

RAMAN RESEARCH INSTITUTE

C.V. Raman Avenue, Sadashivanagar, Bengaluru - 560080



“CIVIL-ALTERATION WORKS AT VYALIKAVAL HOSTEL”

ITEM RATE TENDER & CONTRACT FOR WORKS

NIT No: P.001/EB/PR-210851/21-22 dated 01.02.2022

TENDER DOCUMENT

ESTATES AND BUILDINGS – 2021-22



RAMAN RESEARCH INSTITUTE

C.V. Raman Avenue, Sadashivanagar, Bengaluru – 560080

NAME OF WORK: “**CIVIL-ALTERATION WORKS AT VYALIKAVAl HOSTEL**”

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NOTICE INVITING TENDER

REF. NUMBER: P.001/EB/PR-210851/21-22

01.02.2022

The Raman Research Institute invites sealed tenders for “Civil-alteration works at Vyalikaval Hostel” from the eligible Contractors who have executed works of similar nature, adhering to the terms and conditions given in this tender.

Sl. No	Description	Details
1	Title of Work	“Civil-Alteration works at Vyalikaval Hostel”.
2	Estimated cost put to tender	Rs.83.35 Lakhs (Inclusive of Taxes)
3	Period of completion of work in months reckoned from the date of commencement of work as per the work order	Six (06) Months
4	Last date and time for receipt of tenders	Up to: 24/ 02 / 2022
5	Tender document fee	Rs.1180/- (inclusive of GST)
6	Performance guarantee	3% of the tendered value
7	Security Deposit	2.5% of the tendered value

Important Note:

All the tenderers are requested to attend the pre-bid meeting to be held at 3.00 P.M on 09.02.2022, at Raman Research Institute, Bangalore.



ELIGIBILITY CRITERIA:

Only those tenderers fulfilling the following criteria should respond to the tender:

Sl. No	Eligibility Criteria	Documentary proof for the eligibility (Self attested copies to be submitted along with technical bid)
a	<p>Should have satisfactorily completed the works as mentioned below during the last Seven years from the last date of submission of bid.</p> <p>i. One similar work costing not less than Rs.67.00 Lakhs (OR)</p> <p>ii. Two similar works each costing not less than Rs.50.00 Lakhs (OR)</p> <p>iii. Three similar works each costing not less than Rs.33.50 lakhs (AND)</p> <p>iv. One Completed similar work of costing not less than the amount equal to Rs. 33.50 Lakhs with some Central/State Government Organization/Central Autonomous Body/Central Public Sector undertaking/State public sector undertaking/City development authority/Municipal corporation of city formed under any Act by Central/State government and published in central/state gazette.</p>	<p>i. Certified copy of work orders and completion certificates issued by the authority concerned to establish work experience.</p> <p>ii. Completion certificates for works issued by Private parties shall be supported by TDS (Tax Deducted at Source) certificates.</p>
	<p>Note:</p> <p>i. Similar work shall mean the contractor shall have experience in construction works i.e., Civil and PH works (Including flooring/dadoing, plastering, painting and plumbing works).</p> <p>ii. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion of work to the last date of receipt of application for bids.</p>	
b.	<p>Should have had average annual financial turnover not less than Rs.42.0 Lakhs during the immediate last three years ending 31st March 2021.</p>	Certified copy of audited profit & Loss accounts.
c.	<p>Should not have incurred any loss in more than two years during the last five years ending 31st March 2021.</p>	



d.	Should have a solvency of Rs.33.50 Lakhs	Latest solvency certificate issued by any scheduled bank.
e.	The Tenderer should have valid registration / empanelment with Government organizations like KPWD, CPWD etc / Semi-Government Organizations of State or Central Government or Public Sector Undertakings or Autonomous bodies of State or Central Government, in appropriate class under Civil works category	Valid registration certificates shall be furnished.
f.	<p>The bidding capacity of the contractor should be more than the estimated cost of the work put to tender. The bidding capacity shall be worked out as declared by the tenderer and enclosed along with the technical bid based on the formula:</p> <p>$(A \times N \times 2) - B$ N=01 where, A- Maximum value of work executed in any one year during last 5 years at current price level taking into account the work completed as well as work in progress.</p> <p>B- Value of existing commitments and ongoing work to be completed during the next 'N' years (During the period for which the bids are invited) at current price level.</p> <p>N- Number of years prescribed for completion of the subject contract for which bids are invited. It should be considered as ONE (01)</p>	<p>i. Statement showing the value of existing commitment and ongoing works as well as the stipulated period of completion remaining for each of the works listed to be furnished.</p> <p>ii. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion of work to the last date of receipt of application for bids</p>
g.	The tenderer should have had similar work experience in Karnataka state in the last 5 years	<p>i. Satisfactory work completion certificates shall be furnished.</p> <p>ii. Completion certificates for works issued by Private parties shall be supported by TDS (Tax Deducted at Source) certificates.</p>



EVALUATION OF BIDS:

- A duly constituted Technical Evaluation Committee will first shortlist the tenderers on the basis of eligibility criteria of this tender. The bids conforming to the eligibility criteria will be considered for further evaluation.
- The Technical Evaluation Committee will technically qualify the bids based on detail scrutiny of all the documents furnished by tenderers and checklist criteria stipulated in the tender document. In this stage the Committee may inspect the selected works carried out by tenderers.
- The price bid of only those tenderers who have been qualified during the scrutiny and technical evaluation will be opened separately on a specified date (with due intimation to the qualified tenderers) and further processed, as per tender procedure/stipulations.

OTHER TERMS AND CONDITIONS:

1. Bid documents may be obtained from the Estate Office, RRI, Bangalore on payment of **INR 1180/-** (inclusive of GST) in the form of DD in favor of Raman Research Institute, Bangalore. Those who download the tender document from Central Public Procurement Portal (CPPP)/ RRI website, shall submit a DD for **Rs. 1180/-** (inclusive of GST) towards the cost of bid document along with technical bid.
2. The tender shall be divided into two parts:
 - I. The first part should be “Technical” Bid, containing detailed specifications for tendered **Civil-alteration works**, and Supporting Documents as per the Eligibility Criteria and Checklist.

Note: The first part (Technical Bid) should not contain any financial aspects of the offer.
 - II. The Second part (Financial Bid) should contain detailed financial outlay with List of Bill of materials / Bill of Quantities and services, unit price of items as in the technical bid (i.e., First Part).
3. The tenders shall be complete in all respects and the details specified in this request shall be adhered to before submission. Otherwise, tenders are liable to be rejected.
4. The Tenderer should ensure that all the pages of tender/bid submitted are duly signed by the Authorised Signatory before submission of Bid.
5. Tender should be valid for **180 days** from the date of opening the bid.
6. The work completion period should be Six (6) months from the date of commencement of work as per the work order.
7. Unit price should be mentioned legibly and clearly. Taxes and other levies should be indicated separately.
8. Each of these tenders should be sealed in a separate envelope and bear the reference number and due date of this enquiry and indicate their contents: as technical bid or financial bid. These sealed tenders shall be enclosed in an outer cover, which bears only the address of this office without any indication that there is a bid within.



9. The Institute will have the right to issue the addendum to tender documents to clarify, amend, modify, supplement or delete any of the conditions, clauses or items/specifications stated therein, each addendum so issued shall form part of original invitation to tender and will be duly notified in the website.
10. The institute reserves the right to postpone/extend the due date for submission/opening date of the tender without assigning any reason.
11. EMD: In accordance with the provisions of OM No. F.9/4/2020-PPD of Ministry of Finance, Department of Expenditure, Bid Declaration In lieu of Bid Security may be provided. (Format enclosed)
12. The Institute reserves the right to reject any or all of the tenders received without assigning any reason. It also reserves the right to accept an offer other than the lowest.
13. After awarding the work, the final work order quantity may be varied than that mentioned in the tender, depends on the site condition. Up to 25% deviation in Tendered amount, the tenderer has to execute the work as per the quoted rates in the tender. Any further deviation beyond this limit up to 50%, the contractor shall be paid rates at agreement rate/market rate (including profit & overhead charges of 15%) whichever is lower.
14. The work should be completed within the stipulated time as per the Work order. While the Institute reserves the right not to accept work in part or full, beyond this date, liquidated damages at 1% per every week of delay will be levied. Exceptions: Force Majeure.
15. Tenders will be accepted up to **2.00 PM on 24.02.2022** of the deadline mentioned and Technical bids will be opened at **4.00 PM on 28.02.2022**. Those desirous can be present at the time of tender opening.
16. Any Technical clarification required towards submission of offer may please be mailed to estate@rri.res.in
17. Canvassing in connection with tender will result in disqualification.
18. In the event no rate has been quoted for any item / items, leaving space both in figure(s), word(s) and amount blank, then the tenderer has to confirm if included elsewhere, otherwise the rates for such items will be considered zero and the bid will be treated as incomplete.
19. Rates quoted by the Contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if any discrepancy is found, the rates which correspond with the amount worked out by the Contractor shall be taken as correct.
20. The acceptance or rejection of the bids would vest with RRI, Bengaluru, India. RRI also reserves the right to reject any or all tenders in part or in full without assigning any reasons thereof.
21. Even though the tenderers meet the qualifying criteria, they are subject to be disqualified if they have made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements.
22. A self-declaration towards not having record of poor performance such as abandoning the works / not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc., has to be provided.



