NOTICE INVITING TENDER FOR CIVIL WORKS PERTAINING TO REPAIR AND RECONSTRUCTION OF STAIRCASES IN AUDITORIUM BUILDING AT S.G.T.B KHALSA COLLEGE, UNIVERSITY OF DELHI, NORTH CAMPUS, DELHI 110007

# (Two Bid System)

Tender shall be submitted in 3 separate envelopes

Envelope One: Technical Bid Envelope Two: Financial Bid

Envelope Three: Earnest Money Deposit

Start of Sale of Tender documents: 07 July 2017
Last Date of Sale of Tender documents: 22 July 2017
Date of Submission of Tender Document: 23 July 2017

Architects: Ranjit Singh and Associates 1206 Surya Kiran Building, 19 K.G.Marg, New Delhi 110001

## Sri Guru Tegh Bahadur Khalsa College (University of Delhi) DU North Campus, New Delhi

Sealed Item rate tenders in two bid system (Technical Bid and Financial Bid) are invited by the Principal, Sri Guru Tegh Bahadur Khalsa College for Civil Works pertaining to the Repair And Reconstruction of Staircases in Auditorium Building at S.G.T.B Khalsa College, University Of Delhi North Campus, New Delhi from reputed building contractors who have executed similar repair, retrofitting and reconstruction works, having completed three similar works costing not less than 12 Lakh or two similar works costing not less than 17.0 Lakh or one similar work costing not less than 23.0 Lakh in the last three years.

Tenderers shall furnish proof of satisfactory completion of such work issued by the client along with their full company profile including list of T&P, technical staff, PAN No, GS/TIN No, solvency certificate and 3 year ITR of company. Technical bid shall be opened first and after evaluation and finalization of technical bid, the list of eligible contractors shall be prepared and financial bid of the short-listed contractors shall be opened.

Tender documents can be obtained from the office of Principal Sri Guru Tegh Bahadur Khalsa College, DU North Campus New Delhi 110007 from 07/07/2017 to 21/07/2017 during working hours on payment of Rs. 1000/- by DD in favour of Principal Sri Guru Tegh Bahadur Khalsa College Estimated cost of the work is Rs. 28 Lakhs.

Earnest Money Deposit	Rs.70,000/- (Rupees Seventy Thousand) in a separate envelope
Last Date of Sale of Tenders	22/07/2017
Last date of Submission of Tenders	23/07/2017 upto 3:00 pm
Date of Opening of Technical Bid	23/07/2017 at 3:30 pm
Date of Opening of Financial Bid	Will be conveyed to eligible contractors

**Note:** Document can also be downloaded from the college website <a href="http://www.sgtbkhalsadu.ac.in/">http://www.sgtbkhalsadu.ac.in/</a> and Delhi University Website www.du.ac.in. Downloaded tender shall accompany a DD of Rs. 1000/- drawn in favor of Principal Sri Guru Tegh Bahadur Khalsa College, as cost of tender (Non-refundable). Downloaded tender documents shall be spiral bound before submission. Loose, Stapled or incomplete bid documents will be rejected. College reserves the right to reject any or all the tenders without assigning any reason.

Issued:		
Dated:		

Principal, Sri Guru Tegh Bahadur Khalsa College DU North Campus, New Delhi

## CONTENTS

S.No.	Description	Page No.
1	Appendix	Page 3
2	<b>Notice Inviting Tender</b>	Page 4-6
3	Letter submitting Tender	<b>Page 7-8</b>
4	<b>Special Conditions</b>	Page 9-10
5	<b>General Conditions</b>	Page 11-22
	Schedule of Quantities	
6	Bill of Quantities (Civil Works)	Page 23 – 38
7	Summary of Civil Works	Page 39
8	List of Approved Makes	Page 40
9	Tender Drawings	Page 41 - 43

#### **APPENDIX**

Defects Liability period 12 Months

Date of Commencement The 10<sup>th</sup> day after the date on which The

Architect /Engineer-in-charge issues written orders to commence the works or the date of

handing over the site whichever is later

Date of Completion 6 months from the date of commencement

Penalty for delay 5,000/-per day up-to maximum 10% of the

cost of the works.

Value of work for Interim Certificate Rs.7,00,000/- (Rupees Seven Lakhs)

Earnest Money Deposit Rs. 70,000/- (Rupees Seventy Thousand

Only)

Retention Percentage 5%(As per the terms and conditions)

Performance Guarantee Before issue of letter to start the work,

Contractor shall furnish a performance guarantee in the form of a Bank Guarantee to the tune of Five percent (5%) of the cost of the accepted tender amount, which will be kept valid up to 12 months after completion

of the works

**Contractor** Employer

## Sri Guru Tegh Bahadur Khalsa College, (University of Delhi) North Campus, New Delhi

Dated 07/07/2017

#### **NOTICE INVITING TENDER**

- 1) Sealed Tenders are invited by the Principal, Sri Guru Tegh Bahadur Khalsa College for Civil Works pertaining to the Repair and Reconstruction of Staircases in Auditorium Building at Sri Guru Tegh Bahadur Khalsa College, New Delhi.
- 2) The Architects for this job are M/s Ranjit Singh & Associates, 1206 Surya Kiran Bldg, 19 Kasturba Gandhi Marg, New Delhi –110001. Ph. 011-23312688 Fax: 011-43560879 Email: rsa1206@msn.com.
- 3) The Tender shall be submitted in the prescribed form.
- 4) The works are required to be completed within a period of Six months from the date of commencement.
- 5) The date of commencement shall be from the 10<sup>th</sup> day after the date on which the Architect/Engineer-in-charge issues written orders to commence the work or from the date of handing over of the site whichever is later.
- 6) The work shall be carried out in accordance with the phasing plan approved by the college authorities to avoid disturbance to the normal working of the College. The site is expected to be handed over immediately. The contractor will prepare and submit a Phasing Plan with Bar Chart of all construction activities with targeted dates of completion for all the construction activities and get it approved from the college authorities
- 7) Tender documents consisting of terms and conditions and Tender schedule can be obtained from the office of the Principal, Sri Guru Tegh Bahadur Khalsa College, New Delhi on any working day from 07/07/2017 to 22/07/2017 on the payment of Rs. 1,000/- by crossed cheque in favour of Principal Sri Guru Tegh Bahadur Khalsa College. This amount is non-refundable.
- 8) Completed Tender should accompany PAN number, GS/TIN number and Service Tax registration number, email address, phone number and registered address of the Contractor
- 9) Plans, specifications etc. pertaining to the works can be inspected in the office of M/s Ranjit Singh & Associates, 1206 Surya Kiran Bldg, 19 Kasturba Gandhi Marg, New Delhi 110001, during office hours on any working day OR in the office of the Principal, Sri Guru Tegh Bahadur Khalsa College, New Delhi with prior appointment.
- 10) CONTRACTORS are advised to inspect and examine the site and the surroundings and satisfy themselves before submitting their Tender as to the nature of the ground and sub-soil (so far as practicable), the form and the nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain necessary

information as to the risks, contingencies and other circumstances which may influence or affect their Tender. CONTRACTOR shall be deemed to have full knowledge of the site, whether he inspects it or not and no extra charge consequent to any misunderstanding or otherwise shall be allowed.

