true day & night camera.	Each	2		-	
26.03	SITC of 16 channel Industrial Grade NVR with H265 compression 4 MP Camers recording and playback and event triggering with intelligent video analytics and motion detection with hard disk support capacity upto 6tb, USB, DVD-RW, Flexible search capabilities, Multievent Recording. Storage of 15 Days recording	Each	1		-	
26.04	SITC of 8 Port PoE Switch with 2 Nos. SFP Module complete as required	Each	1		-	
26.05	SITC of 32" LED High resolution, High contrast ratio Color LED Monitor.	Each	2		-	
26.06	Supplying and drawing of UTP 4 pair CAT 6 LAN cables in surface/recessed conduit as required.	Meter	100		-	
26.07	SITC of Internal SATA 2 TB hard disk complete as required	Each	2		-	
26.08	Supplying and fixing of 9U Rack with Fan, Power Switch i/c Cable Manager complete as required.	Each	1		-	
26.09	SITC of 600VA UPS with 15mins back-up complete as required.	Each	1		-	
<b>TOTAL FOR CCTV</b>					-	
<b>PART - V FIRE FIGHTING WORKS</b>						
<b>27 HYDRANTS, SPRINKLER, PIPING &amp; ACCESSORIES</b>						
27.01	Supplying, laying, fixing, testing and commissioning of following sizes (NB) of ISI marked heavy class M.S. pipes including cutting, threading, welding etc. and providing all fittings e.g. elbows, reducers, clamps, hangers, flanges, gaskets, nuts, bolts and washers etc. including painting of pipes and fittings with red paint over a coat of ready mixed primer, both of approved quality and shade including cutting holes and chases in brick or RCC walls/slabs and making good the same etc. complete in all respect as required. (Make Jindal Hisar)					
a.	200 mm dia	Metre	0		-	
b.	150 mm dia	Metre	0		-	
c.	100 mm dia	Metre	30		-	
d.	65 mm dia	Metre	0		-	
e.	50 mm dia	Metre	0		-	
f.	40 mm dia	Metre	0		-	
g.	32 mm dia	Metre	0		-	
h.	25 mm dia	Metre	0		-	
27.02	Supplying, installing, testing and commissioning of following dia Y Strainer of ductile body flanged with stainless steel strainer as required.					
a.	150 mm dia	Nos.	0		-	
b.	80 mm dia	Nos.	6		-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
27.03	Providing and fixing cast iron dual plate wafer type non return valves PN 1.6 including nuts, bolts, 1.5 mm thick gasket companion flanges as per table 'E' etc. complete.					
a.	80 mm dia	Nos.	0		-	
b.	150 mm dia	Nos.	0		-	
27.04	Supplying of Butterfly valves of PN 1.6 rating of following sizes with EPDM rubber lining seat and CF-8 stainless steel disc duly ISI marked and stainless steel stem with lever/gear operation and cast iron body in powder coated finish for fire fighting application complete in all respects confirming to IS: 13095 as required.					
a.	200 mm dia	Nos.	0		-	
b.	150 mm dia	Nos.	3		-	
c.	100 mm dia	Nos.	0		-	
d.	80 mm dia	Nos.	0		-	
e.	65 mm dia	Nos.	0		-	
27.05	Supplying and fixing Single Headed Internal Hydrant Valve oblique pattern with instantaneous Stainless Steel coupling of 63 mm dia with cast iron wheel ISI marked, conforming to IS : 5290 (Type A), with 80 mm dia flanged inlet, with ABS cap and chain complete with all accessories etc. as required. including 6 mm thick Orifice Plate made out of stainless steel plate of grade 316 (thickness as per specification) of required dia of pipe to reduce pressure on individual hydrant to operating pressure (7 kg/cm <sup>2</sup> ) complete in all respects.	Nos.	0		-	
27.06	Supply, Installation, Testing and Commissioning 63 mm dia. 15 Mtr. Long RRL hose pipe with 63 mm dia. male and female stainless steel couplings duly binded with GI wire rivets etc. ISI marked, IS 636 (type-A) as required.	Nos.	0		-	
27.07	Supplying and Fixing <b>First Aid Hose Reel</b> , wall mounting swinging type complete with drum & bracket of MS construction, spray painted in Post office Red, conforming to IS 884/1995 with upto date amendments, complete with the following as required.					