23. The Tenderer along with his team, at the Tenderer's own responsibility and risk, may visit and examine the Site of Work and obtain all information that may be necessary for preparing the Bid and entering into a contract. The costs of visiting the Site shall be borne by the Tenderer. (Timings 2.00 pm to 5.00 pm – Monday to Friday).
24. The unit rates and the prices shall be quoted by the tenderer in Indian Rupees only.
25. Any bids received by the institute after the due date & time shall be rejected.
26. **Performance Guarantee & Security Deposit:**

On award of work – The tenderer should furnish 3% of tendered value in the form of Bank Guarantee from any Scheduled Bank. It should be valid through the period of completion of work, plus six months as claim period.

On completion of the work – 2.5% of the tendered value will be deducted in the running account bills. The Security deposit will be returned after satisfactory completion of the work as well as defect liability if any, as per the terms of Work Order. In case of failure to render the contracted service, either at the time of execution or during the defect liability period or non-compliance of due performance of contract, the balance payable will be forfeited.
27. The tenderer, on award of work is expected to enter into an agreement with the institute on Rs. 100/- stamp paper as per **Agreement Form**.
28. The tenderer has to comply with labour laws while executing the work.
29. The tenderer shall be responsible for the safety and health of all the workers during the execution of work.
30. The tenderer should execute the work in all respect, strictly in accordance with specifications, drawings, orders, etc.
31. Samples of all materials to be incorporated in the work shall be submitted for the approval before starting the work without claiming any extra cost.
32. The Institute should have no liability to the tenderer, if he/she incurs loss on account of stoppage of work or delay due to violation with respect to safety and quality procedure.
33. The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for the full and entire execution and completion of the works. The descriptions given in the Schedule of Quantities shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.
34. A pre bid meeting will be held **at 3.00 P.M** on **09.02.2022** to help the tenderers to seek clarifications, if any.
35. All disputes/Arbitration if any are subject to jurisdiction of courts in Bangalore only.
36. In addition to the above mentioned all terms & conditions, the tenderer shall execute the work as per the latest **CPWD General Conditions of Contract (GCC)**.



Special Terms and conditions:

1. Site Engineer (Preferably Civil Engineer) with experience in similar projects has to be deployed for this project and the details of the person has to be attached along with the technical bid.
2. Supply of Electricity: - Electricity required for the work shall be arranged by the tenderer.
3. Water supply: The Tenderer has to make his own arrangement for water supply. However, if water supply to the worksite at one convenient point is made available by the Institute, the charges for the consumption of water will be borne by the Contractor at 1.50% of the value of the work.
4. The tenderer shall ensure the work area/campus is kept clean and make necessary arrangements to avoid disturbance to the surrounding residents in an environmentally friendly way.
5. All extra item/substitution items will be derived on the basis of latest conditions of contract of CPWD.
6. Price escalation clause is not applicable.



CHECKLIST

SELF ATTESTED COPY OF THE FOLLOWING DOCUMENTS SHALL BE SUBMITTED ALONG WITH TECHNICAL BID, FAILING WHICH THE TENDERS ARE LIABLE TO BE REJECTED

SL.NO	CRITERIA / SPECIFICATION / CONDITION	YES / NO
1.	Bid declaration submitted on the letter head as per the format enclosed.	
2.	Enclosed Tender Document Fee of Rs.1180/- (inclusive of GST) in the form of DD, drawn in favour of Raman Research Institute, Bangalore	
3.	The Tenderer should have valid registration / empanelment with Government organizations like KPWD, CPWD etc. / Semi-Government Organizations of State or Central Government or Public Sector Undertakings or Autonomous bodies of State or Central Government, of appropriate class under Civil works category. Documents in this regard should be submitted.	
4.	Tenderers should furnish Self Certified Copies of original documents defining the constitution or legal status, place of registration, and principal place of business, PAN/GST, EPF and ESI registration certificates.	
5.	The tenderer must not be blacklisted by Central Government, State Government or any Organization in India. A certificate or undertaking to this effect must be submitted.	
6.	A self-declaration towards not having record of poor performance such as abandoning the works/ not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc., has to be provided.	
7.	Tenders should be valid for 180 days from the date of opening the bid.	
8.	<p>Documentary proof for having executed the work of similar nature and comparable magnitude as per the list below.</p> <p>Should have satisfactorily completed the works as mentioned below during the last Seven years from last date of submission of bid.</p> <p>i. One similar work costing not less than Rs.67.00 Lakhs (OR) ii. Two similar works each costing not less than Rs.50.00 Lakhs (OR) iii. Three similar works each costing not less than Rs.33.50 lakhs (AND)</p>	<p>i. Certified copy of work orders and completion certificates issued by the authority concerned to establish work experience.</p> <p>ii. Completion certificates for works issued by Private parties shall be supported by TDS (Tax Deducted at Source) certificates.</p>



	iv. One Completed similar work of costing not less than the amount equal to Rs. 33.50 Lakhs with some Central/State Government Organization/Central Autonomous Body/Central Public Sector undertaking/State public sector undertaking/City development authority/Municipal corporation of city formed under any Act by Central/State government and published in central/state gazette.		
	Note: i. Similar work shall mean the tenderer shall have experience in construction works i.e., Civil and PH works (Including flooring/ dadoing, Plastering, Painting and Plumbing works) . ii. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to last date of receipt of application for bids.		
9.	Details of similar works completed in the last seven years as per the 'Form C'		
10.	Details of on-going/awarded works as per the Form 'D' .		
11.	Latest solvency certificate of Rs.33.50 Lakhs issued by any scheduled bank as per the Form-B .		
13.	Average annual financial turn over should be at least Rs.42.00 Lakhs during the immediate last three years ending 31st March 2021.	Certified copy of audited profit & Loss accounts & Form 'A' need to be filled and submitted	
14.	Should not have incurred any loss in more than two years during the last five years ending 31st March 2021.		
15.	Project commitment letter submitted on the letter head as per the enclosed format.		
16.	Additional documents, if any.		



FORM 'A'

FINANCIAL INFORMATION

1. Financial Analysis – Details to be furnished duly supported by figures in balance Sheet/ profit and loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (copies to be attached)

Particular	Financial Year				
	2016-17	2017-18	2018-19	2019-20	2020-21
(i) Gross Annual Turnover					
(ii) Profit / Loss (Standalone)					
(iii) Certified by					

2. The following certificates are to be submitted:

- (a) Profit & loss account certified by CA & as submitted to Income Tax Department.
(b) Solvency Certificate from banker's as per the **Form 'B'**

Signature of Chartered
Accountant with seal



FORM 'B'

FORM OF BANKER'S CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that
M/s. _____ (with address) a customer of our bank are/ is respectable and
can be treated as good for any engagement up to a limit of Rs.
_____ (Rupees _____).

This certificate is issued without any guarantee or responsibility on the bank or any of
the officers.

(Signature)

For the Bank

NOTE: (1) Banker's certificate should be on letter head of the Bank.



FORM 'C'

DETAILS OF ALL SIMILAR WORKS COMPLETED IN ALL RESPECT DURING THE LAST SEVEN YEARS ENDING PREVIOUS DAY OF LAST DATE OF SUBMISSION OF TENDERS (STARTING WITH LATEST WORK)

Sl. No	Name of Work	Nature Of Work	Value of Work	Date of completion As per Work Order	Actual Date of Completion	Whether extension of time of contract was availed		Name of client, official contacts, and full address
						With levy Of Compensation	Without Levy of Compensation	

Notes:

- (i) The tenderer may submit separate form for giving details of work (completed) for each year to fill up the details as above. Separate sheets if any shall be numbered in sequence.
- (ii) The copies of the work orders for each work should be enclosed.
- (iii) Certified that the above list of works is complete and no work has been left-out and the information given is correct to my knowledge and belief.
- (iv) The hard copy of all similar works completed during the last seven years ending previous day of last date of submission of tenders (starting with latest work) shall also be submitted along with the technical bid.