- 11) Submissions of the Tender by the CONTRACTOR implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors bearing on the execution of the works.
- 12) A CONTRACTOR should quote in figures as well as in words rate(s) quoted. The amount for each item should be worked out and the requisite totals given. Special care shall be taken to write rates in figures as well as in words and the amount in figures only in such a way that interpolation is not possible. The total amount shall be written both in figures and in words. In case of figures the words "Rs." should be written before the figure of rupees and the words "paise" should be written at the end. Unless the rate is in whole rupees and followed by the word "only" it should invariably be upto two places of decimals.
- 13) All rates shall be quoted on the Tender form only.
- 14) Tender shall be received by the office of the Principal, Sri Guru Tegh Bahadur Khalsa College, New Delhi up-to 1500 hours on 23/07/2017 and the technical bid shall be opened at 1530 hours on the same day in the presence of the CONTRACTORs, who may be present or the earliest convenient time and day thereafter.
- 15) The Tender shall be accompanied by earnest money deposit of Rs. 70,000/- (Rupees Seventy Thousand), in the form of a demand draft in favor of the Principal, Sri Guru Tegh Bahadur Khalsa College, New Delhi.
- 16) On acceptance of the Tender, earnest money will be treated as a part of the security. In addition, contractor shall furnish performance guarantee in the form of an F.D.R or bank guarantee of 5% of the accepted Tender cost in favor of Principal, Sri Guru Tegh Bahadur Khalsa College, New Delhi before issue of letter to start the work
- 17) The CONTRACTOR, whose Tender is accepted, shall permit of the Principal, Sri Guru Tegh Bahadur Khalsa College, New Delhi at the time of making any payments to him for works done under the contract to deduct towards security deposit such sum as will along with the amount of earnest money already deposited amount to the following % of the cost of the work: -
  - •5% of the bill amount.
  - •50% of the security money will be released along with the final bill and the balance after expiry of the successful performance of the Defects Liability Period of one year without any interest.
- 18) Sri Guru Tegh Bahadur Khalsa College, New Delhi will return the earnest money where applicable, to every unsuccessful CONTRACTOR on return of all the Tender documents without any interest.

- 19) A CONTRACTOR shall submit the Tender which satisfies each condition laid down in this notice, failing which the Tender will be liable to be rejected.
- 20) Sri Guru Tegh Bahadur Khalsa College, New Delhi does not bind itself to accept the lowest or any tender or to give any reasons for their decision.
- 21) Sri Guru Tegh Bahadur Khalsa College, New Delhi reserves the right of accepting the whole or any part of the Tender and CONTRACTOR shall be bound to perform the same at his quoted rates.
- 22) Sales tax, GST /SERVICE TAX/ VAT, purchase tax, turnover tax or any other tax applicable in respect of this contract shall be payable by the Contractor and Sri Guru Tegh Bahadur Khalsa College will not entertain any claim whatsoever in respect of the same.
- 23) T.D.S. for GST/VAT/WCT etc. as applicable to union territory of Delhi shall be deducted from the payments to be made to the Contractor and tax deduction certificate shall be issued by Sri Guru Tegh Bahadur Khalsa College, New Delhi as per govt. guidelines
- 24) This notice of Tender shall form part of the contract documents.

Contractor:	Owner:
Duly authorized to sign the	For and on behalf of
On Behalf of M/s	Sri Guru Tegh Bahadur Khalsa College
Cionatorea	
Signature	
Date	
Dute:	
Email	
Phone	Authorized Signatory
Postal Address	

To,

The Principal Sri Guru Tegh Bahadur Khalsa College, DU North Campus, New Delhi.

Dear Sir,

I/We have read and examined the following documents relating to Civil Works pertaining to the Repair and Reconstruction of Staircases in Auditorium Building at Sri Guru Tegh Bahadur Khalsa College, New Delhi.

- 1) Notice Inviting Tender Specifications
- 2) Drawings
- 3) General Conditions of Contract
- 4) Special Conditions
- 5) Tender Schedule

I/We hereby Tender for execution of the works referred to in the aforesaid, documents upon the terms and conditions contained or referred to therein and in accordance in all respects with the specifications, designs, drawings and other relevant details at the rates quoted by us in the Tender schedule. We have visited and examined the site of works and are fully aware of the site conditions, having a bearing on the contract.

In consideration of I/We being invited to the Tender, I/We agree to keep the Tender open for acceptance for 90 Days from the due date of submission thereof and not make any modifications in the terms and conditions which are not acceptable to Principal, Sri Guru Tegh Bahadur Khalsa College, New Delhi.

If after the Tender is accepted, I/we fail to commence the execution of the works as provided in the conditions, I/we agree that Principal, Sri Guru Tegh Bahadur Khalsa College, New Delhi shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely.

I/We agree that should Principal, Sri Guru Tegh Bahadur Khalsa College, New Delhi. decide to forfeit earnest money as aforesaid, unless a sum equal to the earnest money mentioned above is paid by us forth-with, the principal Sri Guru Tegh Bahadur Khalsa College, New Delhi may at its option recover it out of the deposit and in the event of deficiency, out of any other money due to me/us or otherwise.

Duly authorized to sign the Tender
On behalf of M/s
Signature
Dated
Duicu
Postal Address

#### SPECIAL CONDITIONS

- 1. The work shall be carried out as per specifications in the Tender schedule/latest C.P.W.D. Specifications, along with the correction slips; issued up to date of acceptance of Tender in case of doubt the decision of the Architect shall be final and binding on the Contractor.
- 2. The Contractor shall carryout the work in stages as to cause minimum disturbance to the working of Sri Guru Tegh Bahadur Khalsa College, New Delhi and other organizations. He shall be responsible for any damage to the equipment or structures, injury to the personnel during the progress of the work and he shall be liable to pay compensation as may be decided by the Principal or his authorized representative in respect of such damages /injuries.
- 3. The serviceable materials out of the dismantled materials if any will be the property of the college and properly stacked by the Contractor as directed by the Engineer-in-charge. Decision of principal or his authorized representative on the service-ability of the dismantled materials shall be final and binding on the Contractor.
- 4. All labour Employed by the Contractor shall be covered by the workman's compensation act. Any death, injury or mishap to the workmen of the Contractor will entirely be the Contractor's responsibility and the College, shall not be liable to pay any damages for the same.
- 5. Contractor shall take adequate safety precautions to avoid any accident etc. at site. Shall erect proper barricades, sign boards, lights, etc. shall provide safety belts, safety shoes, head gears (helmet I.S.I standard) and shall be fully responsible for any criminal & civil liabilities. All safety arrangements are to be made by contractor at his own cost.
- 6. No labor or material rate escalation claims will be entertained from the contractor as this work has to be completed within 6 months from the date of commencement of work at site.
- 7. Rates quoted shall be applicable equally to all floors and shall include all lifts and leads. No extras on this account shall be payable.
- 8. Water and electricity shall be arranged by the Contractor. In case it is available, the same can be provided by the College authorities at one point. A recovery @ 1 % for providing electricity and 1% for providing water shall be made by the college authorities on gross value of work done by the contractor.
- 9. Rates quoted by the contractor shall be inclusive of all items of work listed below and Any work, supplies or services which might have not been specifically mentioned in the specifications, schedule of items or drawings but are necessary for entire completion of the work shall be executed / provided/ rendered by the CONTRACTOR without any Extra cost and within the

- time schedule specified. Rates quoted shall be deemed to include such elements of labour and materials necessary to complete the items of work in all respects
- 10. Contractor shall submit only computerized Bills supported with computerized measurement sheets in A4 size hard copy prints and soft copy in Microsoft Excel Format. Manual Handwritten bills or measurement sheets will not be accepted.
- 11. Labour Camp will be arranged by the contractor outside the college premises. Sri Guru Tegh Bahadur Khalsa College does not have space for labour camps inside its premises.
- 12. Principal SGTB Khalsa College reserves the right to decrease the items of work, change the specifications of works or remove the entire section of work as may be deemed necessary to finish the works within the available budget.

## **GENERAL CONDITIONS OF CONTRACT**

<u>Definitions:</u> the contract document consists of the agreement, the special and general conditions of the contract, specifications and bills of quantities including all modifications and the contract drawings prepared by the Architect from time to time

- 1. The site: shall mean the site of contract work at Sri Guru Tegh Bahadur Khalsa College, New Delhi.
- 2. Sub-Contractor: includes those who have a direct contract with the Contractor.
- 3. <u>Notice:</u> written notice shall be deemed to have been served if delivered in person to a member of the Contractors firm.
- 4. Owner: Principal, Sri Guru Tegh Bahadur Khalsa College, New Delhi.
- 5. Work: the term "work" includes both labour and material of the Contractor/Sub-Contractor.
- 6. Time limits: time limits or 6 months stated in the contract are essence of the contract.
- 7. <u>Law:</u> law of the place of work shall govern the construction under this contract.
- 8. <u>Virtual completion:</u> date of virtual completion is the date when the construction is sufficiently completed in accordance with the contract documents, including modifications, if any.
- 9. Contract documents: shall consist of the following
  - a) Articles of agreement
  - b) General and special conditions of contract
  - c) Technical specifications
  - d) Bills of quantities

### TYPE OF CONTRACT

It is an item rate contract. The Contractor shall be paid for the actual quantity and quality of work done, as measured at site on the rates quoted by him, on the basis of a payment certificate issued by the Architect/ Engineer- In charge

#### **SCHEDULE OF QUANTITIES**

Schedules of quantities given in the contract bill are provisional and are meant to indicate the intent of the work and to provide a uniform basis for the contract. The Owner reserves the right to increase or decrease any of the quantities or to totally omit any of them. Contractor shall be bound to carry out the same without claiming any extras.