a.	30 Mtr Long 20 mm nominal internal dia as per IS 12585 water hose thermoplastic (Textile reinforced) Type II				-	
b.	20 mm dia. ball valve & nozzle.				-	
c.	Drum and brackets for fixing the equipments on wall.				-	
d.	Connection from riser with 25 mm dia gun metal stop valve and M.S pipe as reqd.	Nos.	0		-	
27.08	Supplying and fixing Stainless Steel <b>branch pipe</b> with 20mm dia nozzle conforming to IS:903. suitable for instantaneous connections to hose pipe coupling etc. as required.	Nos.	0		-	
27.09	Supplying and fixing 4 way fire brigade connection of cast iron body with 4 nos. Stainless steel male instantaneous inlet couplings complete with cap and chain as required for 150mm dia MS pipe connection, conforming to IS 904 as required.	No.	1		-	
27.10	Providing, fixing, testing and commissioning of one number Stainless steel fire brigade section hose coupling (Fire brigade withdrawal connection) i/c foot valve in the bottom etc. as per specification complete as required. (M.S pipe of 100 mm dia will be paid in pipe item.	Nos.	0		-	
27.11	Providing & Fixing Pressure switch in the M.S Pipe Line including connection etc. as required.	Nos.	0		-	
27.12	Providing, fixing, testing and commissioning 100 mm dia pressure gauge of range 0 -015 Kg / sqcm conforming to IS - 3624 having bourdon tube of stain steel 310 in cast aluminium, stove enamelled, black, weather proof case with outer, screwed aluminium bezel and complete with necessary U-type stainless steel siphon tube and cock complete as required.	Nos.	0		-	
27.13	Providing and fixing flow switches in 65/80mm dia M.S Pipe as required.	Nos.	0		-	

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
27.14	Providing, fixing, testing & commissioning of 15 mm size quartzoid bulbtype <b>sprinklers</b> , of rating 68 degree C. with required accessories.					
a.	Pendent 68° C Chrome Plated	Nos.	0		-	
b.	Upright 68° C Chrome Plated	Nos.	RO			
27.15	<b>SITC weather proof M.S cabinet size 1200 mm x 2100 mm x 800mm</b>					
	Supplying, installation, testing and commissioning of weather proof M.S cabinet size 900 mm x 2100 mm x 800mm deep fabricated from 1.6mm thick M.S. sheets and M.S angle 40mmx40mmx6mm complete with glass, locking arrangements to accommodate the following: -					
a.	Gunmetal single headed Hydrant valve - 1 No.				-	
b.	Fire Hoses 63mm, 15 M long with accessories - 2 Nos.				-	
c.	Short branch - 1 No.				-	
d.	First Aid hose Reel - 1 No.				-	
e.	Fire Extinguisher - 2 Nos.				-	
f.	Fireman's Axe - 1 No.				-	
g.	Pressure Gauge - 1 No.				-	
	The cabinet shall be painted with one coat of primer and 2 coats of synthetic enamel paint of approved shade.	Nos.	6		-	
27.16	Fabricating, supplying, installation, testing and commissioning of electrical control panel of cubical construction, floor mounted type, fabricated from 2 mm thick CRCA sheet compartmentalised with hinged lockable doors, dust and vermin proof, powder coated of approved shade after 7 tank treatment process, cable alley, inter connection, having switchgears and accessories mounting and internal wiring, earth terminals numbering etc complete in all respect, suitable for operation on 415 V, 3 phase, 50 Hz AC supply with enclosure protection class IP 42 as reqd. Including all required rating starter, mcb, mccb, cables, glands whichever is required complete in all respect.					
	It also includes all cable tray, earthing connecting cable connection between panel and pumps.	Nos.	0		-	
27.17	<b>SITC of Fire Man's Axe</b>					
	Supplying, Installation, Testing and Commissioning of standard Fire Man's axe with heavy insulated rubber conforming to IS : 926	Each	6		-	
27.18	Supplying and fixing ISI marked single headed external hydrant valve with instantaneous stainless steel of 63 mm dia with cast iron wheel, conforming to type "A" of IS:5290 with blank ABS cap and steel chain etc complete as required. including 6 mm thick Orifice Plate made out of stainless steel plate of grade 316 (thickness as per specification) of required dia of pipe to reduce pressure on individual hydrant to operating pressure (7 kg/cm <sup>2</sup> ) complete in all respects.	Each	0		-	
27.19	Providing and fixing weather proof hose cabinets for yard hydrant fabricated from 16 g MS sheet with full glass door and locking arrangement, suitable to accommodate one hydrant valve, 2 nos. 15m long hose, 1 No branch pipe and one fireman's axe. The cabinet shall be painted with one coat of primer and finished stove enamelled "Fire Red", "Fire Hose" written on front including suitably mounted on a raised masonry platform as required. (Approx 0.75m x 0.6m x 0.25m).	Each	0		-	
	<b>TOTAL FOR HYDRANTS, SPRINKLER, PIPING &amp; ACCESSORIES</b>				-	
<b>28 FIRE EXTINGUISHERS</b>						
28.01	Providing and fixing with bracket/supports etc. wall mounted fire extinguishers as per detail below:					

S. No.	Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)	Amount in words
a.	Providing and fixing water based CO2 type extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge valve 30 cms long high pressure discharge hose, discharge nozzle, suspension bracket, ISI marked as per IS:15683 finished externally with red enamel paint and fixed to wall with brackets complete with internal charges.	Each	5		-	
	Capacity 9 lit.					
b.	Providing & fixing of <b>ABC Type</b> , Portable Fire Extinguisher, dry powder type (Gas Cartridge) conforming to IS: 15683 : 2006 with cylinder initially fully charged with dry powder, ISI marked confirming to IS:15683 : 2006 complete with standard discharge valve with tube, CI bracket for wall mounting.	Each	10		-	
	4 Kg					
<b>TOTAL FOR FIRE EXTINGUISHERS</b>					-	