FORM 'D'

DETAILS OF ALL WORKS OF ANY NATURE UNDER EXECUTION OR AWARDED
(No works shall be left out)

Sl. No	Name of Work	Nature of Work	Value of Work	Date of completion As per Work Order	Present Status of work in percentage	Expected date Of Completion	Expected commitment During the period for which bids are invited	Name of client and full address

Notes:

- (i) The copies of the work orders for each work to be enclosed.
- (ii) Certified that, no work has been left-out in the above list and the information given is correct to my knowledge and belief.



FORM OF BID-SECURITY DECLARATION

[The Tenderer shall fill in this Form in accordance with the instructions indicated]

To

The Administrative Officer (i/c)

Raman Research Institute

C.V. Raman Avenue, Sadashivanagar,
Bangalore – 560 080.

Ref: Tender document No.P.001/EB/PR-210851/21-22 dated 01.02.2022

We, the undersigned declare that:

We know that the bid should be supported by a Bid Security Declaration in accordance with your conditions.

We hereby declare that the prices offered by us against RRI tender No. P.001/EB/PR-210851/21-22 dated 01.02.2022 for Civil-alteration works at RRI Vyalikaval hostel will be firm for a period of 180 days from the date of opening of bid.

We accept to automatically be suspended from being eligible for bidding in any contract in RRI for a period of 3 years from the date of opening of Bid. If we are in breach of our obligation(s) under the bid conditions, because we:

After having been notified of the acceptance of our bid by the Contracting Authority within the period of bid validity:

1) We failed or refused to furnish a Performance Security in accordance with the Condition of the Tender Document of Tender No. P.001/EB/PR-210851/21-22 dated 01.02.2022

OR

2) We failed or refused to sign the contract.

We know that this Bid-Securing Declaration will expire, if contract is not awarded to us, upon:

- 1) Our receipt of your notification to us of the name of the successful tenderer or
- 2) Twenty -eight days after the expiration of our Bid or any extension to it

Dated this _____ day of _____

For and on behalf of M/s. _____

Address:

Signature

Name

In the capacity of

(DULY AUTHORISED TO SIGN THE BID)



LOCATION OF WORK:

The site of work is located at #45/46, 2nd Main Vyalikaval, Bangalore-560003.

Block-A, Block-B, Block-C, Block-D, Block-E, Block-F, Room No.12, Creche, Block-G, and VIP Block are considered in this Alteration work.

TECHNICAL SPECIFICATIONS:

Note: The work shall be carried out as per specifications of BOQ / Standard specifications of CPWD and/or I.S Stipulations as the case may be.

IMPORTANT SPECIFICATIONS OF CIVIL WORKS:

1.0 MATERIALS:

1.1 Cement:

Cement should comply in every respect with the requirements of the latest publication of IS: 269 and unless otherwise specified, ordinary Portland cement should be used. No other make of cement but that approved by the Architects/ Employers will be allowed on works and the source of supply should not be changed without approval of the Architects/Employer in writing test certificates to show that the cement used fully complies with the relevant IS specifications should be submitted to the Architects/ Employer and notwithstanding this the architects may at their discretion order that the cement brought to site and which they may consider damaged or of doubtful quality for any reasons whatsoever should be tested in an approved testing laboratory and fresh certificate of its soundness should be produced, Cement ordered for retesting should not be used for any work till the results are obtained.

Cement should be stored neatly packed in piles not exceeding 10 bags high in weather-proof sheds with raised wooden plank flooring to prevent deterioration by dampness or intrusion of foreign matter. It should be stored in such a way as to allow the removal and use of cement in chronological order of receipt, i.e., the first received being first used. Cement deteriorated and/or clotted should not be used on work but should be removed at once from the site daily record of cement received and consumed should be maintained by the tenderer in an approved form and a copy submitted to the employer once a month.

1.2 Fine Aggregates:

Sand should confirm to IS: 383 it should pass through IS sieve 4.75mm (3/ from a 16" B S) test sieve, leaving a residue not more than 5%. It should be from a natural source or crushed stone screeding's it should be washed, if directed, to reduce the percentage of deleterious substances to acceptable-limits. Sand should not contain any trace of salt and sand containing any trace of salt should be rejected.



The fine aggregate for concrete should be graded within limits as specified in IS: 383 and the fineness modules should range between 2.60 to 3.20. The fine aggregates should be stacked carefully, on a clear hard dry surface so that will not get mixed up with deleterious foreign materials. If such a surface is not available, a platform of planks or corrugated sheets or brick floor or concrete floor should be prepared. Sand should be added in the desired proportion as required for the strength specified, with suitable correction for “bulking”.

1.3 Coarse aggregates:

Coarse aggregate should confirm to IS: 383. It should consist of crushed or broken stone, 95% of which should be retained on 4.75 mm IS test sieve. It should be obtained from crushed granite, trap, basalt or similar approved stones from approved quarry. Coarse aggregate should be chemically inert when mixed with cement and should be angular in shape and free from soft friable thin porous laminated or flaky pieces. It should be free from dust and other foreign matter. – Gravel/shingle of desired grading may be permitted as a substitute in part or full in plain cement concrete if the Architect/Employer is otherwise satisfied about the quality of aggregate

2.0 BRICK MASONRY:

General

All brick work should be carried out as shown on the drawings, wherever the proportion of cement mortar has not been specifically mentioned, cement mortar in the proportion of 1:6 should be used. Flat brick arches should be provided, wherever required, without any extra cost. Brickwork should be kept wet while in progress till mortar has properly set. On holidays when the work is stopped, top of all unfinished masonry should be kept wet, should the mortar be dry, white or powdery, due to lack of curing work should be pulled down and rebuilt at the tenderer’s expense.

Table moulded bricks should be locally available or brought from outside, first quality having a minimum crushing strength of 40kg per sq.cm and water absorption not more than 20% by weight. Bricks should be thoroughly cleaned and well wetted. Table moulded bricks should be soaked for at least 12 hours in fresh water before being used on the work.

Unless otherwise specified, brickwork should be done in English bond with frog upwards. The bricks should be bedded and joined with mortar in such a manner as not to leave voids. Each brick should be correctly into position by tapping with the handle of trowel. Grouting of mortar slurry will not be allowed except where necessary for special reasons and in such cases, prior permission of the Architect/ Employer should be obtained.

A care should be taken that each course of brick work is truly horizontal and perfect in bond and the face of the wall is straight, plumb and even. The mortar joints should be 10mm in thickness, except where extra thickness is required for the purpose of bringing the work to the required height or level. Half bricks or bats should not be used except for obtaining the bond and where absolutely necessary.

Brickwork in 230 mm wall: If bricks are of size such that the width of the header course does not come equal to the width of the stretcher course, the difference should be made up during construction of brickwork itself by same mortar as used for construction of masonry to provide a plane vertical surface. The surface should also be scarified to receive plaster.



All junctions of wall should be carefully bonded into the main walls. The rate of laying masonry will be up to a height of 100cm per day if cement mortar is used greater heights may be built only if permitted by the Engineer-in-charge.

During rains, the work should be carefully covered to prevent mortar from being washed away. Should any mortar or cement be washed away the work should be removed and rebuilt at the tenderer's expense.

3.0 MAKING OPENING IN THE MASONRY CONSTRUCTION AND FIXING CHOWKHATS FOR DOORS, WINDOWS AND CLERESTORY WINDOWS:

Before making opening it is necessary to examine that the wall exclusive of opening is adequate to take the load coming on the structure. All the structural members supported on the walls which have direct bearing over the area in which opening is to be made, should be properly supported with props to relieve the load from masonry wall till the lintel over the opening is strong enough to take the load. Care should also be taken not to disturb the adjoining masonry.

The portion to be dismantled may be clearly marked on both sides of the wall. Dismantling should be carried out from top to bottom within the marked area. The sides of the opening should be as far as possible, parallel and perpendicular to the plane of wall.

3.1 Making Opening

The openings for fixing door/window frames should be to the extent of accommodating the hold fast. The hold fasts should be fixed in cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 stone aggregate 20 mm nominal size) or in masonry as required. Where only opening is to be made in the masonry, the

Width of the opening should be such that the sides of the masonry can be built true to line and plumb and such masonry built should conform to the specifications of the particular type of masonry in which the opening is made with particular reference to size of corner stone's etc. In order to get continuity with old masonry, proper key should be provided. The height of the opening should be such that it can accommodate the required depth of the RCC lintel also.