#### **CONTRACT DRAWINGS**

- 1. In general, drawings shall indicate dimension, position & type of construction.
- 2. Specifications shall indicate the qualities, methods, and bill of quantities shall indicate the quantum and rates. Any work indicated in drawings and not mentioned in the specifications or vice versa shall be furnished as fully set forth in both.
- 3. Contractor shall not deviate from the drawings and Architects interpretation of the drawings shall be final and without appeal.
- 4. Errors/inconsistencies discovered in the drawings shall be instantly brought to the notice of the Architect for interpretation and correction, if any.
- 5. All drawings are the property of the Architect and shall not be used on any other project.
- 6. Bar bending schedule, if requested by the Architect/Engineer in-charge shall be furnished to him prior to fabrication.

#### **ARCHITECTS INSTRUCTIONS**

If within seven days of receipt of written instructions from the Architect, requiring compliance with an instruction the Contractor does not comply hence-with, then the Owner may get the work executed through another agency at the risk and cost of the Contractor.

## SCOPE OF WORK OF CONTRACTOR

The scope of work to be carried out by the CONTRACTOR shall also include the following:

- a) Setting out of the works in respect of position, level dimensions, alignments, etc. including establishment of bench marks, survey reference points, etc.
- b) Clearance of the site.
- c) Site leveling /terracing within the limits as shown in the drawings or as directed by the Engineer In charge.
- d) Disposal of debris, excavated materials, etc. as per the instructions of the Engineer In-Charge
- e) Testing of water, soil and concrete. And any other test as required by CPWD norms
- f) Pumping out rain water/underground water from foundations, excavations and drainage of surface water from work site.
- g) All scaffolding, shorting, centering, shuttering works, etc.
- h) Running and maintenance of all construction plants and equipment, tools and tackles, etc. All temporary /enabling works such as approach road to the site, water supply, drainage

and sewerage, power supply including diesel generator set, temporary offices, stores, construction yard, canteens, toilet blocks, labour camp, fencing, etc.

- i) All temporary /enabling works such as approach road to the site, water supply, drainage and sewerage, power supply including diesel generator set, temporary offices, stores, construction yard, canteens, toilet blocks, labor camp, fencing, etc.
- j) Protection and maintenance of trees, shrubs, green and other surfaces as instructed by the Engineer In charge.
- k) Any other work required in connection with the execution of the contract work.

The cost of all the above-mentioned works shall be deemed to be included in the rates for various items of work although such inclusion may not be specifically spelt out.

Whether specified elsewhere in the Agreement or not, the CONTRACTOR shall provide all materials (including steel and cement unless specifically spelt out in the agreement otherwise), labors of every description, energy and water and all tools, tackles, plant and transport necessary for proper execution of the work to the entire satisfaction of the OWNER.

#### **SAMPLES AND SHOP DRAWINGS**

The Contractor shall submit samples of materials and shops drawings required by the Architect with promptness within a week.

#### PROGRESS CHART

In order to achieve the completion time as stated above, the CONTRACTOR shall submit to the OWNER within 2 (two) weeks from the effective date of Agreement a detailed Bar chart/PERT Network showing all the activities including mobilization, site clearance, procurement of major construction materials like steel and cement, excavation, foundation work, sanitary and water supply work, etc. The list of activities for which the Bar chart/PERT network has been worked out and their commencement, duration and completion shall be subject to the approval of the OWNER

#### ACCESS FOR ARCHITECT TO THE WORKS

The Architect and his representative shall have access, at all reasonable times, to the work and workshops of the Contractor.

## **ARCHITECTS STATUS AND DECISIONS**

The Architect shall be Owner's representative during the construction period. He shall periodically visit the site to familiarize himself generally with the progress and the quality of

work and to determine, in general if the work is proceeding in accordance with the contract documents. The Architect shall not be required to make exhaustive or continuous on-site inspections to check the quality and quantity of the work, and shall not be responsible for the Contractors failure to carry out the construction work in accordance with the contract documents. During his site inspections, the Architect shall inform the Owner about progress of work, defects and deficiencies if any.

The Architect may in his absolute discretion from time to time, issue further drawings, details, written instructions, written decisions and written explanations in regard to: -

- 1. Variation or modification of the design
- 2. Quality or quantity of work, addition/alteration/omissions and substitutions of any work
- 3. Any discrepancy and divergence between drawings and specifications.
- 4. Removal and re-erection of any works executed by the Contractor
- 5. Dismissal of any persons employed on the site, who in the opinion of the Architect is not fit for the job.
- 6. Opening up for inspection any work-covered up
- 7. Amending and making good any defects under defects liability period
- 8. Removal from site, any materials brought by the Contractor, which in the opinion of the Architect is not up to the desired standard.
- 9. Delay and extension of time
- 10. Postponement of any work

#### **ENGINEER INCHARGE**

Engineer In-Charge shall mean the person approved by the Architect and appointed and paid by the Owner and acting under the directions of the Architect.

### **CONTRACTORS FIELD ORGANIZATION AND EQUIPMENT**

- 1. The Contractor shall employ qualified and competent licensed Electricians on the site.
- 2. Contractor shall provide and install all necessary hoists, ladders, scaffoldings, tools, tackles, plants and machinery necessary for execution of the works
- 3. Contractor shall provide and maintain simple water tight office accommodation at site
- 4. Contractor shall make his own security arrangements at site and keep a 24hours Watchman
- 5. Contractor shall provide sanitary convenience for site staff and labour to keep the site clean
- 6. A telephone line at site to be maintained and paid by the Contractor

7. Guardrails shall be provided by the Contractor for safety of labour and general public at the site of works.

#### **TAXES**

Sales-tax/VAT/GST/SERVICE TAX, purchase tax, turnover tax or any other tax applicable in respect of this contract shall be payable by the Contractor and Sri Guru Tegh Bahadur Khalsa College will not entertain any claim whatsoever in respect of the same

#### **STATUTORY OBLIGATIONS**

The Contractor shall comply with and give all notices required by any Govt. authority and instrument, rule or order made under an act of parliament or state assembly or any regulation or bye-law of the local body, relating to the work and indemnify the Owner against any such liability arising out of noncompliance of the law.

By way of illustration of various Acts/statutory compliances as stated above, the following Acts as amended from time to time shall be complied with by the CONTRACTOR:

- a) Employee's Provident Fund Act 1952
- b) Contract Labour Act (Regulations and Abolition 1970)
- c) Minimum Wages Act 1948
- d) Payment of Wages Act 1936
- e) Workmen Compensation Act 1923
- f) Factories Act 1948
- g) Apprenticeship Act 1961

#### SUB CONTRACTOR

Before awarding any sub contract, the Contractor shall notify the Architect in writing the names of the Sub-Contractors proposed. Contractor shall not employ the Sub-Contractor to whom Architect or Owner may have a reasonable objection.

## **MEASUREMENT OF WORK**

Unless otherwise specified, measurement of work shall be carried from the works actually executed. The measurements for the purpose of preparing Bills will be taken jointly by the CONTRACTOR's representative and the Engineer In charge. In measurement of work as stated above, the CONTRACTOR shall certify that the work has been carried out strictly as per the drawings, specifications and item of work in terms of the agreement. Such certificate shall require Engineer In-Charge's endorsement for the purpose of payment.

In the event of any dispute with regard to the measurement of the work executed, the decision of the OWNER shall be final and binding on the CONTRACTOR

In the case of site measurements, should the CONTRACTOR not attend or neglect or fail to send his representative for taking joint measurements, the measurements taken by the Engineer In Charge shall be deemed to be the correct measurement of work and shall be binding on the CONTRACTOR

#### **REJECTION**

If the Contract work or any portion thereof, at any time, is found to be defective or fails to fulfill the requirements of the agreement, the Engineer In Charge shall give the CONTRACTOR notice in writing setting-forth particulars of such defects or failure and the CONTRACTOR shall forthwith make good the defects or replace or alter the same to make it comply with the requirements of the agreement.

Any materials, equipment, etc. brought to the site and found to be not in accordance with the agreement, shall be rejected by the Engineer In-Charge and the CONTRACTOR shall remove the materials from the site within the period specified by the Engineer In-Charge.

The CONTRACTOR shall not be entitled to any extension of time or extra cost for rejection as per above

#### **CERTIFICATES OF PAYMENTS**

Architect shall issue an interim certificate of payment stating the amount due to the Contractor from the Owner and the Contractor shall be entitled to payment thereof within a period of two week after issue of the certificate. From the total amount, certified deduction shall be made towards payments already made, security deposit, TDS etc.as applicable to Delhi or any other tax applicable at the time of making payment.

All running payments shall be regarded as payment by way of advance against final payment only and not as payment for the work completed till the date of final payment. The running payment made shall not preclude the liability of the CONTRACTOR to finally complete the work strictly in accordance with the specifications and drawings, if required by re-constructing faulty work

#### **CLAIM FOR EXTRA**

In the case of extra item(s) (items that are completely new, and are in addition to the items contained in the contract), the contractor will submit rates, supported by rate analysis, for the work and the engineer-in-charge shall within one month of the receipt of the rates supported by rate analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

#### DEDUCTION FOR UNCORRECTED WORK

If the Architect deems it in-expedient to correct work damaged or not done in accordance with the contract, an equitable deduction from the contract price shall be made thereof.

#### **FLUCTUATIONS**

The Contractor shall not claim any extras for fluctuation of price and the contract price shall not be subjected to any rise or fall in prices.

#### POSSESSION BEFORE VIRTUAL COMPLETION

If the Owner, with the consent of the Contractor takes possession of part of the building for handing over to the finishing Contractor, such part of the building shall not be deemed to be virtually completed. Virtual completion of such part would occur only on completion of the last part of the structure.

#### TIME EXTENSION

Upon it becoming reasonably apparent that the progress of the work is delayed, the Contractor shall forthwith give written notice of the cause of delay to the Architect, to enable the Architect and Owner to take a proper decision in the matter.

#### INSPECTION AND TEST

- The CONTRACTOR shall ensure inspection and test of all materials and work at his cost through his ENGINEER IN CHARGE and other technical staff either at site or through any approved laboratory.
- ii. The CONTRACTOR shall ensure proper supervision and inspection during the progress of work at site.
- iii. All materials and work, whether at the site or in the CONTRACTOR's /Sub-Contractor's premises shall be subject to inspection and test by the ENGINEER IN CHARGE. The CONTRACTOR/ his Sub-Contractor shall provide all facilities free of cost to the ENGINEER IN CHARGE including all labor, materials, tools, tackles, instruments, appliances, etc. to enable the ENGINEER IN CHARGE to carry out inspection and/or test.
- iv. All test certificates shall be subject to certification by the ENGINEER IN CHARGE.
- v. The CONTRACTOR shall submit to the ENGINEER IN CHARGE three copies of all inspection/ test certificates.

vi. The CONTRACTOR shall not be entitled to any claim for extra time or cost due to any delay in carrying out inspection and testing or re-inspection and re-testing if so decided by the ENGINEER IN CHARGE.

The CONTRACTOR shall take adequate steps to rectify the defects or to replace such materials and work which have failed during inspection /testing

#### **RESPONISBILITY OF COMPLETION**

Any work, supplies or services which might have not been specifically mentioned in the specifications, schedule of items or drawings but are necessary for entire completion of the contract work shall be executed / provided/ rendered by the CONTRACTOR without any Extra cost and within the time schedule specified. Rates quoted shall be deemed to include such elements of labor and materials necessary to complete the items of work in all respects.

#### DAMAGES FOR NON-COMPLETION

If the Contractor fails to complete the works by the date specified or within any extended time granted to him, the Contractor shall allow the Owner to deduct a sum calculated at the agreed liquidated damages, from the money due to him for the period the work remained incomplete, subject to a maximum amount of 10% of the Contract Value.

#### LIQUIDATED DAMAGES FOR DELAY

If the CONTRACTOR fails to complete the work/item (s) of work in all respects and hand over the same to the OWNER within the time stipulated the CONTRACTOR, without prejudice to any other right or remedy of the OWNER on account of such breach, be liable to pay the OWNER liquidated damages at the rate of 1% (one percent) of the total contract price for delay of every week or part thereof.

The total amount of liquidated damages shall be limited to 10% (Ten percent) of the total contract price.

The above provisions shall not apply in cases of delay for which the CONTRACTOR is entitled to extension of completion time

#### VIRTUAL COMPLETION CERTIFICATE AND DEFECTS LIABILITY PERIOD

When in opinion of the Architect the works are practically completed, he shall forthwith issue a certificate to that effect, that date will be taken as the date of virtual completion.

The Architect shall prepare a schedule of defects, not later than 14 days after the expiry of the defects liability period. The Contractor shall within a reasonable period of time after receipt of schedule of defects shall rectify the same, failing which the Architect will make suitable

## MAINTENANCE GUARANTEE / DEFECTS LIABILITY PERIOD

Maintenance Guarantee period will be 12 months from the actual date of completion and handling over to the OWNER.

- a) The CONTRACTOR guarantees that within the maintenance guarantee period, the contract work shall not show any signs of defects, cracks, settlements, disfigurations, shrinkage, leakage, dampness or any other defects.
- b) The CONTRACTOR shall maintain and satisfactorily execute, at his own cost, all such works of repair, amendment, re-construction, rectification, replacement and any other work to make good the faulty work as stated in Article (a) during the maintenance guarantee period.
- c) The CONTRACTOR shall, if required by the ENGINEER IN CHARGE, search for the causes of any defects, imperfection or fault under the direction of the ENGINEER IN CHARGE. The cost of such search shall be borne by the CONTRACTOR.
- d) At intervals specified by the ENGINEER IN CHARGE the CONTRACTOR, along with the ENGINEER IN CHARGE, shall inspect the contract work to satisfy himself that no defects have cropped up in the contract work. Should there be any signs of defects, the CONTRACTOR shall take immediate steps to rectify the same, failing which; the ENGINEER IN CHARGE may get the defects rectified at the risk and cost of the CONTRACTOR.
- e) At the end of the maintenance guarantee period, the CONTRACTOR, along with the ENGINEER IN CHARGE, shall carry out final inspection of the contract work to prove that no defects had appeared in the contract work or that all defects which appeared in the contract work have been rectified to the entire satisfaction of the ENGINEER IN CHARGE. If during the final inspection it is found that the defects still remain in the contract work, the period of maintenance guarantee shall be extended at the discretion of the ENGINEER IN CHARGE and the CONTRACTOR shall be liable to make good the defects and be responsible for the maintenance of the work till the defects have been fully rectified.
- f) Upon successful completion of the maintenance guarantee period the OWNER shall issue final acceptance certificate to the CONTRACTOR

#### PAYMENT WITH HELD

The Architect may withhold or on account of subsequently discovered evidence nullify the whole or part of any certificate to such an extent as may be necessary in his reasonable opinion to protect the Owner from loss, for defective work, non- payment to Subcontractors, or other claims connected to this work.

#### **INJURY TO PERSONS**

The Contractor shall indemnify the Owner against any liability, loss, claim or proceedings whatsoever arising under any statutory or common law in respect of personal injury to or the death of any person, whomsoever arising out of or in the course of or caused by carrying out the work.

### **INSURANCE**

Without prejudice to his ability to indemnify the Owner, the Contractor and his Subcontractors shall maintain such insurance as are necessary to cover the liability of the Contractor and the sub-Contractors.

#### **INSURANCE AGAINST FIRE**

The Contractor shall in the joint name of the Owner and the Contractor, insure against loss or damage due to fire, earthquakes and riots.

#### COORDINATION OF WORK

Contractor shall extend complete coordination to other agencies i.e. air-conditioning, firefighting and interiors working on the same site.