The sides of opening in masonry should be cleaned of all dust, mortar, brick bats/loose stones, chips etc. and the surface left rough and thoroughly wetted.

The lintel should be invariably cast first in the opening made for the purpose. One side of the shuttering should be kept open in the beginning till the concrete is laid. The shuttering should then be fixed for half of the opening and concreting completed.

- Curing of lintel casted should be done for a minimum period of 7 days.
- Precast RCC lintel or R.S. Joist may also be used if directed by the Engineer-in-Charge.

3.2 Finishing

- After the surface of the sides of masonry opening and lintel are sufficiently dry and set, it should be cleaned free of dust, loose mortar etc. and wetted thoroughly. It should then be packed with concrete, plastered or pointed as required flush with the surrounding masonry work. Any other portion of the wall if damaged should be finished in similar manner.
- After the cement plaster/pointing has been thoroughly cured and have dried the surface should be either white or colour washed/painted as



required. The surface of the wall which is spoiled due to splashing of mortar should be cleaned forthwith.

4.0 FIXING CHOWKHATS IN EXISTING OPENING IN BRICKS / RCC WALL WITH DASH FASTNERS:

- In case of door frames without sills, holes 40 mm deep should be made in the floor for fixing the lower end of verticals of the frames. For doors with sills, the sill plates should be partly fixed in the floor so that they project above the floor to the height as directed by the Engineer-in-Charge.
- For fixing dash fasteners /chemical fasteners of doors, windows or clerestory windows, the requisite number of holes at the correct positions should be in the masonry/RCC wall. The size of holes should be such that the fasteners can be conveniently placed in position. Where necessary, masonry should be chipped uniformly to facilitate easy insertion of the frame in the opening.
- Special care should be taken when holes are made in load bearing pillars or wall portions separated by openings to ensure that beams etc. supported by them are properly propped up. In such portions cutting holes should be done on one side at a time. The sides of the holes should be truly parallel and perpendicular to the plane of the wall. Due care should be taken, not to disturb the adjoining masonry and the masonry under the bearings of the lintels and arches etc. spanning the opening. The holes should then be cleaned of all dust, mortar and brick bats or stone pieces and thoroughly wetted.

4.1 Fixing

The sides of chowkhats of door, window or clerestory window abutting against or to be embedded in masonry should be painted with two coats of coal tar before being placed in position. The chowkhats should then be inserted in position tight. The chowkhats should then be adjusted to proper line and plumb and secured in position by temporary bracing which should not be disturbed or removed until the fasteners are embedded in the masonry /RCC wall.

4.2 Finishing

After the surface surrounding the hold-fasts has sufficiently dried it should be cleaned of dust etc. and wetted. It should then be plastered with cement mortar 1:4 (1 cement: 4 fine sand) flush and matching with the surrounding plaster work. In case of exposed brick work, stone work, the finishing should be done to match the surrounding. Any other portion of the wall opening, if damaged, should be repaired in similar way. After the cement plaster patches have been thoroughly cured and have dried, they should either be white washed or color washed as required unless otherwise specified. All malba and debris obtained from cutting etc. should be disposed off to the nearest dumping ground.

6.0 PLASTER TO WALLS:



Unless otherwise specified, all works should be plastered and finished as follows:

Internal faces: 15mm thick with cement mortar 1:6 for walls (one part of cement and six parts of fine river sand) and 12mm thick CM 1:4 for ceiling, wooden float finished to make proper base surface to receive putty for painting.

External faces: 12mm thick base coat with cement Mortar 1:4 (one part of cement and four part of fine river sand) finished rough to receive the final coat and 6mm thick final coat with cement mortar 1:3 (one part of cement and three parts of coarse river sand) sponge finished.

6.1 Cement Mortar:

Cement mortar should be of proportion specified for each type of work. It should be composed of Portland cement and sand. The ingredients should be accurately gauged and should be evenly mixed together in a mechanical mixer. Care should be taken not to add more water than necessary. If hand mix is allowed, it should be done on pucca waterproof platform. The gauged materials should be put on platform and thoroughly mixed dry. Water should Then be added and the whole then be added and the whole mixed thoroughly until the mix is homogeneous and of uniform color. Quantity of mortar mixed should not be more than what can be consumed within half an hour of mixing.

Cement mortar mix are specified in 1:2, 1:3,1:4,1:5 etc., the first figure will mean one part of Portland cement by volume and the second will mean so many parts of sand by volume. For example, cement mortar 1:4 would mean

One part of cement and four parts of sand.

Cement and sand must conform to relevant I.S specification

6.2 Samples:

Samples of each type of plaster and other wall finish should be prepared well in advance of undertaking the work for approval by the Engineer-Cum-Estate Officer, RRI.

6.3 Proportions:

The materials used for plastering should be proportioned by volume by means of gauge boxes.

6.4 Preparations of Surfaces:

The joints in all walls, both existing and freshly built should be raked to a depth of 15mm cleaned with wire brushes, dusted and thoroughly wetted before starting plastering work. Concrete surfaces to receive plaster should be roughened by hacking over the Entire surface so that the skin of the concrete is completely removed, as approved by the Architect/ Employer to ensure proper key for the plaster.

6.5 Mortar Mixing:

Mortar should be prepared as specified in small quantities as required and applied within fifteen minutes of mixing. Plaster application should be commenced only after the preparatory work is approved by the Engineer-in-Charge, RRI. Correct thickness of piaster should be obtained by laying plaster screeds (gauges) at intervals of 1.5 m as directed. Mortar should be firmly applied, well pressed, into the joints, rubbed and finished to give a smooth and even surface to the satisfaction of the Project Engineer-in-Charge.



6.6 Curing:

Finishing Plaster should be kept wet for at least ten days after completion in hot weather, walls exposed to such should be screened with matting kept constantly wet or by other approved means.

6.7 Cleaning Plastering:

Plaster to ceiling, so fits of stairs flight slabs and similar locations, where called for, should be 13 mm thick comprising of one-part cement and three parts of clean fine sand unless otherwise specified. The surface should be brushed, swept clean and thoroughly wetted before plastering. Mortar should be applied firmly pressed to the surface, rubbed and finished smooth evenly subject to the approval of the Engineer-in-Charge

7.0 PAINTING:

The specifications cover the various types of all surfaces thought the interior and exterior of the building the number of coats required in various situations and also the type of finish required for the several items of work such as cement-based paint, plastic emulsion point, synthetic enamel paint etc., are specified in the schedule of quantities and specifications.

Before commencement of the work, the tenderer should provide sample panels of painting at his own cost for the approval of the Engineer-in-Charge, to enable him to keep an accurate check on the materials supplied and final shade to be painted. It is however, the responsibility of the tenderer to provide any deviations and defects should have to be rectified by the tenderer at his own cost. Tenderer should protect not only his own work at all times but also all the adjacent work and materials by suitable covering, protection or other methods acceptable to the Engineer-in-Charge, during progress of painting, it is of painting work to remove all paint and varnish spots from floors, walls, glass panes and other surfaces and restore them to original conditions. The work generally touched up should be attended to after all workmen have left. Accumulated – material, rubbish etc., have to be cleared and the premises left in clean, orderly and acceptable conditions.

Tenderer should provide scaffolding wherever necessary erected on double supports tied together by horizontals. No ballies, bamboos or planks should rest on or touch the surface, which is being painted. Tenderer is demand to have considered the following while tendering and no extra claim on account of these will be entertained.

Supplying the paint and other materials required of approved color and brand.

Preparing the surfaces to be painted.

Providing and erecting scaffolding and removing the same after completion of the lifting of materials to any height and painting at all levels.

Applications of painting as per the specification and to manufactures instruction.

Curing, protecting the painted surfaces and adjacent work and thoroughly cleaning of premises.

The paint should generally confirm to the chemical composition and other characteristics laid down in the relevant Indian standard specification. The entire materials required for painting work should be obtained direct from approved manufactures or their authorized agents and brought to site in original manufactures containers with seals unbroken.



Paint should be ready mixed of quality of the approved brand and manufacture. Mixing of paint by the tenderer at site will not be allowed, except preparation and their quality should be strictly maintained as per manufacture's instruction and all as directed by the Engineer-in-Charge. All the materials should be kept properly protected when not actually in use. Lids of containers should be kept closed. Materials which have become stale or flat (in opinion of the Engineer-in-Charge) should not be permitted to be used on the works and should be removed from site forthwith. Any materials found not conforming to the relevant specifications should have to be removed by the tenderer from the site at his own expenses.