#### LABOUR

Contractor shall not employ child labour under 14 years of age and if female workers are employed he should make provision for safeguarding the small children to keep them clear of the site. All labour shall wear safety helmets and shoes to protect them from injury.

#### SAFTEY

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per C.P.W.D. Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs.200/- for each default and in addition, the Engineer-in- Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

#### **ANTIQUITIES**

All fossils and other objects of interest or value, which may be found on the site or in excavating the same during progress of the work, shall become a property of the Owner. The Contractor shall carefully take out and preserve all such objects and hand them over to the Owner, through the Architect.

#### **GUARANTEE**

Besides guarantees required elsewhere, the Contractor shall guarantee the works in general for one year after completion of defects liability period.

#### TREES AND SHRUBS

The Contractor shall protect trees and shrubs designated by the Owner/Architect/ Engineer In Charge from damage during the course of work

#### PERFORMANCE GUARANTEE

In addition to the Security Deposit the Contractor shall furnish a performance guarantee in the form of a Bank Guarantee to the tune of Five percent (5%) of the cost of the tender amount, which will be kept valid up to 12 months after completion of the work.

#### **ARBITRATION**

In case of dispute, the difference of opinion on any matter pertaining to the works, the decision of the Architect shall be final and binding on the contractors and the owners. If either party is not satisfied with the decision of the Architect, within 28 days a notice to this effect will be sent to the Architect in writing. The matter can then be referred to sole arbitrator or a panel of two arbitrators who should be fellows of Indian Institute of Architect, for a final award. Decision of Principal SGGSCC shall be final and binding in this regard.

#### LIQUIDATION

If the CONTRACTOR commences to be wound up, not being a member's voluntary winding up for the purpose of amalgamation or reconstruction, or carries on his business under a receiver for the benefits of his creditor the OWNER shalt be at liberty to:

i) Give such receiver the liquidator or other person the option of carrying out the performance under the Agreement, subject to the receiver, liquidator or other person providing a guarantee up to an amount to be agreed upon by the OWNER and such receiver

liquidator or other person for the due and faithful performance of the CONTRACTOR's obligations under this Agreement, or

ii) If the receiver, liquidator or other person fails within 30 (thirty) days to exercise the option to carry out performance of the Agreement then the OWNER may terminate the Agreement and give notice in writing to the CONTRACTOR or to the receiver, liquidator or to any person in whom the Agreement may have become vested.

#### **TERMINATION OF CONTRACT**

If the CONTRACTOR violates the Agreement or shall neglect to execute the work with due diligence or expedition or shall refuse or neglect to comply with any reasonable directions, instructions or orders given to him in writing by the Architect/Engineer In-Charge in connection with the work or shall contrivance or breach any provisions of the Agreement, the OWNER may give notice in writing to the CONTRACTOR to make good the failure, neglect or contravention complained of or cure that breach within a period of 30 (thirty) days of receiving such notice and in default of the compliance with the said notice, the OWNER without prejudice to his rights as below may rescind or terminate the Agreement stating therein the effective date of termination, holding the CONTRACTOR liable for the damages that the OWNER may sustain in this behalf.

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

#### CIVIL WORKS

#### SECTION A. EARTH WORK ,DISMANTLING AND DEMOLISHING WORKS

The rates quoted shall include the following:

- Excavation either straight, inclined or curved in trenches, footings, rafts, basements etc., including raking out, cutting and dressing sides and bottom to true dimension and depositing excavated stuff beyond three meters clear of the edge of the trench, filling back as required and disposal of surplus earth anywhere within the plot as directed by engineer-in charge/ architect.
- 2. Clearing all shrubs, roots, vegetation and trees from alignment of the buildings
- 3. Bailing out, pumping out or otherwise removing all water which may accumulate in the excavation from any or all causes whatsoever
- 4. All labour and material required for fencing and protection against risk of accident to open excavations etc., with necessary shoring planking and strutting and for providing gangways, with handrails across open trenches etc., where necessary during the progress of the work.
- 5. Watching and lighting arrangements wherever necessary whether ordered by the Owner/Architect/Engineer-In Charge or otherwise
- 6. Filling back available excavated earth in plinths, sides of foundations, sides of basements, under floors and for ground formation etc., as and where required in 150 mm thick layers, breaking coods, ramming, watering, consolidation, the same with 10 M.T. Rollers or hand tampers where rollers are not accessible, and dressing the filled up areas.
- 7. Battering, benching, forming steps in the sides of foundations and mass excavations where required and removal of the slips and falls. This item is not payable separately.
- 8. Anti termite treatment shall be got done through a specialized sub-contractor approved by the architect. This item is payable separately. The contractor shall guarantee against termite for a period of 10 years.
- 9. Water proofing shall be done by specialized agency as approved by the Architect/Engineer Incharge. Water proofing Agency shall give a guarantee for its effectiveness over a period

- of 10 years. The rates for waterproofing shall be inclusive of all labour and material for the successful completion of the job. This item is payable separately.
- 10. Water table has to be maintained at least 1.0 Mt., below lean concrete level of raft by providing adequate de-watering arrangements. This water table has to be maintained till Basement floor slab is cast including the retaining wall. This item is not payable separately.
- 11. Water table shall also be maintained till such time the waterproofing of retaining wall and raft is complete. This item is not payable separately.

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
A.	SECTION – A: EARTH WORK, DISMANTLING AND DEMOLISHING WORKS				
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 3.0 m, disposed earth to be levelled and neatly dressed.				
1.a	All kinds of soil	CUM	110		
2	Demolishing R.C.C. work in columns, beams, slabs, staircases, waist slabs etc. including all covering plaster/ flooring etc. manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 meters lead as per direction of Engineer - in- charge.	CUM	44		
3	<b>Demolishing cement concrete</b> (any mix ) in flooring, slabs, counters, cills, lintels etc. including all covering plaster/flooring etc. manually/ by mechanical means including disposal of material within 50 meters lead as per direction of Engineer - in - charge.	CUM	6		
4	<b>Dismantling existing wall paster</b> or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 meters lead.	SQM	120		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
A.	SECTION – A: EARTH WORK, DISMANTLING AND DEMOLISHING WORKS				
5	Demolishing brick work in cement mortar manually/ by mechanical means including its wall plaster, stacking of serviceable material and disposal of unserviceable material within 50 meters lead as per direction of Engineer-incharge	CUM	76		
6	<b>Dismantling existing staircase railing</b> , balusters, handrail etc. complete and stacking material within 50 meters lead as per direction of Engineer - in- charge.	RMT	74		
7	<b>Dismantling doors, windows</b> and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 meters lead:  Of area beyond 3 sq. meters	EACH	8		
8	<b>Filling</b> available excavated earth (excluding rock) in trenches, plinth, sides of foundations, floor etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	CUM	94		
9	Filling good earth in trenches, plinth, sides of foundations, floor etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	CUM	20		
10	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete	CUM	10		
11	Providing, diluting and injecting chemical emulsion (Chlorpyriphos/Lindane E.C. 20% with 1% concentration) for <b>anti-termite treatment</b> of under floor soil @ one litre per hole, 900 mm apart including drilling 1meter deep 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand)	SQM	28		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
Α.	SECTION – A: EARTH WORK, DISMANTLING AND DEMOLISHING WORKS				
	Anti-termite treatment shall be got done through a specialized sub-contractor approved by the owner. The contractor shall guarantee against termite for a period of 10 years				
12	<b>Dismantling steel work</b> in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 meters lead	KG	20000		
13	Disposal of excess earth/ building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	CUM	120		
	TOTAL AMOUNT OF SECTION - A EARTH WORK , DISMANTLING AND DEMOLISHING WORKS				

#### SECTION B: PLAIN AND REINFORCED CEMENT CONCRETE

The rates quoted below shall include the following:

- 1. Making all drips, grooves, moulds, curved surfaces and chamfered edges etc. in concrete and/or plaster work as directed
- 2. Forming all expansion and/or construction joints as per standard specification and/or as directed.
- 3. All projections, toothings, ornamental work etc. and finishing to shape as directed.
- 4. Embedding all electric pipes, fan hook boxes, false ceiling suspensions and inserts of any description etc. in R.C.C slab, beam, walls etc., as directed.
- 5. Installing a calibrated cube-testing machine at site, getting it calibrated every month and submitting test report to the architects. Alternately getting the cubes tested in an approved lab.
- 6. Preparing 7 days and 28 days test cube, testing them at site and /or getting tested in an approved laboratory including all fees, costs, transportation etc. relating to them.
- 7. Providing slump tests apparatus at site and test for checking the workability of concrete.
- 8. Working up or hacking of concrete surfaces for providing keys for further concrete work including applying thick cement slurry or mortar as directed
- 9. Providing 12 mm thick cement plaster 1:6 (1 cement: 6 fine sand) and a coat of lime wash on all brick wall surfaces serving as bearing for RCC work.
- 10. Exposed architectural or ordinary centering, shuttering and formwork, strutting, boxing, propping etc. except wherever specified to exclude in the item. Shuttering to be made water tight with plywood and timber if necessary.
- 11. Use of shuttering oil as specified
- 12. Use of cement slurry over shuttering before commencing concreting
- 13. Machine mixing of all concretes and hoisting to all lifts, carrying to all leads, consolidating by rodding, vibrating, tamping and curing.

- 14. Sinking of floors in specified areas.
- 15. Providing of dowel bars wherever directed by the architect/engineer.
- 16. Forming cutouts, openings and concreting at a later stage as required
- 17. Providing sleeves for pipes etc. before concreting
- 18. Working in narrow widths, small quantities and curved alignments etc.
- 19. Removing rust, mild scales, oil, grease, paint etc. from steel reinforcement.
- 20. Providing 16 gauge annealed binding wire and binding the reinforcement with the same without any extra cost on the account for labour or material
- 21. Providing cover to steel with cement concrete briquette spacers at no extra cost.
- 22. Payment of labour for laying steel as per Indian standard section weights actually placed in position as per design and drawing or as directed
- 23. The contractor shall not undertake the RCC work including form-work of first floor before laying lean concrete on the lowest floor if so directed by the architect/engineer.
- 24. Wherever new structural slab/beam is to be connected with the old structural slab/beam, the cost of chipping the necessary old concrete members and re-casting the same is to be included in the item.

	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
В.	SECTION B - PLAIN AND REINFORCED CEMENT CONCRETE				
1	Providing and laying in position <b>cement concrete</b> of specified grade excluding the cost of centering and shuttering - All work up to plinth level:				
1.a	1:3:6 (1 Cement : 3 coarse sand (zone-III): 6 graded stone aggregate 40 mm nominal size).	CUM	8		
2	Providing and 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 Engineer-incharge.				
2.a	All works upto plinth level	CUM	15		
2.b	All works above plinth level upto floor VI level.	CUM	45		
3	<b>Steel</b> reinforcement for R.C.C. Work including straightening, cutting, bending, placing in position and binding all complete upto all lvl.				
3.a	Thermo-Mechanically Treated bars. (Only TATA Or SAIL)	MT	9		
4	Providing, making, fixing & anchoring of reinforcing bars or dowels or rebar including drilling the holes, fixing the bars and grout the bar with Hilty Hit - HY150 grouting chemical ,all labours, all tools &plants, necessary scaffolding, etc but excluding the reinforcement steel completed for all lead & lift as per directed by Engineer Incharge /Structural consultants or Architect.  Rebarring depth minimum 300 mm or 20 D whichever is more				

	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
В.	SECTION B - PLAIN AND REINFORCED CEMENT CONCRETE				
4.a	8mm dia	Nos.	20		
4.b	10mm dia	Nos.	80		
4.c	12mm dia	Nos.	80		
4.d	16mm dia	Nos.	40		
4.e	20mm dia	Nos.	RO		
4.f	25mm dia	Nos.	RO		
5	Centering and shuttering including strutting, propping etc. and removal of form for all works at all levels:				
5.a	Foundations, footings, bases of columns, etc. for mass concrete.	SQM	60		
5.b	Suspended floors, roofs, landings, balconies and access platform.	SQM	180		
5.c	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	SQM	120		
5.d	Columns, Pillars, Piers, Abutments, Posts and Struts.	SQM	100		
	TOTAL AMOUNT OF SECTION - B PLAIN AND REINFORCED CEMENT CONCRETE				

#### SECTION C - MASONRY, ALUMINIUM AND STEEL WORK

The rates quoted shall include the following:

- 1. Work in English bond or any other design as directed by the architect/engineer incharge.
- 2. Work in square round and rectangular pillars, flower troughs, under floor drains, making curved and tapered surfaces steps etc.
- 3. Forming openings, chases, grooves etc.
- 4. Embedding/ cutting chases for conduits, boxes other fixture of any descriptions, hold fasts of doors,
- 5. Fixing Windows glazing etc.,
- 6. Making all drip courses, projected courses of any description, offsets, setbacks, corbels, architrave's or any other feature of description.
- 7. Raking out joints for plastering or pointing in plinth super structure or finishing joints flush in foundation as directed
- 8. Bonding with RCC work
- 9. Work in narrow widths, small quantities etc. supplying moulds, taking briquettes, getting tested, any fees, costs etc., relating to the same.
- 10. Machine mixing of mortars
- 11. Curing of brick work
- 12. Preparing bricks for testing (efflorescence, water absorption, crushing strength, shapes, sizes etc.) in the field laboratory and or an approved laboratory, and any fees, costs etc. relating to them.
- 13. Providing and fixing all flush door shutters of M/S DURO/GREEN/VIRGO/CENTURY make with 18mm teakwood lipping on all edges.
- 14. Kiln seasoning and termite proofing of all timber work
- 15. Providing so-lignum paint to hidden faces of timber work

- 16. The frames for doors, windows, AC openings or any other frame shall be measured for finished dimensions. The length of projections for tenons etc. shall not be measured for payment.
- 17. Providing heavy quality SS hardware fittings and fixtures which shall be included in the rates of the shutters as per details below

o single door shutter

0	i) Butt hinges 100 mm long	4.00 No.
0	ii) Stainless Steel Handles 200 mm long	2.00 No.
0	iii) Door stopper	1.00 No.

o double door shutter

0	i) Butt hinges 100 mm long	8.00 No.
0	ii) Stainless Steel Handles 200 mm long	4.00 No.
0	iii) Door stopper	2.00 No.

- 18. The rate shall include spirit polish for all exposed wood work and veneer finishes unless specified otherwise.
- 19. All items for wood work shall be got approved by the architects before applying primer coat
- 20. Areas of door and windows shutters shall be measured in closed position covering the rebates of the frame. Overlap of two shutters shall not be measured. The width and height of shutters shall be measured correct to one centimeter within frame rebates
- 21. Teak ply to be fixed to base cladding/commercial board with group matching
- 22. All block board and ply shall be used of BWP grade, termite and "powder beetles" proof.
- 23. Supplying and fixing of M.S. frames in the openings with lugs 16 mm x 3.15 mm x 10 cms long in cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 20 mm nominal size) blocks of size 15 x10 x 10 cms or with wooden plugs and screws or with rawl plugs and screws or with clips or with bolts and nuts as required.
- 24. Supplying and fixing of approved quality of heavy anodised aluminium hardware fittings.
- 25. Supplying and fixing approved heavy quality oxidized M.S. Hardware fittings to steel glazed windows/doors as per drawing.
- 26. Painting all M.S. Works with a coat of red oxide primer.

- 27. Providing necessary couplings, transom and mullions wherever required.
- 28. Providing mastic compound at junction of window or glazing frames with openings to make the joint water tight and for embedding mullions.
- 29. Minimum thickness of glass to be used in glazing to be 5.5 mm unless otherwise specified.
- 30. Contractor shall provide full shop drawings for Wood work, Steel Work and Aluminum doors, windows and partitions with full details of Aluminum sections and joinery for approval from architect/ engineer in charge before proceeding with procurement of materials or starting of these works at the site.