7.1 Providing two coats of synthetic enamel paint of approved make color over one coat of primer on plastered surfaces, wooden surfaces and steel:

Surfaces: A fully putty coating has to be given after primer coat in the case of wooden surfaces. The putty should be made from pure whiting mixed to the proper consistency with new linseed oil, a little white lead being mixed to help hardening of putty. On no account putty is to be used before primary coat. Primers to be used should be according to the manufacture specifications.

The manner of taking measurements will be in accordance with ISI: 1200.

8.0 PRESSED CERAMIC TILES IN SKIRTING AND DADO

The tiles should be of approved make as specified and should generally conform to IS 15622. The tiles should be pressed ceramic covered by a glaze thoroughly matured and fitted to the body. The tiles should be sound, true to shape, flat and free from flaws and other manufacturing defects affecting their utility.

The top surface of the tiles should be glazed. The underside of the tiles should not have glaze on more than 5% of the area in order that the tile may adhere properly to the base. The edges of the tiles should be free from glaze, however, any glaze if unavoidable should be permissible on only up to 50per cent of the surface area of edges.

The glaze should be free from welts, chips, craze, specks, crawling's or other imperfections detracting from the appearance when viewed from a distance of one meter. The glaze should be either glossy or matt as specified.

9.1 Dimensions and Tolerances

Glazed pressed ceramic tiles should be made square or rectangular in sizes Table 1, 3, 5 & 7 of IS 15622 give the modular sizes and table 2, 4, 6 & 8 of IS 15622 gives the sizes of non-modular tiles. The tiles should conform to IS 15622 for dimensional tolerance, physical and chemical properties.

Half tiles for use as full tiles should have dimensions which should be such as to make the half tiles when jointed together (with 1 mm joint) match with dimensions of full tiles. Tiles may be manufactured in sizes other than those specified. Above.

The thickness of the tiles should be as per the manufacturer standards.

The dimensions of fittings associated with the glazed tiles namely cover base, round edge tile, angles corner cups, ridge and legs, cornices and capping beads should be of the shape and



dimensions as required and the thickness of fittings should be the same as the thickness of tiles given above.

9.2 Preparation of Surfaces

The joints should be raked out to a depth of at least 15 mm in masonry walls.

In case of concrete walls, the surface should be hacked and roughened with wire brushes. The surface should be cleaned thoroughly, washed with water and kept wet before dadoing is commenced.

9.3 Laying

13 mm thick plaster of cement mortar 1:3 (1 cement: 3 coarse sand) mix of as specified should be applied and allowed to harden. The plaster should be roughened with wire brushes or by scratching diagonal at closed intervals.

The tiles should be soaked in water, washed clean, and a coat of cement slurry applied liberally at the back of tiles and set in the bedding mortar. The tiles should be tamped and corrected to proper plane and lines. The tiles should be set in the required pattern and jointed. The joints should be as fine as possible. Top of skirting or dado should be truly horizontal and joints truly vertical except where otherwise indicated. Odd size/cut size of tile should be adjusted at bottom to take care of slope of the flooring. Skirting and dado should rest on the top of the flooring. Where full size tiles cannot be fixed these should be cut (sawn) to the required size and their edges rubbed smooth. Skirting /dado should not project from the finished "surface of wall" by more than the tile thickness, undulations if any should be adjusted in wall.

9.4 Finishing

The joints should be cleaned off the grey cement grout with wire/coir brush or trowel to a depth of 3 mm to 3 mm and all dust and loose mortar removed. Joints should then be grouted using epoxy-based grout mix, added with pigments if required to match the color of tiles. The surface should be washed and finished clean. The finished work should not sound hollow when tapped with a wooden mallet.

Note: The rate should include the cost of all material and labour involved in all the operations described above.

10. FIXING OF TILE FLOORING WITH CEMENT BASED HIGH POLYMER MODIFIED QUICK SET ADHESIVE (WATER BASED)

10.1 When tile flooring is to be laid over the existing flooring without dismantling old flooring it can be laid with adhesive. The old flooring shall be thoroughly cleaned and checked for undulations, if any shall be rectified with cement mortar 1:3 (1 cement: 3 coarse sand). Old cement concrete surface shall be hacked and cleaned off to have proper bond with the old surface.



10.2 High polymer modified quick set tile adhesive (conforming to IS 15477) shall be thoroughly mixed with water and a paste of zero slump shall be prepared so that it can be used within 1.5 to 2 hours. It shall be spread over an area not more than one sqm at one time. Average thickness of adhesive shall be 3 mm the adhesive so spread shall be combed using suitable trowel. Tiles shall be pressed firmly in to the position with slight twisting action checking it simultaneously to ensure good contact gently being tapped with wooden mallet till it is properly backed with adjoining tiles. The tiles shall be fixed within 20 minutes of application of adhesive. The surplus adhesive from the joints, surface of the tiles shall be immediately cleaned.

10.3 The surface of the flooring shall be frequently checked during laying with straight edge of above 2m long so as to attain a true surface with required slope.

10.4 Where spacer joints shall be filled with epoxy-based grout mix.

10.5 Where full-size tile cannot be fixed these shall be cut (sawn) to the required size and edges rubbed smooth to ensure straight and true joints. Tiles which are fixed in floor adjoining to wall shall enter not less than 10 mm under plaster, skirting or dado.



Name of work: “Civil-Alteration works at Vyalikaval Hostel”

NOTE: TAXES AND OTHER LEVIES SHOULD BE INDICATED SEPARATELY.

SCHEDULE OF QUANTITIES:

SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
	CIVIL WORKS				
1	Chipping and removing of plastering including conveying the debris to distance up to 200m including scaffolding, all lead, lifts, loading and unloading and other including charges etc. complete as directed by Engineer In charge	SQM	300		
	Rate in words:				
2	Dismantling the existing ceramic tile dadoing work/skirting, flooring for thickness of tiles 10 mm to 25 mm, laid in cement mortar 1:4, inclusive of cement plaster up to a depth of 20 mm, shifting the debris from the work site up to a lead of 200 m and as directed by Engineer In charge etc., complete.	SQM	420		
	Rate in words:				
3	Dismantling doors, windows and clearstory windows (steel or wood) shutters including chowkhats, architrave, holdfasts, etc. complete and stacking the material at RRI scrapyard etc., complete as directed by Engineer In charge.	NOS	15		
	Rate in words:				
	Official Use:	Number of corrections:	Signature of tenderer:		
		Number of overwriting's:			
		Number of additions:			



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
7	<p>Providing water proofing treatment with two coats of polyurethane of approved make PU based waterproofing chemical for the sunken floors. The sunken slab and the side vertical walls should be finished smooth with cement plaster, the surface should be absolutely dry, free from dust, grease, oil and loose particles. Providing necessary scaffolding wherever required and cleaning the surface etc., complete all as per the manufacturer's specifications.</p> <p>NOTE:</p> <p>1) The sunken floor should be tested after the treatment for water tightness by impounding water for a period of 48 hours.</p> <p>2) Performance guarantee for a period of 10 years be obtained from the contractors / manufacturers of the product.</p> <p>3) The coverage capacity for "UNISEAL WS-1" or equivalent for a smooth surface should be 3.717sqm/kg (40sft/kg) for the first coat and 4.647sqm/kg (50sft/kg) for the second coat, for a rough surface the coverage should be 2.788sqm/kg (30sft/kg) for the first coat and 3.717sqm/kg (40sft/kg) for the second coat respectively as per the manufacturer's specifications and as directed by engineer-in-charge.</p> <p>The coverage capacity for "TECHCOAT-61P" (Rubber based polyurethane) or equivalent, of Rubber based polyurethane for a smooth surface should be 4.182sqm/ltr (45sft/ltr) for the first coat and 4.647sqm/ltr (50sft/ltr) for the second coat and for a rough surface the coverage should be 3.717sqm/ltr. (40sft/ltr) for the first coat and 4.182sqm/ltr (45sft/ltr) for the second coat respectively as per the manufacturer's specification.</p>	SQM	160		
Rate in words:					
Official Use:		Number of corrections:		Signature of tenderer:	
		Number of overwriting's:			
		Number of additions:			