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
C.	SECTION C - BRICK WORK, ALUMINIUM AND STEEL WORK				
1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	CUM	90		
2	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285,(Jindal/ Hindalco make only) including fixing with Hilti dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including Hilti dash fasteners, cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling to be paid for separately):				
2.a	For fixed portion				

2.b	Anodized/ Powder coated aluminium	KG	288	
	(minimum thickness of powder coating 50			
	micron)( minimum 2mm thick aluminum section of <b>Jindal/Hindalco</b> only)			
	section of sinual/initialeo only)			
3	For shutters of doors, windows & ventilators			
	including providing and fixing hinges/ pivots			
	and making provision for fixing of fittings wherever required including the cost of			
	EPDM rubber /neoprene gasket etc. complete			
	(minimum 2mm thick aluminum section of			
	Jindal/Hindalco only)			
3.a	Anodized/ Powder coated aluminium	KG	216	
	(minimum thickness of powder coating 50			
	micron)			
4	Providing and fixing glazing in aluminium			
	door, window, ventilator shutters and			
	partitions etc. with EPDM rubber / neoprene			
	gasket etc. complete as per the architectural			
	drawings and the directions of engineer-in- charge.(Cost of aluminium snap beading shall			
	be paid in basic item):			
	•			
4.a	With <b>float glass panes</b> of 5.50 mm thickness	SQM	18	
5	Providing and fixing 1mm thick M.S. sheet			
	door with frame of 40x40x6 mm angle iron			
	and 3 mm M.S. gusset plates at the junctions			
	and corners, all necessary fittings complete, including applying a priming coat of approved			
	steel primer.			
	-	907.5		
5.a	Using M.S. angels 40x40x6 mm for diagonal braces	SQM	5	
	oraces			
6	Re-fixing of existing railing including	RMT	74	
	renewing and repairs, welding, repainting of			
	balusters, polishing of handrails, replacement of broken parts etc. complete upto the			
	satisfaction of the engineer in charge (rates			
	inclusive of all hardware, Hilti Fasteners etc.)			
	TOTAL AMOUNT OF SECTION - C			
	BRICK WORK, ALUMINIUM AND			
	STEEL WORK			
	1			

#### **SECTION D - FLOORING AND FINISHING WORKS**

The rates quoted below shall include the following

- 1. Cleaning and final preparation of base, sub-grade or sub floor by trimming undulations etc., including applying neat cement slurry.
- 2. Laying floors to required slope in any size and shape of panels and strips of any description.
- 3. Making "V" grooves of any pattern in plaster and dados including rounding off junctions with floors.
- 4. Baroda/Kota stone slabs or tiles in floors, treads and risers, of steps, skirting, wall cladding etc., shall be machine cut of sizes as per approved samples and shall be laid and fixed as per pattern shown on the drawing
- 5. Cutting holes in stone for treads of steps for fixing staircase-railing balustrades.
- 6. Cleaning paint splashes, drops or dirt, glasses, joinery, electric fittings, wiring etc., including washing the floors and leaving the premises neat and clean.
- 7. Edge polishing to stone slabs and tiles shall not be paid separately.
- 8. Grinding and polishing shall be blade edge granite polish to all marble and granite.
- 9. Measurement shall be as per drawing.
- 10. Cleaning and final preparation of base, sub-grade or sub-floors by trimming undulations etc. including applying neat cement slurry.
- 11. Raking out, joints, cleaning the surface, application of cement slurry and providing and fixing 300 mm wide 24 gauge chicken mesh tightly secured at the junctions of brickwork and RCC work, electrical conduits, plumbing conduits before applying plaster skirting and dados treatment.
- 12. Work in patches, narrow widths, small quantities, curved surfaces, projected bands, set backs, offsets corbels, architrave's etc.
- 13. Repairing and finishing the junctions of skirting and dados with plaster
- 14. Finishing the edge of electrical fittings and boxes etc.

- 15. Use of scaffolding, cradles etc., dust sheets and other coverings for the protections of fixtures, fittings, furniture, floors etc.
- 16. Junctions of all RCC and brick shall be provided with chicken wire mesh of 150 mm width on either side of the junction before plastering.

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
D.	SECTION - D FLOORING AND FINISHING WORKS				
1	Providing and fixing 18 mm thick gang saw cut, mirror polished, pre-molded and pre-polished, machine cut for kitchen platforms, vanity counters, <b>window sills</b> , facias and similar locations of required size, approved shade, color and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				
1.a	Granite of any color and shade (Basic cost Rs. 90 per sqft)				
1.b	Area of slab upto 0.50 sqm	SQM	3		
2	25 mm thick <b>Kota stone slab flooring</b> over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1: 4 (1 cement : 4 coarse sand):  Stone work in treads of steps to be joint less i.e. single length stone (1300 mm long) to be used in main staircase	SQM	200		
3	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) 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 slabs, including rubbing and	SQM	140		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
D.	SECTION - D FLOORING AND FINISHING WORKS				
	polishing complete.				
	Stone work in risers of steps to be joint less i.e. single length stone (1300 mm long) to be used in main staircase				
4	12 mm cement plaster of mix (Junctions of all RCC and brick shall be provided with chicken wire mesh of 150 mm width on either side of the junction before plastering)				
4.a	1:3:3 (1 cement: 3course sand: 3 fine sand)	SQM	680		
5	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) finished with a top layer 6 mm thick cement plaster 1:6 (1 cement: 6 fine sand).  (Junctions of all RCC and brick shall be provided with chicken wire mesh of 150 mm width on either side of the junction before plastering)	SQM	380		
6	6mm cement plaster to ceiling of mix 1:3 (1cement:3fine sand)				
6.a	1:3 (1 cement: 3 fine sand)	SQM	180		
7	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it thereafter .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever	SQM	340		
	required for inspection of work at required locations with essential safety features for the				

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
D.	SECTION - D FLOORING AND FINISHING WORKS  workmen etc. complete as per directions and approval of Engineering-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding.				
	TOTAL AMOUNT OF SECTION - D FLOORING AND FINISHING WORKS				

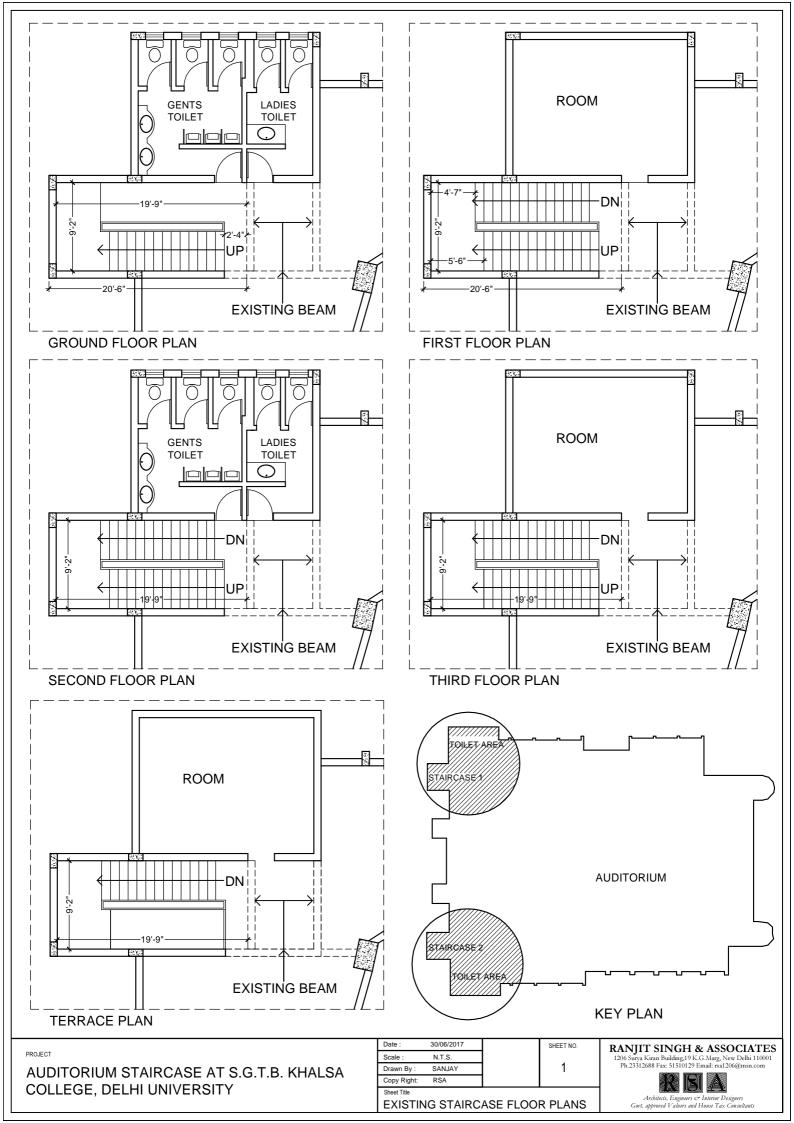
SUMMARY OF CIVIL WORKS				
DESCRIPTION	AMOUNT			
SECTION A: EARTH WORK, DISMANTLING AND DEMOLISHING WORKS	Rs.			
SECTION B: PLAIN AND REINFORCED CEMENT CONCRETE	Rs.			
SECTION C: BRICK WORK, ALUMINIUM AND STEEL WORK	Rs.			
SECTION D: FLOORING AND FINISHING WORKS	Rs.			
TOTAL AMOUNT OF CIVIL WORKS	Rs.			
	DESCRIPTION  SECTION A: EARTH WORK, DISMANTLING AND DEMOLISHING WORKS  SECTION B: PLAIN AND REINFORCED CEMENT CONCRETE  SECTION C: BRICK WORK, ALUMINIUM AND STEEL WORK  SECTION D: FLOORING AND FINISHING WORKS			