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
8	<p><u>ELASTIC WATERPROOFING MEMBRANE UNDER THE FLOOR TILE (WET AREAS);</u></p> <p>1) The surface is primed with primer @ 200 g/Sqm using brush/roller and allowed to dry completely.</p> <p>2) Supplying and applying of 2 coats of water based, flexible, single component, synthetic rubber based liquid water proofing membrane @ Dosage of 1.2Kg/Sqm in two coats using brush or roller. The first coat is allowed to dry completely before applying the second coat. Sprinkle the sand after the second coat when the coating is still green etc., complete as directed by engineer-in-charge</p> <p>Note: Aqua Arm Saniflex or Equivalent.</p>	SQM	150		
Rate in words:					
8 a	<p>3) Corner Tape: Supply and fixing of Seal Tape at the junctions of wall and floor using Synthetic rubber-based liquid etc., complete as directed by engineer-in-charge</p>	MTR	260		
Rate in words:					
9	<p>Providing and laying Cement mortar screed of 35mm thick in CM 1:6 using M-sand to proper slope and waterproofing compound should be added to the cement mortar mix etc complete as per the specification and as directed by engineer-in-charge.</p>	SQM	150		
Rate in words:					
Official Use:			Number of corrections:		Signature of Tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
10	Providing and laying cinder concrete in cement 1:15 (1 cement: 15 cinder of 12.5mm nominal gauge) sunken slabs, laid to slope compacting, including cost of materials, labour, curing complete as per specifications and as directed by Engineer In charge	CU.M	16		
Rate in words:					
11	Providing and constructing HALF BRICK MASONRY walls in following mixes using approved well burnt bricks of class designation (Classification as per IS 1077-1986) as specified below, including scaffolding, raking out joints, curing, etc., all as directed by the engineer-in-charge in Superstructure. (The mix ratio specified is for cement: coarse river sand)	SQM	30		
	Using bricks of class designation '3.5' (minimum average compressive Strength not less than 3.5N/sq.mm) in cement mortar 1:4				
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
12	<p>Providing and laying Ceramic tile dadoing of first/premium quality, size, colour and thickness according to the dimensions of tiles and having scratch hardness and other parameter conforming to IS:15622 - 2006 Group B III, for dadoing, of Jhonson/Somany/Kajaria/ Bell/ Naveen or equivalent approved make laid over a bed / backing as specified below, with cement slurry at 3.30kg /sqm, Grouting the tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing etc., Complete all as per specification and as directed by engineer-in-charge at all floors.</p> <p>In dado with approved colour glossy/ matt finished wall tiles of size 300mm X 600mm (Thickness of tile as per the manufacturer standards) as per IS: 15622 - 2006 Group B III, 12mm thick in CM 1:3.</p> <p>The tiles must be cut with the zero-chipping diamond cutter only.</p>	SQM	635		
Rate in words:					
	<p>Official Use:</p> <p style="text-align: center;">Number of corrections: Number of overwriting's: Number of additions:</p>			Signature of tenderer:	



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
13	<p>Providing and laying Vitrified tiles in floor of Antiskid finish in sizes 300mm X 300mm (thickness of tiles as per the manufacturer standards) Johnson/Somany/Kajaria/Bell or equivalent approved make and colour with water absorption less than 0.08% and conforming to 15622 - 2006 Group B II, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3mm thickness. The tiles must be cut with the zero-chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, levelling system and rubber mallet for placing the tiles gently and easily, Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing etc complete etc all complete as per specifications and direction of Engineer-in-charge.</p> <p>Note: 1). The newly laid floor should be protected with a layer of gypsum / POP (Plaster of Paris) laid over a polythene sheet by covering the entire finished surface as directed till the finished items like painting / polishing etc. are completed inside the building. This should be done irrespective of Whether mention has been made in the individual flooring items or not at no extra cost.</p> <p>2) Wherever the brand names of materials are stipulated, the materials of any of the brand names indicated in item specification only should be incorporated in the work.</p>	SQM	150		
Rate in words:					
14	Hacking of Cement floor / Mosaic tile flooring including necessary cleaning/removal of floor paint, dust etc. complete as per direction of the Engineer-in-Charge.	SQM	2000		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
15	<p>Providing and laying Vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer),of Johnson/Somany/Kajaria/Bell or equivalent approved make and colour with water absorption less than 0.08% and conforming to IS:15622, 2006 Group B I a of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling /grouting and finishing etc complete as per specifications and as per direction of Engineer-in-charge.</p> <p>Vitrified tile, Polished Double charged with nano tech light series, of size 600mm (±5mm) x 600mm (±5mm) x 9 to 9.5mm (±0.5mm) thick.</p> <p>Note: 1). The newly laid floor should be protected with a layer of gypsum / POP (Plaster of Paris) laid over a polythene sheet by covering the entire finished surface as directed till the finished items like painting / polishing etc. are completed inside the building. This should be done irrespective of Whether mention has been made in the individual flooring items or not at no extra cost.</p> <p>2) Wherever the brand names of materials are stipulated, the materials of any of the brand names indicated in item specification only should be incorporated in the work.</p>	SQM	1500		
Rate in words:					
Official Use:			Number of corrections:	Signature of tenderer:	
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
16	Providing and laying Vitrified tiles in different sizes (thickness to be specified by the manufacturer), of Johnson/Somany/Kajaria/Bell make and approved colour with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, in skirting , riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including Grouting the tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing etc complete as per specifications and as per direction of Engineer-in-charge. Vitrified tile, Polished Double charged with nano tech light series of size 600mm (±5mm) x 600mm (±5mm) x 9 to 9.5mm (±0.5mm) thick.	SQM	200		
Rate in words:					
17	Painting internal plastered surfaces with two or more coats of Premium super acrylic emulsion paint of approved brand and colour (Asian/Berger/Nippon) to give an even shade with required finish over a coat of water thinnable cement primer including cleaning the surfaces, filling the crevices with approved filler, applying a coat of approved putty on whole surface and rubbing the surface to achieve desired smooth surface to give an even shade, scaffolding, etc., complete all as per specifications and as directed by Engineer in charge.	SQM	3250		
Rate in words:					
18	Wall painting with Premium super acrylic emulsion paint of approved brand and colour (Asian/Berger/Nippon) to give an even shade: One or more coats on old work	SQM	3250		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
19	<p>Providing applying two coats of wall putty of average 2mm thick to inside plastered walls/ceiling using white cement-based putty (Birla putty or equivalent). Scrapping and levelling the surface using steel blade and preparing the surface even and smooth by using different grade sand papers, including cost of all materials, cost of labour and scaffolding etc., complete as per the specification.</p> <p>Note: The wording "more coats" indicate the additional coats to be painted, wherever the desired finish has not been achieved after the application of the specified number of coats given. No extra payment will be made for the additional coats required to be rendered on account of the above.</p>	SQM	260		
Rate in words:					
20	<p>Painting wood work with TWO or more coats of SYNTHETIC ENAMEL PAINT of first quality and approved colour to give an even shade over a coat of synthetic enamel primer including cleaning the surfaces, filling the crevices with approved filler, applying a coat of approved putty on whole surface and rubbing the surface to achieve desired smooth surface, scaffolding, etc. complete all as per specifications. (Rate to include cost of synthetic enamel primer, putty also).</p>	SQM	666		
Rate in words:					
21	<p>Painting steel work with TWO or more coats of SYNTHETIC ENAMEL PAINT of first quality and approved colour to give an even shade over a coat of red oxide zinc chromate primer including cleaning the surfaces, applying a coat of approved putty on whole surface and rubbing the surface to achieve desired smooth surface, scaffolding, etc., complete all as per specifications (Rate to include cost of zinc chromate primer, putty also).</p>	SQM	200		
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
22	<p>Supplying & fixing of factory-made composite door shutter with frame and single shutter with door frame of size 70 x 50mm. The door shutter should be of rigid GRP sandwich composite structure of 26mm thick (minimum) laminated on all sides with GRP skin fabricated using U.V. stabilized Isophthalic gel coat and one layer of 450 GSM E glass chopped strand mat (CSM) impregnated with polyester resin. The thickness of skins should not be less than 1.5mm. Expanded polystyrene structural foam panel of density 20kg/Cu.m should be used as core material</p> <p>For the whole areas of door except the wooden frame structure. The wooden reinforcements made of seasoned sal wood block of minimum cross section of 70 x 26 for lock side 40 x 26 all-round forming the framework for shutter and minimum of 75mm wide intermediate strip for the width of the door for fixing locks and fixture and should confirm to IS-4020- 1998. The finish of the shutter be without grains and of approved colour Quoted rate to include providing 3Nos stainless steel hinges of size 100mm along with necessary SS screws and labour for fixing hardware's like Tower bolts, AL drop, handle & baby latches etc., complete all as per manufacturers specifications as directed by engineer-in-charge. etc., complete all as per manufacturer's specifications at all heights.</p>	SQM	25		
Rate in words:					
	<p>Official Use:</p> <p style="text-align: center;">Number of corrections: Number of overwriting's: Number of additions:</p>	Signature of tenderer:			