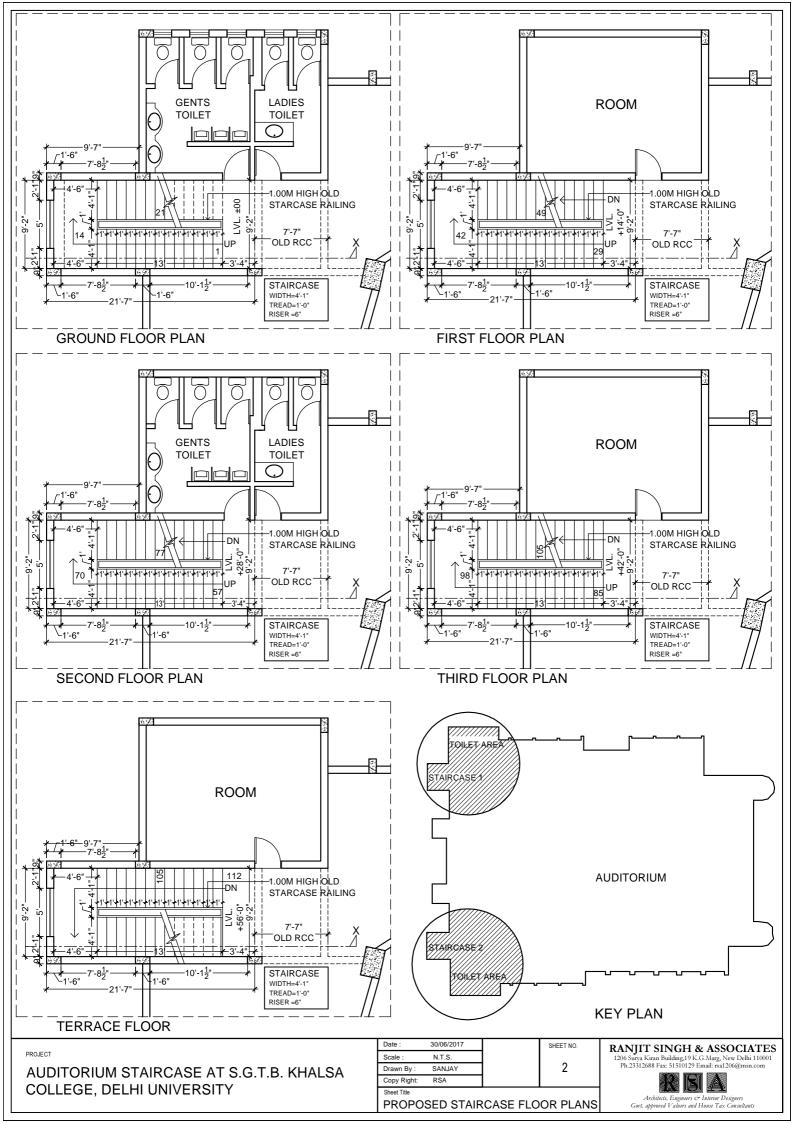
#### **Approved Make Of Materials** (applicable wherever the make is not listed in the item) **Civil Works** Serial Materials Manufacturer No. 1) Commercial Ply And Commercial Board Duro, Green, Virgo 2) Teak Ply Duro, Green, Virgo 3) Laminate Greenlam, Decolam, Virgo, Merino Mirror 4) Modigaurd, Saint Gobain 5) Glass Modi Float, Saint gobain Flush Door Shutters Duro, Green, Virgo, Sitapur, Mysore 6) (First Quality) Or Equivalent 7) **Paints** Nerolac, I.C.I, Asian 8) Mortice Latches And Locks Godrej, Dorset, Hardwyn 9) Coarse Sand As Per Is:383 (Latest Edition) Approved Quarry Or Equivalent 10) Fine Sand Do 11) Stone Aggregate Do 12) **Aluminum Section** Indal Or Jindal (Heavy Quality) Or Equivalent 13) Wall and Floor Tiles Orient, Kajaria, Nitco, Bell, Regency Or Equivalent 14) Mdf Board Green Panel Max Hinges-Ms Oxidised Heavy Duty 15) Tower Bolt-Aluminium Do 16) 17) Door Stopper-Aluminium Do Dο 18) L-Drop – Aluminium 19) Handle- Aluminium Do 20) Pvc Strips/ Hand Rail Fixo Pan Or Equivalent 21) Cement Ultratech, L&T, Ambuja 22) Steel Tata, Sail

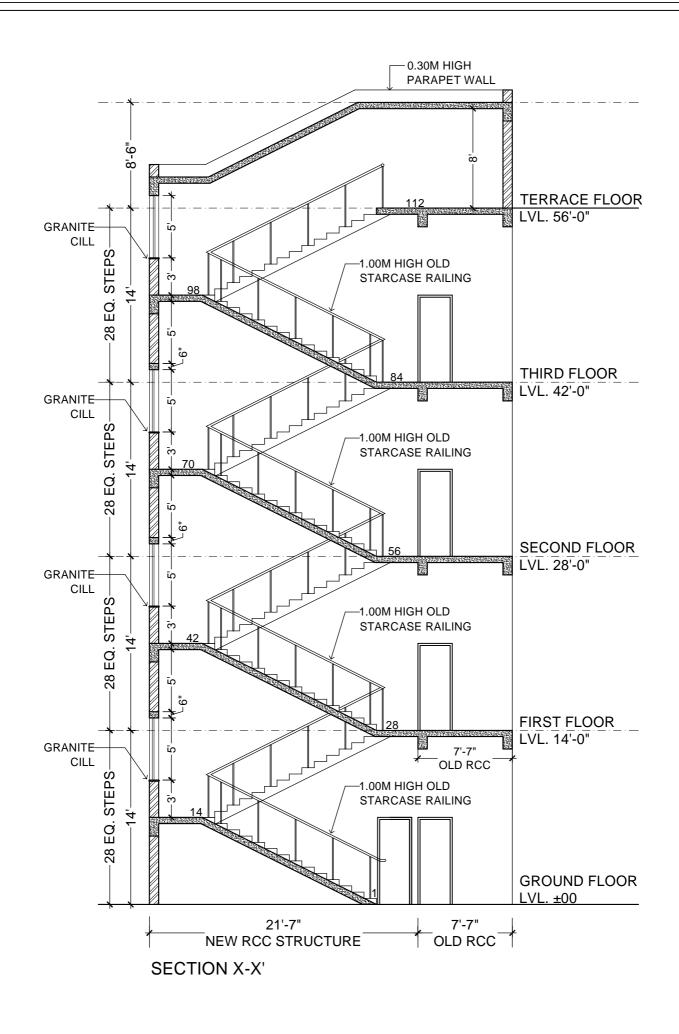
Hilti

23)

Steel anchoring and Rebar







AUDITORIUM STAIRCASE AT S.G.T.B. KHALSA COLLEGE, DELHI UNIVERSITY

RANJIT SINGH & ASSOCIATES 1206 Surya Kiran Building,19 K.G.Marg, New Delhi 110001 Ph.23312688 Fax: 51510129 Email: rsa1206@msn.com