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
23	<p>Providing and laying 16 to 18mm thick +1mm tolerance mirror polished granite stone slabs flooring of approved colour and shade using mirror polished granite stone slabs of size 1800mm x 1200mm / 1800mm x 2400mm and smaller sizes as per the site conditions (cut from the bigger sizes of mirror polished water jet cut stone slab stone slab of approximate size 6.5ft x 10.5ft) approved colour / texture and pattern of RANDOM GRANITE SLABS, water cut quality, machine cut to required size, laid over a bed of 20mm thick cement mortar 1:6 and cement slurry at the rate of 4.4kg/sqm for bedding and jointing including grouting the joints with pigments to match the shade of the slabs finishing to required level, curing, cleaning, mopping, etc., complete all as per specifications at all heights in all floors.</p> <p>Flooring cut to required size from bigger gang size slabs of color Jet black</p>	SQM	10		
Rate in words:					
23 a	Skirting 125mm high with Lacca red/green Pal/Tropical Brown/Jet black colour red granite slab.	MTR	50		
Rate in words:					
23 b	Extra for nosing in marble / granite stone for treads.	MTR	50		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
23 c	Extra for providing opening of required size & shape for wash basins / kitchen sink in kitchen platform, vanity counters and similar location in marble / stone work including necessary holes for pillar taps etc. including rubbing and polishing of cut edges etc. complete, per opening.	EACH	35		
Rate in words:					
23 d	Extra for fixing marble / granite stone over and above corresponding basic item, in facia and drops of width up to 150mm with epoxy resin-based adhesive (Araldite or equivalent) including cleaning etc. complete as directed by Engineer in Charge.	MTR	15		
Rate in words:					
24	Water proof cement plastering of thickness as specified below in cement mortar 1:3 (cement: coarse river sand),20MM thick, mixed with approved water proofing compound such as CICO or ACCOPROOF or equivalent as per manufacturers specifications including scaffolding, curing, etc., complete for EXTERNAL SURFACES all as per specifications for heights up to 10m above GL.	SQM	50		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
25	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like water tanks, roof slabs, podiums, etc., prepared by mixing in the ratio of 5: 2 (5 parts integral crystalline slurry: 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fibre brush. The material shall meet the requirements as specified in ACI- 212-3R-2010 i.e. by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage.				
25a	For vertical surface two coats @ 0.70 kg per sqm	SQM	150		
Rate in words:					
25b	For horizontal surface one coat @1.10 kg per sqm.	SQM	50		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
26	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 Cu.m and fine aggregates @ 0.459Cu.m, machine mixed, and concrete laid in layers not exceeding 15 CMS. Thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications and position as directed by Engineer In Charge.	CU.M	10		
Rate in words:					
27	Providing and laying RCC Small lintels not exceeding 1.5m clear span over sailings, coping shelves and the like, etc complete as directed by Engineer-in-charge.	CU.M	01		
Rate in words:					
28	Disposal of moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead up to 10 km for all lifts, complete as per directions of Engineer-in-charge.	CU.M	50		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
29	Providing and fixing ventilator with exhaust fan and louvers, frame made of Aluminium metal of 1.5mm wall thickness, including cutting of grill, scaffolding etc complete as directed by Engineer-in-charge.	EACH	30		
Rate in words:					
30	Removing and refixing the existing wooden door shutters including making necessary cutting, planing to proper size with necessary tools, hardware's etc. complete as directed by Engineer-in-charge.	EACH	70		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



PH ITEMS:					
SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
1	Dismantling the existing GI pipeline of 20mm dia carefully without damaging including removal of GI specials and stacking in position as directed by Engineer in Charge etc., complete.	MTR	450		
Rate in words:					
2	Dismantling the existing 15 mm dia CP brass screw down bib taps/stop cock and shifting / stacking the same at place as directed by Engineer-In-Charge etc., including all charges for dismantling carefully without damaging complete all as per specifications.	NOS	160		
Rate in words:					
3	Removing of existing old or broken Water closet Indian / European and disposing it with all cost and conveyance labour for all items of work, HOM with all lead and lift, loading and unloading, transportation charges and all other incidental charges etc., complete as per specification and directions of the Engineer-in-charge of the work.	EACH	30		
Rate in words:					
4	Removing of existing old or broken wash basin / urinals and disposing it with all cost and conveyance labour for all items of work, HOM with all lead and lift, loading and unloading, transportation charges and all other incidental charges etc., complete as per specification and directions of the Engineer-in-charge of the work.	EACH	30		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
5	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes (SDR 13.5) conforming to IS:15778, having thermal stability for hot and cold-water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and cost of cutting chases and making good the same with CM 1:3, including testing of joints complete as per direction of engineer-in-charge etc., for CONCEALED WORKS with: CPVC pipes of 20mm nominal dia. Makes= Ashirvaad/Astral	MTR	450		
Rate in words:					
6	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes (SDR 13.5) conforming to IS: 15778, having thermal stability for hot and cold-water supply including all CPVC plain & brass threaded fittings, i/c fixing of pipe with u-clamps with hooks on external wall surface at 1.00m spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement, trenching, refilling and testing of joints complete as per direction of engineer-in-charge etc. for EXTERNAL WORKS with: CPVC pipes 32mm nominal dia. Makes= Ashirvaad /Astral	MTR	425		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
7	Providing and fixing rigid PVC SWR (soil, waste and rain water) drainage / rain water pipe, working pressure 4kg/sqcm, conforming to Type-A IS 13592-1992, including accessories like bends and fixing with pipe clips, adhesive at joints all as per manufacturer's specifications to required length etc., complete all as per specifications and directions of engineer-in-charge. Makes= Supreme/Finolex				
7a	75mm dia pipe with minimum wall thickness of 1.80mm	MTR	120		
Rate in words:					
7b	110mm dia pipe with minimum wall thickness of 2.20mm	MTR	250		
Rate in words:					
7c	50mm dia pipe with minimum wall thickness of 1.5mm	MTR	50		
Rate in words:					
8	Providing and fixing 75mm dia (OD) unplasticized PVC pipe water spouts conforming to IS 4985- 1988 inclusive of specials (Tee) conforming to IS: 7834 (part-IV)-1987 of working pressure 6kg / sqcm. The outlet end should be provided with PVC Tee and the inlet end should be flush with inner face of facials / parapets, fixing in cement mortar 1:3 etc.; complete all as per specifications and as directed by Engineer in Charge. Makes= Supreme/Finolex	MTR	15		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
10	Providing and fixing Wall mixer unit with provision for overhead shower of best quality (approved make like Jaquar or equivalent) including diverter with exposed part all as per specification, directions of Engineer - in - charge, etc., complete. Catalogue. No: FUS-29273UPR.	EACH	30		
Rate in words:					
11	Providing and fixing in position best quality (approved make like Jaquar or equivalent) 15mm CP brass shower, all as per specifications, site condition and directions of Engineer - In - Charge etc., complete. Swivel type with shower arm and Wall flange. Catalogue.no: OHS-1757.	EACH	30		
Rate in words:					
12	Providing and fixing in position best quality (approved make like Jaquar or equivalent) 15mm NB CP brass angle cock/stop cock conforming to IS: 781 with a minimum weight of 400gm. Catalogue.no: FLR-5053N.	EACH	65		
Rate in words:					
13	Providing and fixing C.P. brass stop cock (concealed) of standard design and of (Approved make like Jaquar or equivalent) conforming to IS:8931. 32mm Nominal bore Catalogue No: KUP-35083KPM.	EACH	30		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
14	Providing and Fixing Indian make wash basin (with CP bottle trap)				
14.1	Best Indian make white glazed vitreous chinaware Under Counter wash basin of best quality (approved make like Jaquar or equivalent) conforming to IS:2556 Part-IV bearing ISI mark supported on a pair of painted CI brackets conforming to IS:775. Catalogue.No: CNS-WHT-701.	EACH	18		
	A) One 15mm CP brass pillar cock of approved make as required conforming to IS: 1795 with minimum weight of 577gm.				
	B) One 15mm heavy quality flexible PVC inlet pipe connection with CP brass hexagonal check nuts with washer at both ends.				
	C) One 15mm CP brass angle-cock/stop cock of approved make conforming to IS: 781 of best quality approved make with a minimum weight of 400gm on the inlet to the basin.				
	D) One 32mm heavy quality CP brass waste coupling with rubber plugs and CP chain.				
	E) One 32mm heavy quality CP brass bottle trap with extension piece and wall flange.				
	F) One 32mm medium quality GI waste pipe with specials from extension piece of the bottle trap to the floor trap, length not exceeding 1 m concealed in wall.				
	G) One no. 40mm GI bend and 40mm dia 250mm long GI pipe connection waste pipe to floor trap. All as per specifications and as directed with approved fittings.				
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
14.2	Providing and Fixing Indian make Wall Hung wash basin (with CP bottle trap) comprising of: A) Best Indian make white glazed vitreous wash basin of best quality (Approved make like Jaquar or equivalent) conforming to IS: 2556 Part-IV with single tap hole and bearing ISI mark supported on a pair of painted CI brackets conforming to IS: 775. Catalogue.No: CNS-WHT-813. Wall Hung basin with fixing accessories.	EACH	20		
	B) One 15mm CP brass pillar cock of approved make as required conforming to IS: 1795 with minimum weight of 577gm.				
	C) One 15mm heavy quality flexible PVC inlet pipe connection with CP brass hexagonal check nuts with washer at both ends.				
	D) One 15mm CP brass angle-cock/stop cock of approved make conforming to IS: 781 of best quality approved make with a minimum weight of 400gm on the inlet to the basin.				
	E) One 32mm heavy quality CP brass waste coupling with rubber plugs and CP chain.				
	F) One 32mm heavy quality CP brass bottle trap with extension piece and wall flange.				
	G) One 32mm medium quality GI waste pipe with specials from extension piece of the bottle trap to the floor trap, length not exceeding 1 m concealed in wall.				
	H) One no. 40mm GI bend and 40mm dia 250mm long GI pipe connection waste pipe to floor trap. All as per specifications and as directed with approved fittings.				
	Rate in words:				
Official Use:		Number of corrections:		Signature of tenderer:	
		Number of overwriting's:			
		Number of additions:			



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
15	Providing and fixing in position best quality (approved make like Jaquar or equivalent) 15mm NB CP brass angle cock/stop cock conforming to IS: 781 with a minimum weight of 400gm. Catalogue.no: FLR-5053N.	EACH	65		
Rate in words:					
16	Providing and fixing C.P. brass stop cock (concealed) of standard design and of (Approved make like Jaquar or equivalent) conforming to IS:8931. 32mm Nominal bore Catalogue No: KUP-35083KPM.	EACH	30		
Rate in words:					
17	Providing and fixing in position best quality of (Approved make like Jaquar or equivalent) 15mm brass 2-way bib tap conforming to IS: 781 and bearing ISI mark etc. complete as directed by Engineer in Charge. Catalogue.No: ARI-39041.	EACH	30		
Rate in words:					
18	Providing and fixing in position best quality approved make of bevelled edge Mirror of size 550mm x 400mm 5mm thick, mounted on 6mm thick plain E-board backing with 4no.s of CP brass cap screws and washers fixed to walls with necessary plugs etc. all specified and directed by Engineer-in-charge.	EACH	30		
Rate in words:					
19	Providing and fixing in position CP brass hinged grating on top of trap, inner annular surfaces between floor finish and top of trap should be finished smooth with neat cement, Floor trap with 75mm outlet etc., complete as specified and directed by Engineer-in-charge.	EACH	30		
Rate in words:					
20	Providing and fixing in position best quality (Approved make like Jaquar or equivalent) toilet paper roll holder of approved make with necessary CP screws and washers fixed to wall including cutting wall, fixing and making good the surface etc., Complete all as specified and directed by Engineer-in-charge. Catalogue.No: CAN-1151N.	EACH	30		
Rate in words:					
Official Use:			Number of corrections:		Signature of tenderer:
			Number of overwriting's:		
			Number of additions:		



SL.NO	Description	Unit	Qty	Rate in Figures	Amount in Rs.
21	Providing and fixing PVC floor trap (water seal) of approved make conforming to ISI specifications and construction of Cistern n CC 1:2:4 as per directions (Rate is inclusive of cost of materials and fixtures and conveyance of materials to work spot) 10 cms x 7.5cms including all lead, lifts, Loading and unloading and other including charges etc. complete as per direction of Engineer in Charge.	EACH	55		
Rate in words:					
22	Providing and fixing in position best quality (Approved make like Jaquar or equivalent) liquid soap holder as mentioned below with CP brass brackets, CP cap screws, washers etc, fixed to wall with necessary plugs etc. all as specified and directed by E In C Catalague.No: ACN-1131N.	EACH	30		
Rate in words:					
23	Providing and fixing best quality (Approved make like Jaquar or equivalent) Towel rail for bath room including necessary charges for materials, labour etc., complete and as directed by Engineer in Charge. Catalague.No: CAN-1111SM. 600mm long.	EACH	30		
Rate in words:					
24	Providing and fixing best quality (Approved make like Jaquar or equivalent) Health faucet ABS body with 8mm dia, 1meter long flexible tube & wall hook. Catalague.No: ALD-577.	EACH	30		
Rate in words:					
				TOTAL	
				+GST	
				GRAND TOTAL	
Amount in Words:					
Official Use:		Number of corrections:		Signature of tenderer:	
		Number of overwriting's:			
		Number of additions:			



ABBREVIATIONS:

In the 'Item of work/ description of work' column 'unit' column, the various abbreviations shall mean as below.

- a. MTR/M/m/Rm/Mtr shall mean 'Metre' in length or breadth or depth.
- b. SQM/Sqm/SM/sqm/M2 /m2 shall mean 'Square Metre' in area
- c. Cu.m/cu.m/Cum/M3 /m3 shall mean 'Cubic Metre' in volume.
- d. Kg/kg/KG shall mean 'Kilogram' in weight.
- e. Cm/CM/cm shall mean 'Centimeter'

DEFINITIONS:

1. CONTRACT: The 'Contract' means the documents forming the tender and acceptance thereof and the formal agreement executed between the President of India and the Contractor, together with the documents referred to therein including these conditions, the specifications, design, drawings and instructions issued from time to time by the Engineer-in-charge and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

2. TENDERER/CONTRACTOR: The 'Contractor' means 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 composing such firm or the successors of such firm or company and the permitted assignee of such individual or firm or firms or company.

3. MARKET RATE: 'Market Rate' shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour at the site including applicable taxes, duties and also the transportation charge to where the work is to be executed plus the percentage mentioned in schedule 'F' to cover all overheads and profits.

4. TENDERED VALUE: 'Tendered Value' means the value of the entire work as stipulated in the letter of award or work order.



PROJECT COMMITMENT LETTER:

To

Raman Research Institute,
Sadashivanagar,
Bangalore-560 080.

Sub: **Civil-Alteration works at Vyalikaval Hostel**

NIT No: P.001/EB/PR-210851/21-22 dated 01.02.2022

Sir,

We hereby confirm and commit with the detailed technical inputs mentioned in the tender specifications and abide by the provisions/terms and conditions of the Contract/Tender.

For and on behalf of M/s. _____

Address:

Signature

Name

In the capacity of

(DULY AUTHORISED TO SIGN THE TENDER)



AGREEMENT FORM

This agreement is executed on this day of, 2022 by and between Raman Research Institute, Bangalore, (hereinafter called as the Institute) of the First Part and

(Name of the Contractor)
having its registered office at hereinafter called as the Contractor (which includes its successors, executors and permitted assigns) of the Second Part.

WHEREAS, Institute has issued Tender No - for the (Name of the tender) and invited bids for this propose.

The Institute has accepted the bid by the contractor for the execution and completion of such works and rectification of any defects therein, at a contract price of Rs.

NOW THIS AGREEMENT WITHNESSETH as follows:

1. In this Agreement, words and expression should have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they should be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by Institute to the Contractor as hereinafter mentioned, the Contractor hereby covenants with Institute to execute and complete the works and rectify any defects therein in conformity in all aspects with the provisions of the Contract.
3. The Institute hereby covenants to pay the Contractor in consideration of the execution and upon completion of the works and rectifying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the given time and in the manner prescribed in the Contract.
4. The Terms and Conditions mentioned in the work order is deemed to form and be read and construed as part of this Agreement.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED

FOR AND ON BEHALF OF THE INSTITUTE
(FIRST PART)

SIGNED, SEALED AND DELIVERED

FOR AND ON BEHALF OF THE
CONTRACTOR
(SECOND PART)

NAME:
DESIGNATION:
ADDRESS:

NAME:
DESIGNATION:
ADDRESS:

