NOTICE INVITING TENDER FOR CIVIL, ELECTRICAL, PLUMBING & INTERIOR WORKS AT SRI GURU GOBIND SINGH COLLEGE OF COMMERCE, PITAMPURA, NEW DELHI

STAFF ROOM INTERIORS (BASEMENT & GROUND FLOOR)
EXISTING SEMINAR HALL INTERIORS
EXISTING CONFERENCE ROOM INTERIORS
NEW SEMINAR HALL INTERIORS
CONSTRUCTION OF RAIN WATER HARVESTING PITS
RENOVATION OF STUDENT TOILETS
CONSTRUCTION OF NEW TOILET BLOCK (GROUND FLOOR)
CONSTRUCTION OF 4 GAZEBO'S

(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: 05 November 2018

Last Date of Sale of Tender documents: 16 November 2018

Date of Submission of Tender Document: 20 November 2018

Prepared by:

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

Sri Guru Gobind Singh College of Commerce (University of Delhi) Pitampura, New Delhi

Sealed Item rate tenders in two bid system (Technical Bid and Financial Bid) are invited by the Principal, Sri Guru Gobind Singh College of Commerce for civil, electrical, plumbing & interior works at Sri Guru Gobind Singh College of Commerce, New Delhi from reputed building contractors who have executed similar works, having completed three similar works costing not less than 1.31 Crores or two similar works costing not less than 1.97 Crores or one similar work costing not less than 2.63 Crores 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., GSTN No., solvency certificate and 3-year ITR of company. All these documents will be submitted in the technical bid for the tender. 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. The Principal, Sri Guru Gobind Singh College of Commerce or his authorised representatives may visit the work sites of the contractors to assess the quality of their works before opening of the financial bids

Tender documents can be obtained from the office of Principal Sri Guru Gobind Singh College of Commerce, Pitampura New Delhi 110034 from 05/11/2018 to 16/11/2018 during working hours on payment of Rs. 1000/- by DD in favor of Principal Sri Guru Gobind Singh College of Commerce

Estimated Cost of the work	Rs. 3,28,95,497
Earnest Money Deposit	Rs. 6,58,000/- (Rupees Six Lakh Fifty-
	Eight Thousand Only) in a separate
	envelope
Last Date of Sale of Tenders	16/11/2018
Last date of Submission of Tenders	20/11/2018 up to 4:00 pm
Date of Opening of Technical Bid	21/11/2018 at 11:00 am
Date of Finalization of Technical Bid	Will be conveyed to eligible contractors

Note: Tender Document can also be downloaded from the college website www.sggscc.ac.in and Delhi University Website www.du.ac.in Downloaded tender shall accompany a DD of Rs. 1000/- drawn in favor of Principal Sri Guru Gobind Singh College of Commerce, as cost of tender (Non-refundable). Downloaded tender documents shall be spiral bound before submission. Loose, Stapled or incomplete bid documents can be rejected.

Issued:	
Dated:	Principal,

Sri Guru Gobind Singh College of Commerce Pitampura, New Delhi

CONTENTS

S.No.	Description	Page No.
1	Appendix	Page 3
2	Notice Inviting Tender	Page 4-6
3	Letter submitting Tender	Page 7-8
4	Bidders' details	Page 9
5	Eligibility criteria	Page 10
6	Annexure-1	Page 11
4	Special Conditions	Page 12-13
5	General Conditions	Page 14-25
6	Schedule of Quantities	
7	Part I : Civil Works	Page 26 – 64
8	Summary of Civil Works	Page 65
9	List of Approved Makes for Part I	Page 66
10	Part II : Electrical Works	Page 67 – 77
11	Summary of Electrical Works	Page 78
12	Part III : Sanitary Works	Page 79 -91
13	Summary of Sanitary Works	Page 92
14	Summary of Civil, Electrical and Sanitary Works	Page 93
15	List of Approved Makes for Part II : Electrical	Page 94 -99
	Works	
16	List of Approved Makes for Part III : Sanitary Works	Page 100 – 106
17	List of cutting, alteration, correction made in the	Page 107
	financial bid by the contractor	-
18	Tender Drawings	Page 108 - 135

APPENDIX

Defects Liability period 12 Months

Date of Commencement The 10th 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 8 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. 25,00,000/- (Rupees Twenty-Five Lakhs)

Earnest Money Deposit Rs. 6,58,000/- (Rupees Six Lakh Fifty-Eight

Thousand)

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 Gobind Singh College of Commerce, (University of Delhi) Pitampura, New Delhi

Dated 05/11/2018

NOTICE INVITING TENDER

- 1) Sealed Item rate tenders in two bid system (Technical Bid and Financial Bid) are invited by the Principal, Sri Guru Gobind Singh College of Commerce for civil, electrical, plumbing & interior works at Sri Guru Gobind Singh College of Commerce, 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, 011-43560879 Email: rsa1206@msn.com.
- 3) The Tender shall be submitted in the prescribed form only
- 4) The works are required to be completed within a period of Eight months from the date of commencement.
- 5) The date of commencement shall be from the 10th 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 Gobind Singh College of Commerce, New Delhi on any working day from 05/11/2018 to 16/11/2018 on the payment of Rs.1,000/- by crossed cheque in favor of Principal Sri Guru Gobind Singh College of Commerce. This amount is non-refundable.
- 8) Completed Tender should accompany PAN number, GSTN 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 Gobind Singh College of Commerce, 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 subsoil (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. CONTRACTORS shall be deemed to have full knowledge of the site, whether they 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 Gobind Singh College of Commerce, New Delhi up-to 1600 hours on 20/11/2018 and the technical bid shall be opened at 1100 hours on 21/11/2018 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. 6,58,000/- (Six Lakh Fifty-Eight Thousand Only), in the form of a demand draft in favor of the Principal, Sri Guru Gobind Singh College of Commerce, 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 Gobind Singh College of Commerce, New Delhi before issue of letter to start the work
- 17) The CONTRACTOR, whose Tender is accepted, shall permit of the Principal, Sri Guru Gobind Singh College of Commerce, 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 Gobind Singh College of Commerce, 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 and every condition laid down in this notice, failing which the Tender will be liable to be rejected.
- 20) Sri Guru Gobind Singh College of Commerce, New Delhi does not bind itself to accept the lowest or any tender or to give any reasons for their decision.
- 21) Sri Guru Gobind Singh College of Commerce, 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) All taxes other than GST applicable in respect of this contract shall be payable by the Contractor and Sri Guru Gobind Singh College of Commerce will not entertain any claim whatsoever in respect of the same. However, in respect of GST, same shall be paid by the contractor to the concerned department on demand and it will be reimbursed to him by Sri Guru Gobind Singh College of Commerce after satisfying that it has been actually and genuinely paid by the contractor
- 23) T.D.S. for VAT/WCT/GST/INCOME TAX 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 Gobind Singh College of Commerce, New Delhi as per govt. guidelines

O

24) This notice of Tender shall form part of the contract documents.

Contractor

Duly authorized to sign the On Behalf of M/s	For and on behalf of Sri Guru Gobind	Singh	College	of
	Commerce			
Signature				
Date				
Email				
Phone	Authorized Signatory			
Postal Address	Tradionized Signatory			

To,

The Principal Sri Guru Gobind Singh College of Commerce, Pitampura, New Delhi.

Dear Sir,

I/We have read and examined the following documents relating to Civil, Electrical, Plumbing & Interior works at Sri Guru Gobind Singh College of Commerce, 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 Gobind Singh College of Commerce, 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 Gobind Singh College of Commerce, 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 Gobind Singh College of Commerce, 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 Gobind Singh College of Commerce, 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
Dated
Postal Address

BIDDERS' DETAILS

~		T == == . ==
S.NO.	DESCRIPTION	DETAIL
1	N. C.C.	
1	Name of Company	
2	Address of Company	
2	Address of Company	
3	PAN no.	
4	GSTN no.	
5	Telephone Number	
6	Email Address	
7	Name of Company Owner /	
	5. (5)	
	Director / Partner	
8	Address of Company Owner /	
O	radiess of company owner,	
	Director / Partner	
9	Telephone Number of	
	-	
	Company Owner / Director/	
	Partner	

I/We hereby declare that the information furnished above is true and correct. Incase the above
information is found incorrect at any stage, the Principal SGGSCC Pitampura may take
appropriate action as warranted

11 1		
Name:		
Signatures:		
Stamp/ Seal:		
Place:		
Date:		

ELIGIBLITY CRITERIA

- 1) Bidder should have executed similar works, having completed three similar works costing not less than 1.31 Crores or two similar works costing not less than 1.97 Crores or one similar work costing not less than 2.63 Crores in the last three years.
- 2) The bidder should have had average annual financial turn over (gross) of Rs.1,00,00,000/on Civil and Interior works during the immediate last three consecutive financial years. This should be duly audited by a Chartered Accountant. Year in which no turnover is shown would also be considered for working out the average.
- 3) The bidder should not have incurred any loss in more than two years during the immediate last five consecutive financial years, duly certified by the Chartered Accountant
- 4) The bidder should have a solvency of Rs. 1,32,00,000/- certified by his Bankers
- 5) The Proposal should be accompanied by Earnest Money Deposit (EMD) of Rs. 6,58,000/- drawn from any scheduled bank in favor of Principal, Sri Guru Gobind Singh College of Commerce, Pitampura, New Delhi in a separate sealed envelope

DOCUMENTS TO BE PLACED IN TECHNICAL BID:

- 1) Company Registration Certificate
- 2) Complete company profile
- 3) Valid GSTN copy.
- 4) PAN Card Copy
- 5) EMD Demand Draft of Rs. 6,58,000/- (Separate Envelope)
- 6) Tender Fee Demand Draft of Rs.1000/- (Separate Envelope)
- 7) Turnover certificate (Annexure-1)
- 8) Solvency Certificate issued by the bank
- 9) 3-year ITR of the company
- 10) Experience proof documents (Valid Completion Certificates)

QUOTING RATES IN THE FINANCIAL BID:

The item rates in the financial bid have to be filled without GST. The GST has to be added in the final summary at PAGE NO. 93 only

ANNEXURE-1

ON THE LETTER PAD OF CHARTERED ACCOUNTANT

This	is	to	certify	that	the	total	turno	ver	in	the	case	of	N	I/s
				•••••		having	PAN						is	as
under:														

Financial Year/Period	Amount in	Amount in
	Rupees (Figures)	Rupees(words)
2015-16		
2016-17		
2017-18		
Total		

Average= Total/3

It is further certified that the above-mentioned amounts have been derived from the books of accounts presented before us for the above-mentioned periods.

Chartered Accountants

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 Gobind Singh College of Commerce, 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 8 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. Labor Camp will be arranged by the contractor outside the college premises. Sri Guru Gobind Singh College of Commerce does not have space for labour camps inside its premises.
- 12. Principal SGGSCC Pitampura 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 Gobind Singh College of Commerce, 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 Gobind Singh College of Commerce, New Delhi.
- 5. Work: the term "work" includes both labour and material of the Contractor/Sub-Contractor.
- 6. Time limits: time limits or 8 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.
- 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, labour 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/ENGINEER 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

All taxes other than GST, applicable in respect of this contract shall be payable by the Contractor and Sri Guru Gobind Singh College of Commerce will not entertain any claim whatsoever in respect of the same. However, in respect of GST, same shall be paid by the contractor to the concerned department on demand and it will be reimbursed to contractor by Sri Guru Gobind Singh College of Commerce after satisfying that it has been actually and genuinely paid by the contractor

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 reconstructing 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

- i. 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.
- vii. 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

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 the works 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:

- 1. 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 labor 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.
- 8. Anti-termite treatment shall be got done through a specialized sub-contractor approved by the architect. The contractor shall guarantee against termite for a period of 10 years. This item is payable separately
- 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.

Rates to be quoted without GST. GST to be added in the final summary at page no. 93 only

S. No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
A	SECTION - A EARTH WORK, DISMANTLING AND WATERPROOFING 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 1.5m, disposed earth to be levelled and neatly dressed.				
1.a	All kinds of soil	CUM	1153		
1.b	Extra for every additional lift of 1.5 m or part thereof in excavation /banking excavated or stacked materials (up to 3 meter depth)	CUM	300		
2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
2.a	All kinds of soil	CUM	70		
3	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations, floor etc. in layers not exceeding 20cm in depth, consolidating	CUM	693		

S. No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.				
4	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	CUM	70		
5	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	15		
6	Dismantling existing wall plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 meters lead.	SQM	935		
7.a	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	18		
7.b	Demolishing Half brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 meters lead as per direction of Engineer-in-charge. A) In cement mortar	SQM	149		
8	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 meters lead: A) Of area 3 sq. meters and below	Each	87		
9	Dismantling of existing shutters of the seminar hall windows (Chowkhats shall be retained) and stacking the same as per instructions of the engineer in-charge	Each	28		

S. No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
10	Dismantling of existing electrical lights, fans, switches, AC and other electrical fittings and fixtures and stacking them at the designated point within the college premises as per instructions of the engineer in charge				
10.a	Existing Auditorium	L.S	1		
10.b	Existing Seminar Hall	L.S.	1		
10.c	Existing Hall above Principal Office	L.S.	1		
10.d	Existing Staff Room	L.S.	1		
10.e	Existing toilets	L.S	10		
11	Dismantling of existing stage area flooring and sorting cum stacking of all usable materials as per instruction of the engineer in charge	L.S	1		
12	Dismantling stone and tile work in floors and walls laid in cement mortar including disposal of unserviceable material within 50 meters lead as per direction of Engineer-in-charge. For all types and thickness of stone and tiles	SQM	1177		
13	Dismantling of existing sanitary fittings and fixtures including stacking of serviceable material and disposal of unserviceable material within 50 meters lead as per direction of Engineer-in-charge.	Per Toilet Block	10		
14	Providing, diluting and injecting chemical emulsion (Chlorpyriphos/Lindane E.C. 20% with 1% concentration) for anti-termite treatment 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) 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 (base + walls)	SQM	158		
15	Disposal of excess earth/ building rubbish / malba / similar unserviceable, dismantled or	CUM	634		

S. No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	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.				
16	Providing and Filling light weight ACC broken blocks /ACC Rubble under the proposed stage & steps in New Seminar Hall and toilet under floors	CUM	98		
17	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for underground structures as directed by Engineer-in-Charge and consisting of: i) Ist layer of 22 mm to 25 mm thick approved and specified rough stone slab over a 25 mm thick base of cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound. ii) 2nd layer of 25 mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportions. iii) Finishing top with stone aggregate of 10 mm to 12 mm nominal size spreading @ 8 cudm/sqm thoroughly embedded in the 2nd layer.				
17.a	Using rough kota stone.	SQM	50		
18	Providing and laying integral cement based treatment for water proofing on the vertical surface by fixing specified stone slab 22 mm to 25 mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20 mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3				

S. No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	(1 cement : 3 coarse sand) 20 mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in-charge :				
18.a	Using rough Kota stone	SQM	60		
19	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying:				
19.a	(a) after surface preparation, first layer of slurry of cement@ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm.(b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm.(c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	SQM	363		
20	Dismantling and removal of existing terrace water proofing over the library and mini auditorium area including dismantling of terrace tiles, mud phuska etc. complete including cleaning the base RCC slab and disposal of unserviceable material within 50 meters lead as per direction of Engineer-incharge including all lifts and leads	SQM	850		
	TOTAL AMOUNT OF SECTION - A EARTH WORK, DISMANTLING AND WATERPROOFING 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.

Rates to be quoted without GST. GST to be added in the final summary at page no. 93 only

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
В.	SECTION - B PLAIN AND REINFORCED CEMENT CONCRETE				
1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering:				
1.a	1:4:8 (1 Cement: 4 coarse sand: 8 graded stone aggregate 40mm nominal size)	CUM	84		
1.b	1:3:6 (1 Cement: 3 coarse sand: 6 graded stone aggregate 20 mm nominal size)	CUM	23		
2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor , etc., upto floor five level, excluding the cost of centering, shuttering and finishing:				
2.a	1:2:4 (1 Cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size)	CUM	27		
3	Providing and laying damp-proof course 50 mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) with providing and mixing water proofing material in cement concrete.	SQM	23		
4	Providing and laying cement concrete in pavement, Krebs, steps and the like at or near ground level excluding the cost of centering, shuttering and finishing.				
4.a	1:2:4 (1 Cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)	CUM	15		
5	Reinforced cement concrete work M-25 grade in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills,				

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).				
5.a	All works upto plinth level.	CUM	89		
5.b	All works above plinth level upto floor VI level.	CUM	83		
6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete up to all level.				
6.a	Thermo-Mechanically Treated bars. (Only TATA, SAIL, JSW, JINDAL Panther)	MT	25		
7	Providing and fixing in position 12mm thick bitumen impregnated fiber board conforming to IS: 1838, including cost of primer, sealing compound Grade-A in expansion joints. Up to the 40 mm width and 100 mm depth as per instructions of the engineer in charge	meter	15		
8	Providing and fixing sheet covering over expansion joints with suitable Hilti SS fasteners @ 200mm c/c as per instructions of the engineer in charge				
8.a	Aluminium fluted strips 3.15 mm thick 200 mm wide	meter	15		
9	Centering and shuttering including strutting, propping etc. and removal of form for all works at all levels:				
9.a	Retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, Krebs and steps etc.	SQM	81		
9.b	Foundations, footings, bases of columns, etc. for mass concrete.	SQM	136		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
9.c	Suspended floors, roofs, landings, balconies and access platform.	SQM	435		
9.d	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	SQM	256		
9.e	Columns, Pillars, Piers, Abutments, Posts and Struts.	SQM	180		
9.f	edges of slabs and breaks in floors and walls under 20 cm wide	meter	240		
9.g	Circular column	SQM	200		
	TOTAL AMOUNT OF SECTION - B PLAIN AND REINFORCED CEMENT CONCRETE				

SECTION C MASONRY 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.

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
C.	SECTION - C MASONRY WORK				
1	Brick work with common burnt clay F.P.S. (non-modular) bricks of class designation 7.5 in foundation and plinth in:				
1.a	Cement mortar 1:6 (1 cement: 6 coarse sand)	CUM	141		
2	Brick work with common burnt clay machine molded perforated bricks of class designation 12.5 conforming to IS: 2222 in superstructure above plinth level up to floor five level in cement mortar 1:6 (1 cement: 6 coarse sand): With F.P.S. (non-modular) bricks	CUM	44		
3	Half brick masonry 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.				
3.a	Cement mortar 1:4 (1 cement :4 coarse sand)	SQM	460		
4	Extra for providing and placing in position 2 Nos 6 mm dia. M.S. bars at every third course of half brick masonry.	SQM	460		
	TOTAL AMOUNT OF SECTION - C MASONRY WORK				

SECTION D: JOINERY, ALUMINIUM, WOOD AND STEEL WORK

The rates quoted below shall include the following

- 1. Providing and fixing all flush door shutters of M/S DURO/GREEN/VIRGO/CENTURY make with 18mm teakwood lipping on all edges.
- 2. Kiln seasoning and termite proofing of all timber work
- 3. Providing so-lignum paint to hidden faces of timber work
- 4. 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.
- 5. Providing heavy quality SS hardware fittings and fixtures which shall be included in the rates of the shutters as per details below
 - a. single door shutter

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

e. double door shutter

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

- 6. The rate shall include spirit polish for all exposed wood work and veneer finishes unless specified otherwise.
- 7. All items for wood work shall be got approved by the architects before applying primer coat
- 8. 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
- 9. Teak ply to be fixed to base cladding/commercial board with group matching
- 10. All block board and ply shall be used of BWP grade, termite and "powder beetles" proof.

- 11. 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 x 10 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.
- 12. Supplying and fixing of approved quality of heavy anodised aluminium hardware fittings.
- 13. Supplying and fixing approved heavy quality oxidized M.S. Hardware fittings to steel glazed windows/doors as per drawing.
- 14. Painting all M.S. Works with a coat of red oxide primer.
- 15. Providing necessary couplings, transom and mullions wherever required.
- 16. Providing mastic compound at junction of window or glazing frames with openings to make the joint water tight and for embedding mullions.
- 17. Minimum thickness of glass to be used in glazing to be 5.5 mm unless otherwise specified.
- 18. 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
D.	SECTION - D JOINERY, ALUMINIUM, WOOD AND STEEL WORK				
1	Providing and fixing vertical blinds 100mm Regular quality of MAC or equivalent make made from 100% polyester yarn coated with fade resistant polymer to ensure complete opacity with zero light transmittance having suitable coating on exterior, including all fixtures and fittings complete in all respect as per design and instructions of the engineer-in charge including removal of old blinds.	SQM	25		
2	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to wooden frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse	EACH	396		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	sand:6 graded stone aggregate 20mm nominal size).				
3	Providing and fixing bright finished heavy duty SS tower bolts (barrel type) with necessary SS screws etc. complete (Only Dorma/Dorset/Hafle/Hettich Make)				
3.a	250x10 mm	EACH	64		
4	Providing and fixing bright finished Heavy duty SS AL drop with necessary SS screws etc. complete:				
4.a	300x16x5 mm	EACH	39		
5	Providing and fixing bright finished Heavy duty SS 304 Grade handles with SS screws etc. complete:				
5.a	Dorset Xia 8" SS (200mm) pull Handle (Or equivalent in Godrej, Golden locks, Dorma, Hettich)	PAIR	66		
5.b	Dorset SOP 12" SS (300mm Pull) Handle with Lock (Or equivalent in Godrej, Golden locks, Dorma, Hettich)	PAIR	9		
6	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS: 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete. (Only of Godrej/Hettich/Dorset/Dorma)	EACH	76		
7	Providing and fixing stainless steel (Grade 304) staircase railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required	KG	160		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).				
8	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
8.a	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	KG	100		
9	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):				
9.a	For fixed portion				
9.b	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15 (minimum 2mm thick aluminum section of Jindal/Hindalco only)	KG	3241		
10	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings				

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	wherever required including the cost of EPDM rubber /neoprene gasket etc. complete (minimum 2mm thick aluminum section of Jindal/Hindalco only)				
10.a	Anodized aluminium (anodized transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	KG	1258		
11	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-incharge.(Cost of aluminium snap beading shall be paid in basic item):				
11.a	With float glass panes of 5.50 mm thickness	SQM	114		
11.b	With frosted glass panes of 5.5 mm thickness.	SQM	57		
12	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both sides, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge including door, door handle, lock, stopper etc. complete.	SQM	20		
13	Providing and Fixing Toughened glass 10 mm thickness in 304 grade Stainless Steel U channel of Ozone or equivalent make including the cost of all fitting fixing silicon etc. complete up to the satisfaction of the engineer in charge (U channel payable separately)	SQM	10		
14	Providing and fixing U channel for 10mm toughed glass of 304 stainless steel of ozone make including all hardware, fasteners, materials etc. complete	meter	50		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
15	Providing and fixing door Chowkhats using a finished section of 6" x 2.5" of Kapoor Sal Wood including all labor, hardware, hold fast/hilti fasteners etc. complete	meter	21		
16	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands finished with 1mm thick Laminate on both faces of shutter: (Flush door only of Duro / Green/ Century/ Virgo make and laminate only of Merino, Sundek, Century, Duro make) 35 mm thick including ISI marked 3 no.s 4 inch long Heavy Duty Stainless Steel butt hinges with necessary SS screws complete	SQM	103		
17	Extra for providing melamine polish finished C.P. teakwood lipping size 35 mm x 12 mm size on all four edges of flush door shutters (over all area of door shutter to be measured).	SQM	103		
18	Providing and fixing wooden molded corner beading of approved shape for fixing window glass or the junction of paneling etc. with iron screws, plugs and priming coat on unexposed surface and melamine polish on exposed surface etc. complete using 2nd class teak wood.				
18.a	50x50 mm (base and height)	MTR	65		
19	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stonework by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.				
19.a	Up to 5mm depth and 5 mm width	MTR	525		
20	Providing and fixing 150mm brass handle and lock (Only Godrej/ Victory/ Kodia/ Laxmi make) for aluminium doors including necessary SS Screws, cutting and making good etc. complete. (1 Set includes 2 Handles	SET	5		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	and One Lock and Keys)				
	TOTAL AMOUNT OF SECTION - D JOINERY, ALUMINIUM, WOOD AND STEEL WORK				

SECTION E: FLOORING & PANELING

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.

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
Е.	SECTION - E FLOORING & PANELING				
1	Providing and fixing 18 mm thick gang saw cut, mirror polished, pre-moulded and pre-polished, machine cut for kitchen platforms, vanity counters, window sills, floor skirtings, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement: 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				
1.a	Granite of any color size and shade (Basic cost Rs. 110 per sqft)	SQM	108		
2	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	SQM	108		
3	Extra for providing opening of required size & shape for wash basin/kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete	EACH	46		
4	Kota stone slab flooring 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 to be used				
4.a	25 mm thick	SQM	91		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
5	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 polishing complete. Stone work in risers of steps to be joint less i.e. single length to be used in main staircase	SQM	16		
5.a	Extra for pre-finished nosing in treads of steps of Kota stone/ sand stone slab.	meter	63		
6	Providing and laying rectified Glazed Ceramic floor tiles of size 600 x 600mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS: 15622, of approved make, in all colors, laid on 20 mm thick cement mortar 1:4 (1 Cement: 4 Coarse sand), including grouting the joint with white cement & matching pigments etc. complete. (Tile of Kajaria, Orient, Somani, Asian, Restile Make Only). Basic cost of tile Rs. 65/- per sqft	SQM	225		
7	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete. (Tile of Kajaria, Orient, Somani, Asian, Restile Make Only) Basic Cost of Tile Rs. 65/- per sqft	SQM	903		
8	Providing and laying full body Polished vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colors and shades, laid on 20mm thick				

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	cement mortar 1:4 (1 cement: 4 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. (Tile of Kajaria, Orient, Somani, Asian, Restile Make Only). Basic cost of tile Rs. 65/- per Sq. Ft.				
8.a	Size of Tile 800x800 mm	SQM	764		
9	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, dado, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. (Tile of Kajaria, Orient, Somani, Asian, Restile Make Only). Basic cost of tile Rs. 65/- per Sq. Ft.				
9.a	Size of Tile 800x800 mm	SQM	55		
10	Extra for using "+" shaped 2 mm wide plastic spacers at corners (to be removed before jointing) during fixing of Vitrified tile in floor to achieve a perfectly straight joint line, and jointed with Laticrete or approved equivalent jointing compound of matching shade in place of white cement with matching pigment all complete as per direction of E-I-C	SQM	1074		
11	Providing & fixing in position Phenol bonded Bamboo wood flooring with planks of sizes 14mm thick, 1800mm length (minimum) and 130 mm wide(minimum), in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC). The flooring shall be fixed with tongue and groove interlocking system, with underlayment of 4mm thick expanded poly ethylene foam sheets having density 40kg/cum, over prepared surface with necessary quarter round planks of size 1900mm x 18mm and door reducer of size	SQM	70		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	1900mm x 44mm, wherever required. The bamboo wood planks shall have minimum density of 1000 Kg/cum & minimum Hardness 1000 Kgf. with Eco friendly UV coating, all complete as per direction of Engineer in-charge.				
12	Providing and fixing minimum 11mm thick AC VI (six) grade laminated wooden flooring suitable for commercial-heavy use areas like auditorium application of approved make, shade and pattern. The top surface shall have a 0.60 mm thick multi-layer high pressure laminate fixed over moisture resistant high-density fibreboard substrate. The planks shall be of size 1200 mm x 200/125 mm. The flooring shall confirm to EN 438, EN 717-1, EN 13501-1, EN-1815, JIS Z 2801:2000 standards. The planks shall be placed on an underlay of 0.2 mm thick alkali resistant Polyethylene sheet having density 920-935 kg/ m3 to resist moisture from the sub floor and to secure the floor installation etc all complete. (Skirting profiles, edge profiles/ trims etc shall be included & not paid extra) as per direction of E-I-C) (Approved Make: Armstrong, Pergo, Vista, Krono Only) Contractor shall provide performance certificate of AC VI grade flooring from the manufacturer	SQM	490		
13	2" thick Slotted Wood Finish Wall Panel system on Masonry: Providing and fixing wall paneling on existing masonry with 50mm x 50mm Aluminium section framework of size 600mmx600mm grids and filled with acoustical insulation of 50 mm thickness 1000 gsm density from Star Insulation or Prime Insulation. The framework and acoustical infill are to be concealed behind the 15mm Slotted finish fire rated wood finish MDF panels from Topakustik, Wood Fit, Armstrong, Sound Slats, RPG or equivalent approved vendors. The perforated wood finish panels must have a minimum perforation area of 12% or higher	SQM	415		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	and is to be supplied with black RP Tissue or equivalent of approved quality. This should be completed as per details and diagrams provided. Rate shall be inclusive of installation on the frame work arrangements. Works will be inclusive of scaffolding and staging at all levels. Rate shall include the preparation of detailed shop drawings as per site conditions, which shall be approved before commencement of works				
14	Providing and Fixing Super white marker board laminate of Sundek/Mernio make over 25mm BWP grade plywood of Duro, Green Virgo or century make including fixing of polished teakwood edge beading 18mm x 4mm all around the whiteboard	SQM	18		
15	Acoustical Wall Panels - Gripper system Providing and installing Acoustical treatment to the walls, including 2"x2" Aluminium section framework of size 600mmx600mm and 50 mm thick Acoustical Insulation of 1000 gsm density from Star Insulation or Prime Insulation. 9 mm thick Plywood strips- 100 mm width strips with 20 mm air gaps in between, fixed over acoustical insulation. The plywood strips are to be faced with 6 mm thk fire retardant polyester wadding and gripper system from Walltracts, Chisel Interiors Inter Dimension or equivalent system) pressure stapled over Plywood strips and selected FINAL Fabric . Fabric is to be approved by Client and tested by vendor for dimensional stability etc installed in the gripper system, all done in accordance to the recommendation and the specs Rate quoted includes all the materials, labour, scaffolding, lead, lift, finishing, cleaning, hardware, etc complete. Contractor shall submit the samples and the Shop drawings to the architect prior to the commencement of the work for approval	SQM	100		
	TOTAL AMOUNT OF SECTION - E FLOORING & PANELING				

SECTION F: ROOFING AND TERRACE WATERPROOFING

The rates quoted shall include the following:

- 1. Cleaning and final preparation of base for laying water proofing
- 2. Making ridges and valleys over terrace finished surface true in line and slope as per drawing
- 3. All items of terracing shall be as per CPWD specifications
- 4. Keeping the roof clean and protecting the terrace water proofing form any damage during progress of work at site

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
F.	SECTION -F ROOFING AND TERRACE WATERPROOFING				
1	Providing and laying uPVC pressure pipes as per IS:4985 of 6 Kg/Sq.cm pressure rating including all fittings, solvent weld joints, cutting and making good the walls etc. (For rain water pipes) a) 110 mm nominal dia	RM	40		
2	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 25cm diameter and weighing not less than 587 grams.	No.	4		
3	Providing and fixing unplasticized-PVC pipe clips of approved design to unplasticised-PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with MS screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete. a) 110mm	Nos	15		
4	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate of 20 mm nominal size) over PVC sheet 1m x 1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement: 3 coarse sand) and a coat of neat cement, punning, rounding the edges and making and finishing	Nos	4		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	the outlet complete.				
5	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :				
5.a	In 75x75mm deep chase	Meter	150		
6	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.				
	c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/sqm of cement admixed jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making				

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	pattern of 300x300 mm square 3 mm deep. d) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineering-Charge:				
6.a	With average thickness of 120 mm and minimum thickness at khurras as 65 mm.	SQM	1020		
7	Providing and Fixing roof shingles (Saint Gobain "Carriage House") or approved equivalent including 1" cement screed over existing sloping roof, a coat of bituminous primer, fixing with corrosion resistant nails, Ridges, Flashing membranes etc. all complete as per manufacturers specifications (for Gazebo Roof)	SQM	250		
	TOTAL AMOUNT OF SECTION -F ROOFING AND TERRACE WATERPROOFING				

SECTION G: FALSE CEILING & FINISHING WORKS

The rates quoted below shall include the following:

- 1. Cleaning and final preparation of base, sub-grade or sub-floors by trimming undulations etc. including applying neat cement slurry.
- 2. 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.
- 3. Work in patches, narrow widths, small quantities, curved surfaces, projected bands, set backs, offsets corbels, architrave's etc.
- 4. Repairing and finishing the junctions of skirting and dados with plaster
- 5. Finishing the edge of electrical fittings and boxes etc.
- 6. Use of scaffolding, cradles etc., dust sheets and other coverings for the protections of fixtures, fittings, furniture, floors etc.
- 7. 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
G.	SECTION-G FALSE CEILING & FINISHING WORKS				
1	Providing and fixing 2 x 2 grid false ceiling (tiles and frame) at all heights of size 595X595mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflectance > 85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Fire Performance as per (BS 476 pt - 6 &7)in true horizontal level suspended on interlocking Heavy Duty T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised @80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'.				
1.a	The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be pre-painted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge.				
1.b	With Ceiling Tile of Armstrong Make ULTIMA+ or equivalent from Gyproc Only	SQM	1030		
2	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating				

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	of 120 gms/sqm (both side inclusive) as per IS: 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction,				
2.a	including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with:				
2.b	12.5 mm thick tapered edge gypsum moisture resistant board of Saint Gobain 12.5mm	SQM	117		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	gypsum or USG Boral Gypsum 12.5mm Gypsum				
3	12/15 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)				
3.a	1:3:3 (1 cement: 3course sand: 3 fine sand)	SQM	1461		
4	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	559		
4.a	Extra for Plaster in Circular Work	SQM	215		
4.b	Extra for providing Groove in Plaster (In circular work)	RMT	150		
5	6mm cement plaster to ceiling of mix 1:3 (1 cement: 3 fine sand)	SQM	1229		
6	External painting works: External painting works at all heights and levels as per procedure mentioned including 1) Surface preparation (scrapping, sanding, cleaning) 2) A liberal coat of Wall Primer as per manufacturers specification 3) Painting 2 or more coats of Exterior Weather Proof Paint in various colors (Asian/ICI/Shalimar/ Berger/ Nerolac) 4) Horizontal surfaces like the tops of Chajjas and parapets must be given an additional coat for greater protection				
6.a	Contractor's scope includes all materials, tools & plants, paint brushes & rollers of approved makes, ropes, lifts, ladders, safety equipment's, scaffolding and all other equipment's as may be required to complete	SQM	344		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	the works successfully. (The rates include all labor, materials and items of work required to complete the work successfully up to the satisfaction of the owner)				
7	Internal painting works: Internal painting works at all heights and levels as per procedure mentioned including 1) Surface preparation (scrapping, sanding, cleaning) 2) One coat of Wall Primer as per manufacturers specification 3) Coat of White cement based putty (JK/BIRLA) 4) One liberal coat of wall primer over wall putty 5) Painting 2 or more coats of Premium acrylic emulsion of interior grade, having VOC content less than 50 grams/ liter in various colors (Asian/ ICI /Shalimar/ Berger/ Nerolac)				
7.a	Contractor's scope includes all materials, tools & plants, paint brushes & rollers of approved makes, ropes, lifts, ladders, safety equipment's, scaffolding and all other equipment's as may be required to complete the works successfully. (The rates include all labor, materials and items of work required to complete the work successfully up to the satisfaction of the owner)	SQM	3035		
8	Melamine polishing with 2 or more coats of matte finish machine coated melamine over existing door window frames and shutters in the required shade including the following works: Removal of existing polish with sand paper Base preparation and filling Color coating with mechanical sprayer Melamine Ist coat Melamine 2nd coat Machine buffing Cleaning of door window glass and surrounding surfaces (Face area of Chowkhats and shutters will be measured)	SQM	150		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
9	Providing and fixing Black Out roller blinds of Mac/ Vista/ Aero lux make (Eight windows of 8ft x 5ft size)	SQM	70		
10	Providing, fixing, testing and commissioning of motorized projection screen 120" wide (16:9 ratio) with somfy motor & infrared remote including electrical connection wiring etc. complete	Each	2		
11	Exterior- Providing and fixing "Dovetex" or equivalent tiles for external wall cladding to match the size, Texture and color, of the tiles used in the existing building. Wall surface should be given a coat of 12 mm to 15 mm thick cement plaster (1: 5). 1 cement: 5 coarse sand and to fix the tiles with 6 mm thick cement Mortar 1: 3 (1 cement: 3 coarse sand) while the base plaster is still fresh (i.e. within 24 hours.)	SQM	251		
12	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 there after .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer in-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding.	SQM	640		
	TOTAL AMOUNT OF SECTION - G FALSE CEILING AND FINISHING WORKS				

SECTION H - ROAD, PAVING & WATER HARVESTING WORK

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
Н	SECTION-H: ROAD, PAVING AND HARVESTING WORK				
1	Providing and laying factory made colored chamfered edge Cement Concrete paver blocks of required strength, thickness & size/shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with jamuna sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. complete as per manufacturer's specifications & direction of Engineer in-Charge. 60mm thick C.C. paver block of M-35 grade with approved colour, design & pattern	SQM	170		
2	Providing and erecting 2.00 meter high temporary barricading at site as per drawing/ direction of Engineer-in-Charge which includes writing and painting, arrangement for traffic diversion such as traffic signals during construction at site for day and night, glow lamps, reflective signs, marking, flags, caution tape as directed by the Engineer-in- Charge. The barricading provided shall be retained in position at site continuously i/c shifting of barricading from one location to another location as many times as required during the execution of the entire work till its completion. Rate include its maintenance for damages, painting, all incidentals, labour materials, equipments and works required to execute the job. The barricading shall not be removed without prior approval of Engineer-in-Charge. (Note: One time payment shall be made for providing barricading from start of work till	meter	100		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	completion of work i/c shifting. The barricading provided shall remain to be the property of the contractor on completion of the work).				
3	Providing and laying matt finished vitrified tile of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colors and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	SQM	124		
4	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8mm having with water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colors and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	SQM	25		
6	Providing and fixing UNISTONE or equivalent make GRC jali 40 mm thick throughout in cement mortar 1:3 (1 cement: 3 coarse sand), including pointing in white cement mortar 1:2 (1 white cement: 2 stone dust) with an admixture of pigment, matching the stone shade, jali slab without any chamfers etc INCLUDING SS 304 grade SS Angle/Pipe framework and fixing with Hilti dash fasteners etc. complete	SQM	80		
7	Providing and placing in position 100mm thick factory made machine batched & machine mixed Precast RCC Rectangular Covers on drains of footpath of various sizes, of M-25 grade cement concrete for RCC work,	SQM	25		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	including cost of centering, shuttering, reinforcement of 8mm dia TMT bars of Fe 500 grade @ maximum 100mm c/c on both ways, neat cement punning on finished surface, properly encased on all edges with 1.6 mm thick, 100mm wide MS sheet duly painted over priming coat, reinforcement to be welded at edges with MS sheet and providing 2 Nos. 12 mm dia bar for hooks etc i/c cost of cartage, all leads & lift, handling at site etc. all complete as per direction of Engineer-in-Charge				
8	Supplying, spreading & leveling Geotextile membrane, in recharge pit, for all leads & lifts, all complete as per direction of Engineer-incharge	SQM	60		
9	Supplying, filling, spreading & leveling 200mm thick layer of coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over charcoal/activated carbon, for all leads & lifts, all complete as per direction of Engineer -in-charge.	CUM	12		
10	Supplying, filling, spreading & leveling 100mm thick layer of charcoal/activated carbon, in the recharge pit, over the layer of brick aggregates, in required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	CUM	6		
11	Supplying, filling, spreading & leveling 500mm thick layer of brick aggregates of size 40mm-63mm size in the recharge pit, in required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge	CUM	30		
12	Boring/drilling bore well of 300 mm dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, upto 60 Meter	MTR	180		

S.No.	DESCRIPTION OF ITEM	UNIT	QTY	RATE	AMOUNT
	depth below ground level				
13	Supplying, assembling, lowering and fixing in vertical position in bore well 150mm dia plasticized PVC medium well screen (RMS) pipes with ribs, conforming to IS: 12818, including hire & labor charges, fittings & accessories etc.all complete, for all depths, as per direction of Engineer-in-charge.	MTR	180		
	SECTION-H: ROAD, PAVING AND HARVESTING WORK				

	SUMMARY OF PART I : CIVIL WORKS				
S.NO.	DESCRIPTION	AMOUNT (WITHOUT GST)			
1	SECTION - A EARTH WORK, DISMANTLING AND WATERPROOFING WORKS	Rs.			
2	SECTION - B PLAIN AND REINFORCED CEMENT CONCRETE	Rs.			
3	SECTION C: MASONARY WORK	Rs.			
4	SECTION - D JOINERY, ALUMINIUM, WOOD AND STEEL WORK	Rs.			
5	SECTION - E FLOORING & PANELING	Rs.			
6	SECTION -F ROOFING AND TERRACE WATERPROOFING	Rs.			
7	SECTION - G FALSE CEILING AND FINISHING WORKS	Rs.			
8	SECTION-H: ROAD, PAVING AND HARVESTING WORK	Rs.			
	TOTAL AMOUNT OF PART I: CIVIL WORKS	Rs.			

Approved Make Of Materials

(applicable wherever the make is not listed in the item)

Civil Works

	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				
4)	Mirror	Modigaurd, Saint Gobain				
5)	Glass	Modi Float, Saint gobain				
6)	Flush Door Shutters	Duro, Green, Virgo, Sitapur, Mysore				
		(First Quality) Or Equivalent				
7)	Paints	Nerolac, I.C.I, Asian, Berger				
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				
15)	Hinges-Ms Oxidised	Heavy Duty				
16)	Tower Bolt-Aluminium	Do				
17)	Door Stopper-Aluminium	Do				
18)	L-Drop – Aluminium	Do				
19)	Handle- Aluminium	Do				
20)	Pvc Strips/ Hand Rail	Fixo Pan Or Equivalent				
21)	Cement	Ultratech, L&T, Ambuja				
22)	Steel	Tata, Sail, JSW, Jindal Panther				

PART II - ELECTRICAL WORKS

SECTION A - CIRCUIT CUM POINT WIRING

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
A	SECTION A: CIRCUIT CUM POINT WIRING				
1	Wiring for the following light points with 1.5 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible FRLS wires of approved make in concealed or surface mounted 25 mm dia 16 gauge MS Conduit including providing and fixing of 6 amps single pole modular switch of approved quality color make & design in 1.6 mm thick GI box and earthing of fixtures and the outlet box with 1.5 sq.mm PVC insulated copper conductor stranded flexible "FRLS" wire. (including circuit wiring from DB to switch Board)				
1.1	Primary point as above.	No.	54		
1.2	Same as item no. 1) above but Secondary point (Controlling switch and GI box included in item no. 1)	No.	216		
2	Wiring for ceiling fan point with 1.5 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible "FRLS" wires in concealed or surface mounted 25 mm dia 16 gauge MS conduits, including providing fan hook box, 6 amps switch and 300 watts electronic step type fan regulator of approved make in GI box and earthing the fan and outlet box with 1.5 sq. mm. PVC insulated copper conductor stranded flexible FRLS wire. (including circuit wiring from DB to switch Board).	No.	59		
3	Wiring for 250 volts single phase and neutral 16 amps modular switch socket outlet with universal pins with 3 x 4 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible "FRLS" wire in concealed or surface mounted 25 mm dia 16 gauge MS conduit / existing raceway including providing and fixing of 16 amps 3 pin modular switched sockets of approved make and design in 1.6 mm thick GI box with grid plates				

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
	and earthing the third pin of each socket outlet with 4 Sq mm PVC insulated copper conductor stranded flexible "FRLS" wire.				
3.1	Primary point for 16 amps switched socket outlet	No.	18		
3.2	Same as item no. 3 above but secondary point looped with primary point	No.	13		
4	Wiring for 250 volts single phase and neutral 6 amps modular switch socket outlet with universal pins with 3x4 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible "FRLS" wire in concealed or surface mounted 25 mm dia 16 gauge MS conduit / existing raceway including providing and fixing of 6/16 amps 3 pin modular switched sockets of approved make and design in 1.6 mm thick GI box with grid plates and earthing the third pin of each socket outlet with 2.5 Sq mm PVC insulated copper conductor stranded flexible "FRLS" wire.				
4.1	Primary point for 6 amps switched socket outlet	No.	31		
4.2	Same as item no. 4 above but secondary point looped with primary point	No.	75		
5	Wiring for 250 volts single phase and neutral 6 amps modular switched socket outlet with universal pins with 3x2.5 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible "FRLS" wire in concealed or surface mounted 25 mm dia 16 gauge MS Conduit / existing raceway including providing and fixing of 6 amps 3 pin modular switch socket outlet of aprpoved make and design in 1.6 mm thick GI box with grid plate and earthing of third pin of the socket with 2.5 Sq. mm PVC insulated copper conductor stranded flexible "FRLS" wire (maximum six to eight no. of 6 amps switches socket shall be connected on one circuit)				
5.1	Primary point for 1 No. 6 amps switched socket outlet with universal pins.	No.	36		
5.2	Same as item No. 5 above but secondary point	No.	32		

11				
looped with primary point				
Wiring for 250 volts single phase and neutral 16 amps polycarbonate industrial 3 pin (IP 65/66) socket outlet with 16 amps double pole MCB in a poly carbonate enclosure of approved size and design with 3x4 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible "FRLS" wires in concealed or surface mounted 25 mm dia 16 gauge MS Conduit, including providing and fixing of 16 amps socket and DP MCB (IP 65/66) in poly carbonate enclosure and earthing of third pin of the socket with 4 sq.mm PVC insulated copper conductor stranded flexible FRLS wire.	No.	23		
Wiring for Exhaust fan point with 1.5 sq. mm. insulated copper conductor 1100 volts grade stranded flexible "FRLS" wires of approved make in concealed or surface mounted 25 mm dia 16 guage MS Conduit including providing and fixing of 6 amps flush mounted switch at the normal switch level in 2 mm thick GI box and 6 amps 3 pin flush mounted socket near exhaust fan and earthing of exhaust fan through the third pin of the socket outlet and GI box with 1.5 sq. mm. PVC insulated copper conductor flexible "FRLS" wire.	No.	6		
Providing and fixing in position the following 16 gauge MS conduits concealed or exposed as called for including all accessories i.e. bends, junction boxes, with cover plates of approved make and design.				
20 mm dia MS conduit	RM	100		
25 mm dia MS conduit	RM	100		
32 mm dia MS conduit	RM	50		
Providing and fixing in position the following 2mm thick PVC rigid conduits concealed or exposed as called for including all accessories i.e. bends, junction boxes, with cover plates of approved make and design.				
_	16 amps polycarbonate industrial 3 pin (IP 65/66) socket outlet with 16 amps double pole MCB in a poly carbonate enclosure of approved size and design with 3x4 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible "FRLS" wires in concealed or surface mounted 25 mm dia 16 gauge MS Conduit, including providing and fixing of 16 amps socket and DP MCB (IP 65/66) in poly carbonate enclosure and earthing of third pin of the socket with 4 sq.mm PVC insulated copper conductor stranded flexible FRLS wire. Wiring for Exhaust fan point with 1.5 sq. mm. insulated copper conductor 1100 volts grade stranded flexible "FRLS" wires of approved make in concealed or surface mounted 25 mm dia 16 guage MS Conduit including providing and fixing of 6 amps flush mounted switch at the normal switch level in 2 mm thick GI box and 6 amps 3 pin flush mounted socket near exhaust fan and earthing of exhaust fan through the third pin of the socket outlet and GI box with 1.5 sq. mm. PVC insulated copper conductor flexible "FRLS" wire. Providing and fixing in position the following 16 gauge MS conduits concealed or exposed as called for including all accessories i.e. bends, junction boxes, with cover plates of approved make and design. 20 mm dia MS conduit Providing and fixing in position the following 2mm thick PVC rigid conduits concealed or exposed as called for including all accessories i.e. bends, junction boxes, with cover plates of exposed as called for including all accessories i.e. bends, junction boxes, with cover plates of	16 amps polycarbonate industrial 3 pin (IP 65/66) socket outlet with 16 amps double pole MCB in a poly carbonate enclosure of approved size and design with 3x4 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible "FRLS" wires in concealed or surface mounted 25 mm dia 16 gauge MS Conduit, including providing and fixing of 16 amps socket and DP MCB (IP 65/66) in poly carbonate enclosure and earthing of third pin of the socket with 4 sq.mm PVC insulated copper conductor stranded flexible FRLS wire. Wiring for Exhaust fan point with 1.5 sq. mm. insulated copper conductor 1100 volts grade stranded flexible "FRLS" wires of approved make in concealed or surface mounted 25 mm dia 16 guage MS Conduit including providing and fixing of 6 amps flush mounted switch at the normal switch level in 2 mm thick GI box and 6 amps 3 pin flush mounted socket near exhaust fan and earthing of exhaust fan through the third pin of the socket outlet and GI box with 1.5 sq. mm. PVC insulated copper conductor flexible "FRLS" wire. Providing and fixing in position the following 16 gauge MS conduits concealed or exposed as called for including all accessories i.e. bends, junction boxes, with cover plates of approved make and design. 20 mm dia MS conduit RM 25 mm dia MS conduit RM Providing and fixing in position the following 2mm thick PVC rigid conduits concealed or exposed as called for including all accessories i.e. bends, junction boxes, with cover plates of	16 amps polycarbonate industrial 3 pin (IP 65/66) socket outlet with 16 amps double pole MCB in a poly carbonate enclosure of approved size and design with 3x4 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible "FRLS" wires in concealed or surface mounted 25 mm dia 16 gauge MS Conduit, including providing and fixing of 16 amps socket and DP MCB (IP 65/66) in poly carbonate enclosure and earthing of third pin of the socket with 4 sq.mm PVC insulated copper conductor stranded flexible FRLS wire. Wiring for Exhaust fan point with 1.5 sq. mm. insulated copper conductor 1100 volts grade stranded flexible "FRLS" wires of approved make in concealed or surface mounted 25 mm dia 16 guage MS Conduit including providing and fixing of 6 amps flush mounted switch at the normal switch level in 2 mm thick GI box and 6 amps 3 pin flush mounted socket near exhaust fan and earthing of exhaust fan through the third pin of the socket outlet and GI box with 1.5 sq. mm. PVC insulated copper conductor flexible "FRLS" wire. Providing and fixing in position the following 16 gauge MS conduits concealed or exposed as called for including all accessories i.e. bends, junction boxes, with cover plates of approved make and design. 20 mm dia MS conduit RM 100 25 mm dia MS conduit RM 50 Providing and fixing in position the following 2mm thick PVC rigid conduits concealed or exposed as called for including all accessories i.e. bends, junction boxes, with cover plates of	16 amps polycarbonate industrial 3 pin (IP 65/66) socket outlet with 16 amps double pole MCB in a poly carbonate enclosure of approved size and design with 3x4 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible "FRLS" wires in concealed or surface mounted 25 mm dia 16 gauge MS Conduit, including providing and fixing of 16 amps socket and DP MCB (IP 65/66) in poly carbonate enclosure and earthing of third pin of the socket with 4 sq.mm PVC insulated copper conductor stranded flexible FRLS wire. Wiring for Exhaust fan point with 1.5 sq. mm. insulated copper conductor 1100 volts grade stranded flexible "FRLS" wires of approved make in concealed or surface mounted 25 mm dia 16 guage MS Conduit including providing and fixing of 6 amps flush mounted switch at the normal switch level in 2 mm thick GI box and 6 amps 3 pin flush mounted socket near exhaust fan and earthing of exhaust fan through the third pin of the socket outlet and GI box with 1.5 sq. mm. PVC insulated copper conductor flexible "FRLS" wire. Providing and fixing in position the following 16 gauge MS conduits concealed or exposed as called for including all accessories i.e. bends, junction boxes, with cover plates of approved make and design. 20 mm dia MS conduit RM 100 25 mm dia MS conduit RM 50 Providing and fixing in position the following 2mm thick PVC rigid conduits concealed or exposed as called for including all accessories i.e. bends, junction boxes, with cover plates of

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
9.1	20 mm dia PVC conduit	RM	2300		
9.2	25 mm dia PVC conduit	RM	600		
9.3	Sub main wiring with 2 run x 6 sq mm Single	RM	20		
	core PVC insulated cable unsheathed				
	multistranded copper conductor LT 1100 volts				
	grade FRLS cable IS-694 marked drawn in &				
	including PVC conduit ISI marked of suitable dia				
	including conduit accessories with one run single				
	core copper cable 6 sq mm multistranded				
	conductor colour code as a earth continuity and				
	connecting upto DB all as specified and directed.				
	TOTAL AMOUNT OF SECTION A:				
	CIRCUIT CUM POINT WIRING				

SECTION B - CABLES, MAINS AND SUB MAINS

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
В	SECTION B: CABLES, MAINS AND SUB MAINS				
1	Supplying of following 1100 volt grade XLPE insulated PVC sheathed aluminium conductor armoured cables as per specification.				
1.1	4 core 25 sq. mm	RM	120		
2	Supplying of following 1100 volt grade XLPE insulated PVC sheathed copper conductor armoured cable as per specification.				
2.1	4 core 10 sq.mm	RM	35		
2.20	4 core 6 sq. mm	RM	10		
2.3	3 core 6 sq. mm.	RM	230		
3	Cable end termination of the following PVC insulated sheathed XLPE /copper conductor armored cables of 1100 volt grade including supplying and fixing of bimetallic copper crimping lugs, single compression glands with earthing facility and cable sockets etc. complete as required.				
3.1	4 core 25 sq. mm.	No.	8		
3.2	4 core 16 sq. mm.	No.	8		
3.3	4 core 10 sq. mm.	No.	16		
3.4	4 core 6 sq. mm.	No.	16		
3.5	3 core 6 sq. mm.	No.	78		
4	Cable end termination of the following PVC insulated sheathed XLPE copper conductor armored cables of 1100 volt grade including supplying and fixing of bimetallic crimping lugs, single compression glands with earthing facility and cable sockets etc. complete as required.				

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
4.1	Low resistance / amie braided 30 core 1.5sqmm cable	No.	6		
	TOTAL AMOUNT OF SECTION B: CABLES, MAINS AND SUB MAINS				

SECTION C - MAIN LT PANEL AND SUB DISTRIBUTION BOARDS

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
C	SECTION C: MAIN LT PANEL AND SUB DISTRIBUTION BOARDS				
1	DISTRIBUTION BOARDS				
1.1	Supply, installation, testing and commissioning of the following cubicle type 1.6 mm thick CRCA sheet steel enclosed and partitions to segregate phases recessed in wall or surface mounted final distribution boards of the following description. Distribution board shall be powder coated and double door construction and in four tier configuration.				
1.2	12 way TPN DB with 36 No 10/16/20/32 amps SP MCB as outgoing and 3 No. 32 amps DP RCCB's of 100 mA leakage current including 1 No. 40 amps 4 Pole MCB as incomer & separate neutral link for each phase and earth bar.	No	1		
1.3	8 way TPN DB with 24 No 10/16/20/32 amps SP MCB as outgoing and 3 No. 32 amps DP RCCB's of 100 mA leakage current including 1 No. 40 amps 4 Pole MCB as incomer & separate neutral link for each phase and earth bar.	No	1		
1.4	4 way SPN DB with 8 Nos. 10/16 amps SP MCB as outgoing and 1 No. 32 amps DP RCCB's of 100 mA leakage current with 40 amps DP MCB as incomer including neutral link	No.	1		

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
1.5	Supply, installation, testing and commissioning of 63 amps 4 pole MCB in 1.6 mm thick MS enclosure of approved make design and painted with approved paint shade.	No.	1		
2	DB TYP Floor				
	Incoming				
	1 No. 63 Amps 4 pole MCCB with following accessories:				
	VAF digital electronic meter with inbuilt selector switch and 40/5 Amps suitable VA, CL 1 CTs 1 Set				
	Phase indicating light shall be protected by 2 Amps SP MCB's 3 Set				
	Bus Bars				
	100 Amps 4P Aluminiun bus bars with heat coloured shrinkable insulation sleeve 1 Set				
	Outgoing				
	10/16/32 Amps DP MCB -15 No.				
	Notes:-				
	All MCCB's shall be of 25 KA (Ics) breaking capacity.				
	All MCB's shall be of 10 KA breaking capacity.				
	All MCCB's shall be provided with extended type roten handle.				
	DB-2.1 described as above	No.	2		
	TOTAL AMOUNT OF SECTION C: MAIN LT PANEL AND SUB DISTRIBUTION BOARDS				

SECTION D - EARTHING INSTALLATION

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
D	SECTION D : EARTHING INSTALLATION				
1	Supplying, fixing, testing and commissioning of following bare Copper/GI tapes including all necessary fixing accessories and effecting connections.				
1.1	25 mm x 6 m thick GI tape	RM	40		
1.2	25 x 3 mm thick GI tape.	RM	115		
1.3	8 SWG GI wire	RM	100		
2	Pipe Earthing as per IS:3043 with perforated 3.0 Mtr. Long, 40 mm dia. 'B' class G.I. Pipe including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300 mm and embodying the pipe complete with alternate layers salt and coke/charcoal, testing of earth resistance as required.	No.	8		
3	Supply, laying, connecting, testing and commissioing of Single core 120 sq.mm Green colour cable (UPS neutral earthing).	RM	60		
	TOTAL AMOUNT OF SECTION D: EARTHING INSTALLATION				

SECTION E - LIGHTING FIXTURES

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
5.110.	DESCRIPTION	UNII	QII.	KAIL	AMOUNT
E	SECTION E : LIGHTING FIXTURES				
1	Supply, installation, testing and commissioning of the following lighting fixtures and fans with all fixing accessories etc. as required.				
1.2	Ceiling fan 1200 mm dia of approved make complete with all accessories as required.	No.	59		
1.3	Propeller fan upto 450 mm sweep of approved make complete with louvars all accessories as required.	No.	4		
1.4	LED light fitting, 1x18 w, 230V recessed mounting etc. complete with all accessories prewired and including connecting up with twin core twisted flexible copper conductor cable with suitable size.	No	236		
1.5	Wiring for the following light points with 1.5 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible FRLS wires of approved make in concealed or surface mounted 25 mm dia 16 gauge MS Conduit including providing and fixing of 6 amps single pole modular switch of approved quality colour make & design in 1.6 mm thick GI box and earthing of fixtures and the outlet box with 1.5 sq.mm PVC insulated copper conductor stranded flexible "FRLS" wire.(including circuit wiring from DB to switch Board)				
1.5.1	Primary point as above.	No.	15		
1.6	Supply, installation, testing and commissioning of the following lighting fixtures and fans with all fixing accessories etc. as required.				
1.6.1	IP 65 rated LED Canopy lighting fixture Philips, Bajaj, Wipro, Power corporation, SISKA, Crompton make	No.	15		

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
1.7	Supply and fix wall mounting Fluorescent tube light fitting, 1x 28w, 230V Energy efficient T5, Box type, epoxy powder coated CRCA sheet housing with reflector cover channel, with electronic ballasts, bipin holders, connector block, etc. complete with all accessories internally prewired and including connecting up with twin core twisted flexible copper conductor cable with suitable size.(make bajaj- cat no. 160483) or equivalent model in philips adn CG	No	36		
	TOTAL AMOUNT OF SECTION E : LIGHTING FIXTURES				

SECTION F - CONDUITING WIRING AND CABLING FOR TELEPHONE/DATA SYSTEM

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
F	SECTION F: CONDUITING WIRING AND CABLING FOR TELEPHONE/DATA SYSTEM				
1	Supply, installation, testing and commissioning of flush mounted outlets wired to T 568 A or B with British style faceplace. The plastic shall be high impact, flame-retardant, UL rate thermoplastic. Dust cover/ blank shall be provided to protect unused faceplate openings. Termination caps and plastic over should be provided to protect jack wiring. Quoted price shall be inclusive of 1.6 mm thick GI Boxes.				
1.1	Single outlet faceplate with RJ-45 jack	No.	108		
2	Supply, installation, testing and commissioning of 4 pair Category 6 LAN cable consisting of 24 AWG solid copper conductors and as per the specification.				
2.1	The cable should have flexible Jacket & ripcord for easy stripability	RM	475		

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
3	Supply and fixing of 16 gauge mm thick MS Conduits in following sizes including cost of junction boxes, bends, elbows, sockets, tees etc. laying in slab, cutting chases and making good or surface mounted including all fixing hardware.				
3.1	32 mm dia	RM	61		
3.2	25 mm dia	RM	267		
4	Supply, fixing, cable termination, testing and commissioning of Tag Blocks and boxes with lockable door etc. as required.				
4.1	10 pair tag box	No.	1		
5	Supply and fixing telephone outlets with grid plate and RJ-11 jack in 1.6 mm thick GI box complete including cutting, chases, fixing of GI boxes and making good (Cover plate shall match the color size and make of wiring accessories to be used in the project).	No.	11		
6	Supply, laying, installation, testing and commissioning of following PVC insulated tinned copper conductor cable / wires in existing cable tray / conduits.				
6.1	2 pair 0.61 mm wire	RM	60		
	TOTAL AMOUNT OF SECTION F: CONDUITING WIRING AND CABLING FOR TELEPHONE/DATA SYSTEM				

	SUMMARY OF PART II : ELECTRICAL WORKS					
S.NO.	DESCRIPTION	AMOUNT				
		(WITHOUT GST)				
1	SECTION A : CIRCUIT CUM POINT WIRING	Rs.				
2	SECTION B: CABLES, MAINS AND SUB MAINS	Rs.				
3	SECTION C: MAIN LT PANEL AND SUB DISTRIBUTION BOARDS	Rs.				
4	SECTION D: EARTHING INSTALLATION	Rs.				
5	SECTION E: LIGHTING FIXTURES	Rs.				
6	SECTION F : CONDUITING WIRING AND CABLING FOR TELEPHONE/DATA SYSTEM	Rs.				
	TOTAL OF PART II : ELECTRICAL WORKS	Rs.				

PART III - SANITARY WORKS

SECTION A - SANITARY FIXTURES & FITTINGS

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
D.110.		01111	VII ,		
Α.	SECTION A - SANITARY FIXTURE & FITTINGS				
1	Providing and fixing white vitreous china extended wall mounted water closet of size 790X 370X710mm of approved shape including providing and fixing of white vitreous china cistern with dual flushing fitting of flushing capacity 3 liter/6 liters (Adjustable to 4liter/8liters) including sheet cover, and cistern fittings, nut bolt gasket etc complete.				
1.a	Wall hung EWC (Hind ware Cornice E.W.C & Cistern Suit Cat. No.92055 & 92121 of size 790x370x710 or approved equivalent)	Each	43		
2	Providing and fixing wash basin with C.I. Brackets, 15mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls where ever require:				
2.a	Round Washbasin size 490mm dia Hindware in counter basin Cat No10052 or approved equivalent, CP brass single lever mixing fitting with pop-up waste Jaquar Cat. No. PRS-CHR-031 or approved equivalent.	Each	46		
3	Providing and fixing white vitreous china flat back half stall urinal of size 460 x 350x260 mm with white P.V.C automatic flushing cistern, with fittings, standard size C.P brass flush pipe, spreaders with unions and clamps (all in C.P brass) with waste fitting as per IS: 2556, C.I trap with outlet grating and other coupling in C.P brass including painting of fittings and cutting and making good the walls and floors whereever required (Make:Hindware, Cat-No.60001)				
3.a	Range of two half stall urinals with 5 litre P.V.C automatic flushing cistern	Each	27		

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
4.0	Providing & fixing chinaware urinal partition of 90X 320X 720 mm with fixed with expandable anchor fasteners with C.P. brass bolts and washers, embedded in wall with anchor and set in cement concrete complete including cutting and making good the walls wherever required (MAKE-CERA MODEL NO. S4090101 or EQUIVALENT.)	Each	24		
5	Providing and fixing 1350x750 mm beveled edge mirror of superior glass (of ASAHI/SAINTGOBAIN/MODI make) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. Brass screws and washers complete	Each	23		
6	Providing and fixing CP brass angle valve for basin mixture and geyser points of approved quality confirming to IS: 8931	Each	76		
7	Providing and fixing PTMT angle stop cock 15mm nominal bore, weighting not less than 85gms.	Each	12		
8	Providing and fixing PTMT Bottle Trap for Wash basin.				
8.a	Bottle trap 31 mm single piece molded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling 77 mm breadth with 25 mm minimum water seal, weighing not less than 260 gms.	Each	46		
9	Providing and fixing white vitreous china Janitor sink with C.I. brackets, C.P. brass chain with rubber plug 40mm C.P. brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete including painting of fittings and brackets, cutting and making good the wall wherever required:				
9.a	Neelkanth NK SB1 M SIZE: 610 X 460 X 255	Each	1		
10	Providing and fixing CP brass single lever low flow Sink mixer with 15 mm CP brass single lever pillar cock with pop up and waste complete including cutting and making good the walls	Each	1		

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
	where required. MAKE-CERA (Model F1014501) or Equivalent.				
11	Providing and fixing health faucet with 1 m PVC tube and swivel hook including all fittings (Jaqual ALD-CHR-573) complete.	Each	43		
12	Providing and fixing toilet paper holder of approved make.				
12.a	Recessed Type-Vitreous China 150 X 150 mm	Each	43		
13	Providing and fixing straight type Macfit single body push fit type WC pan connector with factory supplied spring loaded seal guard with integral single mould sealing fins made of flexible EVA body, including bush/adaptor for use with C.I. Pipe as supplied with the pan connector.	Each	43		
14	Providing & Fixing, testing, commissioning, receiving, storing, handling, shifting of CERA CRUSE SET Complete Handicap Toilet Set including: EWC 710 x 370 x 810 mm New Cat No: S1021113 S Trap / S1021114 P Trap S1060106 Cistern B1520118 Soft Close Seat Cover B1810112 Twin Flush Fittings S2040101 Wash Basin 510 x 400 mm F9030451 Spatula Lever basin mixer B2210106 Wall mounted Grab bar 600 mm long B2210106 Wall mounted Grab bar 600 mm long B2210108 Wall mounted Hinged rail 750 x 750 complete with brackets, tracks, waste pipes and other accessories complete as required including cutting and making good the wall and floor as required.	Each	1		
15	Providing and fixing PTMT grating of approved quality and color. Circular/square type				
a)	100 mm nominal dia/size.	Each	63		

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
b)	125 mm nominal dia/size with 25 mm waste hole.	Each	11		
16	Providing, fixing satin finish stainless steel AISI 316 grade wall mounted coat hook CERA MAKE F5003113 on door complete.	Each	22		
17	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
a)	15 mm nominal bore	Each	11		
18	Providing and fixing un-plasticized PVC connection pipe with brass unions :				
a)	45 cm length				
b)	15 mm nominal bore	Each	76		
19	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	Each	11		
	TOTAL AMOUNT OF SECTION A - SANITARY FIXTURES				

SECTION B - SOIL, WASTE, VENT WATER PIPES

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
В.	SECTION B - SOIL, WASTE, VENT WATER PIPES				
1	Providing and fixing soil, waste and vent pipes				
1.a	Centrifugally cast (spun) iron socket & Spigot (S & S) Pipe as per IS 3989 100mm dia	Meter	498		
1.b	Centrifugally cast (spun) iron socketed pipe as per IS 3989 75mm dia	Meter	11		
2	Providing and fixing M.S. holder bat clamps of approved design to sand cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10 x 10 x 10 cm of 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc.				
2.a	100mm dia	Each	119		
2.b	75mm dia	Each	RO		
3	Providing and fixing plain bend of required degree.				
3.a	sand cast iron S & S as per IS: 3989 100mm dia	Each	10		
3.b	sand cast iron S & S as per IS: 3989 75mm dia	Each	2		
4	Providing and fixing single equal plain junction of required degree.				
4.a	sand cast iron S & S as per IS: 3989 100 x 100 x 100mm	Each	21		
4.b	sand cast iron S & S as per IS: 3989 75x75x75 mm	Each	RO		

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
5	Providing and fixing terminal guard.				
5.a	sand cast iron S & S as per IS: 3989 100mm dia	Each	27		
5.b	sand cast iron S & S as per IS: 3989 75mm dia	Each	RO		
6	Providing lead caulked joints to sand cast iron / centrifugally cast (spun) iron pipes and fittings of diameter:				
6.a	100mm dia	Each	280		
6.b	75mm dia	Each	4		
7	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors				
7.a	100mm inlet and 100mm outlet sand cast iron S & S as per IS: 3989	Each	54		
8	Providing & fixing GI pipes complete with GI fittings and clamps, including cutting & making good the walls etc.				
	Internal work- Exposed on wall				
a)	32mm nominal bore	Meter	12		
b)	40mm nominal bore	Meter	20		
c)	50mm nominal bore	Meter	RO		
9	Painting GI pipes and fittings with two coats of anti corrosive bitumestic paint of approved quality.				
a)	32mm nominal bore	Meter	12		
b)	40mm nominal bore	Meter	20		
c)	50mm nominal bore	Meter	RO		
10	Painting sand cast iron/ centrifugally cast (spun)				

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
	iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any color such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work				
a)	100mm diameter pipe	Meter	200		
b)	75mm diameter pipe	Meter	11		
11	Providing and fixing single unequal plain invert branch of required degree:				
11.a	100 x 100 x 75mm sand cast iron S & S as per IS: 3989	Each	1		
12	Providing and fixing on wall face un plasticized-PVC rain water pipes confirming to IS: 13592 TYPE A, including jointing with seal ring confirming to IS: 5382 leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
12.a	75mm diameter.	Meter	RO		
12.b	110mm diameter.	Meter	RO		
12.c	160mm diameter.	Meter	44		
13	Providing and fixing on wall face unplasticised-PVC molded fitting/ accessories for unplasticised-PVC rain water pipes confirming to IS: 13592 TYPE A, including jointing with seal ring confirming to IS: 5382 leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
13.a	Single Tee with door				
13.b	160x160x160, mm	Each	4		
13.c	Bend 87.5 degree				
13.d	160 mm bend	Each	4		
13.e	75mm diameter.		RO		
13.f	110mm diameter.		RO		

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
14	Making khurras 45x45 cm. with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) over PVC sheet1mx1mx400 micron, finished with12 mm cement plaster1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete	Each	4		
15	Providing and laying cement concrete 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate 40 mm nominal size) around CI/stoneware pipes including in bed for pipes to be laid in trenches as per standard details.				
15.a	100 mm diameter	Meter	20		
16	Providing and fixing 100mm dia G.I. inlet fitting consisting of 100mm dia main G.I pipe with multiple G.I. sockets (Inlets) of required diameter welded to it (as per site requirement) and fixing the same to C.I trap and setting in cement concrete, complete as per instructions of the Engineer in charge.	Each	36		
17	Providing and fixing G.I reducer/hopper/elbow (Floor Drain) of 100 x 75mm, complete as per instructions of the Engineer in charge.(grating and G.I pipe to be paid separately)	Each	20		
18	Providing and fixing terminal guard				
18.a	150mm Sand cast iron S&S as per IS: 3989.	Each	RO		
19	Providing and fixing M.S. stays and clamps for sand cast iron/centrifugally cast (spun) iron pipe of diameter: a) 150mm	Each	10		
20	Painting sand cast iron/centrifugally cast (spun) iron soil, waste vent pipes and fittings with paint of any color such as chocolate, grey or buff, etc., over a coat of primer (of approved quality) for new work.				
20.a	150mm diameter pipe TOTAL AMOUNT OF SECTION B - SOIL,WASTE & VENT WATER PIPES	Meter	RO		

SECTION C - INTERNAL WATER SUPPLY

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
C.	SECTION C - INTERNAL WATER SUPPLY				
1	Providing & fixing GI pipes complete with GI fittings and clamps, including cutting & making good the walls etc. Internal work- Exposed on wall				
a)	25mm nominal bore	Meter	24		
b)	32mm nominal bore	Meter	12		
c)	40mm nominal bore	Meter	50		
2	Providing and fixing chlorinated poly vinyl chloride (CPVC) pipes having thermal stability for hot &coldwater supply, including all CPVC plain & brass threaded fitting, including fixing the pipe with clamps at 1 m spacing. This includes jointing of pipes &fitting with one step CPVC solvent cement and cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.				
	Concealed work including cutting chases and making good the walls etc.				
a)	15mm nominal outer dia. Pipes.	Meter	37		
b)	20mm nominal outer dia. Pipes.	Meter	166		
3	Providing and fixing GI pipes complete with GI fittings including trenching and refilling etc.				
d)	50mm nominal bore	Meter	100		
4	Providing & fixing brass stop cock of approved quality.				
a)	15 mm nominal bore	Each	RO		
b)	20 mm nominal bore	Each	9		
5	Providing and fixing gunmetal gate valve with CI wheel of approved quality (Screwed end)				

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
a)	25mm nominal bore	Each	18		
b)	32mm nominal bore	Each	4		
c)	40mm nominal bore	Each	2		
d)	50mm nominal bore	Each	4		
6	Constructing masonry chamber 30x30x50cm, inside with 7.5 class designation brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for stop cock with C.I. Surface box 100x100x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 (1 cement:2 coarse sand:4 graded stone aggregate 20mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement:5 fine sand: 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick finished with a floating coat of neat cement complete as per standard design with F.P.S. bricks.	Each	1		
7	Painting GI pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work.				
c)	25mm nominal bore	Meter	24		
d)	32mm nominal bore	Meter	12		
8	Painting GI pipes and fittings with two coats of anti corrosive bitumastic paint of approved quality.				
a)	15-20-25mm nominal bore	Meter	203		
9	Providing and filling sand of grading zone V or coarser grade all-round the GI pipes in external work.				
d)	50mm nominal bore	Meter	20		
10	Providing & fixing C.I double air valve of approved quality with bolts, nuts, rubber insertion etc complete (The tail pieces, tapers etc if				

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
	required will be paid separately)				
a)	50 mm dia	Each	1		
11	Providing and fixing M.S fabricated hot dipped galvanized coating puddle flange comprising of 600 mm dia long M.S class 'B' pipe (screwed end up to 50 mm & flange for more than 50 mm dia) with 6 mm thick M.S plates of required size including cutting holes in centre of plate, inserting pipe & making welded (Arc) joint complete. Same shall be installed with TEC welded joint in position with reinforcement bars of RCC tank wall/slab including making cutout in shuttering during concrete casting of tank of following diameter. (Location: underground/ overhead tanks.)				
b)	50 mm dia	Each	4		
	TOTAL AMOUNT OF SECTION C - INTERNAL WATER SUPPLY				

SECTION D - SEWERAGE & DRAINGE SYESTEM

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
D.	SECTION D - SEWERAGE & DRAINGE SYESTEM				
1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete				
a)	150 mm diameter	Meter	150		
2	Providing and laying cement concrete 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate 40 mm nominal size) all-round stoneware pipes including in bed for pipes to be laid in trenches as per standard details.				
a)	150 mm diameter	Meter	150		
3	Constructing brick masonry manhole with 7.5 class designation bricks in cement mortar 1:4 (1 cement: 4 coarse sand) R.C.C. top slab 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design.				
4	Inside size 90x80 cm and 45 cm deep including CI Cover with frame (light duty as per IS:12592) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)				

S.No.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
a)	with common burnt clay F.P.S.(non module) brick of class designation 7.5	Each	7		
5	Extra for depth for manholes				
a)	Size 90 x 80 cm				
b)	With F.P.S. bricks class designation 7.5	Meter	RO		
6	Constructing brick masonry road gully chamber 50x45x60 cm with bricks of class designation 7.5 in cement mortar 1:4 (1 cement :4 coarse sand) including 500x450 mm precast RCC horizontal grating with frame complete as per standard design				
a)	With F.P.S bricks	Each	4		
7	Providing and fixing square mouth SW gully trap grade 'A' complete CI grating brick masonry chamber with bricks of class designation 75 and water tight CI cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 13.00 kg and frame to be not less than 5 kg. as per standard design. (COVER MIN. 4.5 KG & FRAME MIN.2.7 KG)				
	180x150mm size P type With FPS bricks	Each	6		
8	Making connection of drain or sewer line with existing manhole including breaking into and manhole good the wall, floors with cement concrete 1:2:4 mix (1 Cement : 2 Coarse Sand : 4 Graded Stone Aggregate 20mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 Coarse sand), finished with a floating coat of neat cement and making necessary channels for the drain etc, complete:				
a)	For pipe 100 to 250 mm diameter	Each	1		
	TOTAL AMOUNT OF SECTION D - SEWERAGE & DRAINAGE SYSTEM				

	SUMMARY OF PART III				
	SANITARY WORKS				
S.NO.	DESCRIPTION	AMOUNT			
		(WITHOUT GST)			
1	SECTION A : SANITARY FIXTURES & FITTINGS	Rs.			
2	SECTION B: SOIL, WASTE & VENT WATER PIPES	Rs.			
3	SECTION C: INTERNAL WATER SUPPLY	Rs.			
4	SECTION D: SEWERAGE & DRAINAGE SYSTEM	Rs.			
	GRAND TOTAL OF PART III	Rs.			
	SANITARY WORKS				

SUMMARY OF CIVIL, ELECTRICAL AND SANITARY WORKS **DESCRIPTION** S.NO. **AMOUNT** TOTAL AMOUNT OF PART I – 1 Rs. **CIVIL WORKS** TOTAL AMOUNT OF PART II – 2 Rs. **ELECTRICAL WORKS** TOTAL AMOUNT OF PART III – 3 Rs. **SANTARY WORKS GRAND TOTAL** Rs. **GST** Rs. TOTAL AMOUNT INCLUDING GST Rs.

	LIST OF APPROVED MAKES FOR ELECTRICAL WORKS				
S.No.	Details of Materials / Equipment	Manufacturer's Name			
1	LT Panel, Main Distribution Panel, Sub-Main	Tricolite industries Ltd.			
	Distribution Panel and Motor Control Centre	Adlec Control System			
		SPC Electro Tech Pvt. Ltd.			
		Ambit Switchgear			
		Milestone			
2	Sandwiched Construction Bus ducts	Control & Switchgear			
		Henikwon (L&T)			
		GE			
		Schneider Electric			
3	Final Distribution Board	Legrand			
		Hager			
		ABB			
		Siemens			
		Schneider Electric (MG)			
4	Air Circuit Breaker (3/4 Pole)	Schneider Electric (MVS)			
		Larsen & Toubro (C-Power)			
		ABB(E-Max)			
		Siemens			
5	Moulded Case Circuit Breaker (MCCB)	Larsen & Toubro			
		ABB			
		Schneider Electric (CVS)			
		Siemens			
6	Motor Protection Circuit Breaker(MPCB)	Hager			
		ABB			
		Schneider Electric			
		Siemens			
7	Miniature Circuit Breakers (MCB)	Hager			
		ABB			
		Schneider Electric			
		Siemens			
8	Residual Current Circuit Breaker (RCCB)	Hager			
		ABB			
		Schneider Electric			
		Siemens			
9	Power/Aux. Contactor / Capacitor	Schneider Electric (MG)			
	Duty Contactor	Hager (L&T)			
		ABB			
		Siemens			
10	Change Over Switch	Larsen & Toubro			

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS		
S.No.	Details of Materials / Equipment	Manufacturer's Name
		C & S
		HPL – Socomec
11	Control Transformer/Potential Transformers	Automatic Electric
		Matrix
		Pragati
		Precise
12	Current Transformer (Epoxy Cast Resin)	Automatic Electric
		Matrix
		Pragati
		Precise
13	Protection Relay	
	a. Numeric Type	ABB
		Areva
		Larsen&Toubro
		Siemens
	b. Electromagnetic Type	ABB
		Areva
		Larsen&Toubro
14	Indicating Lamps LED type and Push Button	Vaishno Electricals
		Larsen & Toubro (ESBEE)
		Schneider Electric Siemens
15	Overload relays with built in Single Phase preventer	ABB
		Larsen & Toubro
		Schneider Electric
		Siemens
16	a. Electronic Digital Meters (A/V/PF/Hz/KW/KWH) with LED Display	Conzerv
		Schneider Electric
		Secure
	b. ISI Marked Dual Energy Meter with centralized metering & billing system	Secure
		Radius
17	Static Power Meter & Logger (SPML)	Conzerv
	With RS 485 port	Schneider Electric
		Secure
18	Power Capacitor	Matrix
		Ducati
		EPCOS
		Meher

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS		
Details of Materials / Equipment	Manufacturer's Name	
Autoamtic Power Factor Correction Relay	Areva	
(Numeric Type)	BELUK (Germany)	
	Siemens	
PVC insulated XLPE aluminium/copper conductor	Cable corporation of India	
armoured MV Cables upto 1100 V grade	Skytone	
	Ravin Cable	
	Polycab	
	KEI	
	Dimond	
LT Jointing Kit / Termination	Birla-3M	
	Raychem	
	REPL	
	Safe Kit	
Cable Glands Double Compression with	Baliga Lighting	
earthing links	Comet	
	Cosmos	
Bimettalic Cable Lug	Comet	
	Dowell's (Biller India)	
	Hax Brass (Copper Alloy India)	
PVC insulated copper conductor stranded	Finolex	
flexible wires	R RKabel	
	Skytone	
	KEI	
	Polycab	
	BatraHenlay	
Mettalic / GI Conduit (ISI approved)	AKG	
	BEC	
	NIC	
Lead Coated Flexible GI Conduit	PLICA India Pvt. Ltd.	
	Flexicon	
PVC Conduit &Accessories (ISI approved)	AKG	
(_2, app. 0. 0a)	BEC	
	Precision	
	Polypack	
	Ravindra	
Industrial Socket		
	•	
	Details of Materials / Equipment Autoamtic Power Factor Correction Relay (Numeric Type) PVC insulated XLPE aluminium/copper conductor armoured MV Cables upto 1100 V grade LT Jointing Kit / Termination Cable Glands Double Compression with earthing links Bimettalic Cable Lug PVC insulated copper conductor stranded flexible wires Mettalic / GI Conduit (ISI approved) Lead Coated Flexible GI Conduit PVC Conduit &Accessories (ISI approved)	

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS		
S.No.	Details of Materials / Equipment	Manufacturer's Name
		Gewiss
		Legrand
		Neptune Balls
		Schneider Electric
	b. Metal Clad	ВСН
		MDS
29	Switch & Socket	Clipsal (Opal Series)
		Crabtree
		M K India (Wraparound)
		Idoasian-simon
		Legrand (Mosaic)
		Wipro (NorthWest)
		Havells –crownos
		ABB – Lumina
		Anchor Roma
		Siemens
		L&T
30	Ceiling Fan	Crompton Greaves
		Havells
		Orient
		Usha
31	Lighting Fxiture	
	a. Incandescent / Halogen / PL / Metal Halide) /	Philips
	Fluorescent	Wipro
		GE
	b. External Lighting Fixture	Bajaj Electricals Ltd.
		Keslec
		LIGMAN
		Philips
		Wipro
	b. Aviation Obstruction Light(LED Type)	Actos
		Bajaj
		Binay
32	Electronic Ballast for Fluorescent	Osram
	(To be selected as per fixtures' manufacturer)	Opal
		Philips
		Thorn
		Wipro (APF)
33	Selector Switch, Toggle switch	Kaycee

S.No. Details of Materials / Equipment Salzer (Larsen & Toubro) Profab Engineer Ricco Steel Needo MaheshwariElectrtricals Amar Raja Exide Global (Rocket) Hitachi Shinkobe 36 Battery Charger Manufacturer's Name Salzer (Larsen & Toubro) Profab Engineer Ricco Steel Needo MaheshwariElectrtricals Amar Raja Exide Global (Rocket) Hitachi Shinkobe Caldyne ChhabiElectricals	
Cable Trays (Factory Fabricated) / Raceways Profab Engineer Ricco Steel Needo MaheshwariElectrtricals 35 Sealed Maintenance Free Batteries Amar Raja Exide Global (Rocket) Hitachi Shinkobe 36 Battery Charger Caldyne	
Ricco Steel Needo MaheshwariElectrtricals Sealed Maintenance Free Batteries Amar Raja Exide Global (Rocket) Hitachi Shinkobe Battery Charger Caldyne	
Needo MaheshwariElectrtricals 35 Sealed Maintenance Free Batteries Amar Raja Exide Global (Rocket) Hitachi Shinkobe 36 Battery Charger Caldyne	
MaheshwariElectrtricals 35 Sealed Maintenance Free Batteries Amar Raja Exide Global (Rocket) Hitachi Shinkobe 36 Battery Charger Caldyne	
35 Sealed Maintenance Free Batteries Amar Raja Exide Global (Rocket) Hitachi Shinkobe 36 Battery Charger Caldyne	
Exide Global (Rocket) Hitachi Shinkobe 36 Battery Charger Caldyne	
Global (Rocket) Hitachi Shinkobe 36 Battery Charger Caldyne	
Hitachi Shinkobe 36 Battery Charger Caldyne	
Shinkobe 36 Battery Charger Caldyne	
36 Battery Charger Caldyne	
ChhabiElectricals	
Joshi Electricals	
Max Power	
Volstat	
37 Invertor Autopro (Professional Lighting)	
Luminous	
Megatech	
Microtek	
38 Lightning Protection System Erico	
(Early Streamer Emission Type) LPI	
39 Timer ABB	
Larsen & Toubro	
Legrand	
Schneider Electric	
Siemens	
40 50 W Halogen Light Transformer Gemini Global	
(Encapsulated Transformer) Opal	
Philips	
Reiz	
41 Tap off / splitters complete with gasketed G.I. Catvision boxes	
CE	
DX	
Powerage	
Vision Hire	
B. <u>TELELEPHONE / DATA</u>	
1 Tag Block Krone	
TVSE	
2 Telephone armoured / unarmoured cable / wire Delton	ĺ

	LIST OF APPROVED MAKES FOR ELECTRICAL WORKS		
S.No.	Details of Materials / Equipment	Manufacturer's Name	
		Finolex	
		Skytone	
		Fusion Polymer	
		Polycab	
3	Coaxial Cable	Beldon	
		Comm-Scope (US Imported)	
		Fusion Polymer	

No.	Details of Materials / Equipment	Manufacturer's Name
1	a. Vitreous China Sanitaryware	Cera
		Neycer
		Parryware
2	W.C Seat Covers	Admiral
		Tara
3	Low level Flushing cisterns	Commander
		Duralite
	b. WC Connectors	Multiwik
		Viega
2	Bath Tub and Shower Tray	Aquaplus
		Parryware
3	Stainless Steel Sink	Cobra
		Jayna
		Nirali
6	Cistern	Commandor
		Champion
		Parryware
7	CP Brass Fittings	Crabtree
		Ess-Ess
		Gem
		Jaguar
		Kingston
		Parko
		Parryware
		Marc
		Plumber
8	Flow Control Devices	Jaquar
		RST
9	Storage Type Geyser / Heat Pump	Racold
		AO Smith
		Venus
10	Floor Drain Fixture, Rain Water	ACO
	Outlets	GMGR
		Neer
11	Urinal Trap	Chilly
		Neer
12	ULTRA LOW FLOW FIXTURES-	M.N. Padia

C NI		3.6
S.No.	Details of Materials / Equipment (Flush valves, Faucets, Bib taps)	Manufacturer's Name Schell
	Low Flow C.P Fittings	Schen
13	Macerating systems	Grundfos
13	Waterating systems	Sanitop
14	Shower Channel / PP – car parking	ACO
14	channel	Kessel
15	C.D. Creating for Floor Tran	Viega Chilly
13	C.P. Grating for Floor Trap	GMGR
		Neer
1.5	GV (VA G D) GG 1200 1VG	Viega
16	GI / M.S Pipes (IS : 1239 and IS : 3589)	AST Pipes
	3307)	Hitech
		Swastik
		Zenith
17	GI pipes fittings	Crescent Engg Corp. Jalandhar
		KS Engg
	 	RM Engg works, ahmedabad
		Zoloto
18	GI/MS Pipe Protection Wrapping & Coating	IWL - Pypkote
		Neotape
		Rustech – Coatek
		STP Ltd.
19	Pipe clamp & supports	Diamond
		Easyflex
		Intellotech
20	Pipe Hangers	Hitech
	· -	OM fasteners
21	D. I. Pipes	Jindal
	-	NECO
22	UPVC Pipe	Finolex
	A .	Jain
		Kisan
		Prince
		Crescent Engg Corp. Jalandhar
		KS Engg
		RM Engg works, ahmedabad

S.No.	Details of Materials / Equipment	Manufacturer's Name
		Zoloto
23	CPVC pipes & fittings	Ajay
		Ashirwad
		Astral
		Prince
24	Teflon Tape	
25	Toilet Accessories	Akoi
		Parko
26	P.P.R Pipes	Prince
		Reliance
		Supreme
27	P.E.X pipes	Itap
		Giacomini
		Henco
		Viega
28	FRP/GRP Manhole covers	Everlast
		Thermoset
29	HDPE Pipe & fitting	Duraline
		Kimplas
		Reliance
30	RCC Pipe	Dhere
		KK
		INDIAN HUME PIPE
		Pranali
31	Stoneware Pipes	Anand
		Burn & Co.
		Perfect potteries
		Rajura
32	GM / Forged Brass Ball Valves	Jayhiwa
		Leader
		RB
		Sant
33	Sluice Valves	Advance
		Kirloskar
		Marck-Cair
		SANT
		Zoloto
34	Butterfly Valve	Audco
		Jayhiwa

S.No.	Details of Materials / Equipment	Manufacturer's Name
	<u> </u>	Keystone
		Marck-Cair
35	Check Valve – WaferType	Kirloskar
		Jayhiwa
		Marck-Cair
		Normex
36	Check Valve – Dual Plate	Marck-Cair
		Normex
		Sant
37	Cast Iron Non Return valve	Leader
		Zoloto
38	Check Valve Forged Screwed	Leader
		RB
		Zoloto
39	Pressure Reducing Valve	Marck-Suzhik
		RB
		OR
		Zoloto
40	Solenoid Valve	Avcon
		Aira
		Danfoss
41	Thermostatic mixing valve	Danfoss
	-	Overtrop
42	Air Release Valve	Marck
		OR
		RB
		Studor
		Zoloto
43	Ball Float Valve	Prayag
		Zoloto
44	NRV – Ball type – Sewage	Danfoss
	application	Silverspark
		Normex
45	Backflow preventor	Normex
46	Foot valve	Kirloskar
		Normex
47	HDPE Tanks	Sintex
		Ashish
48	Air Vent Inlet Valve	Studor

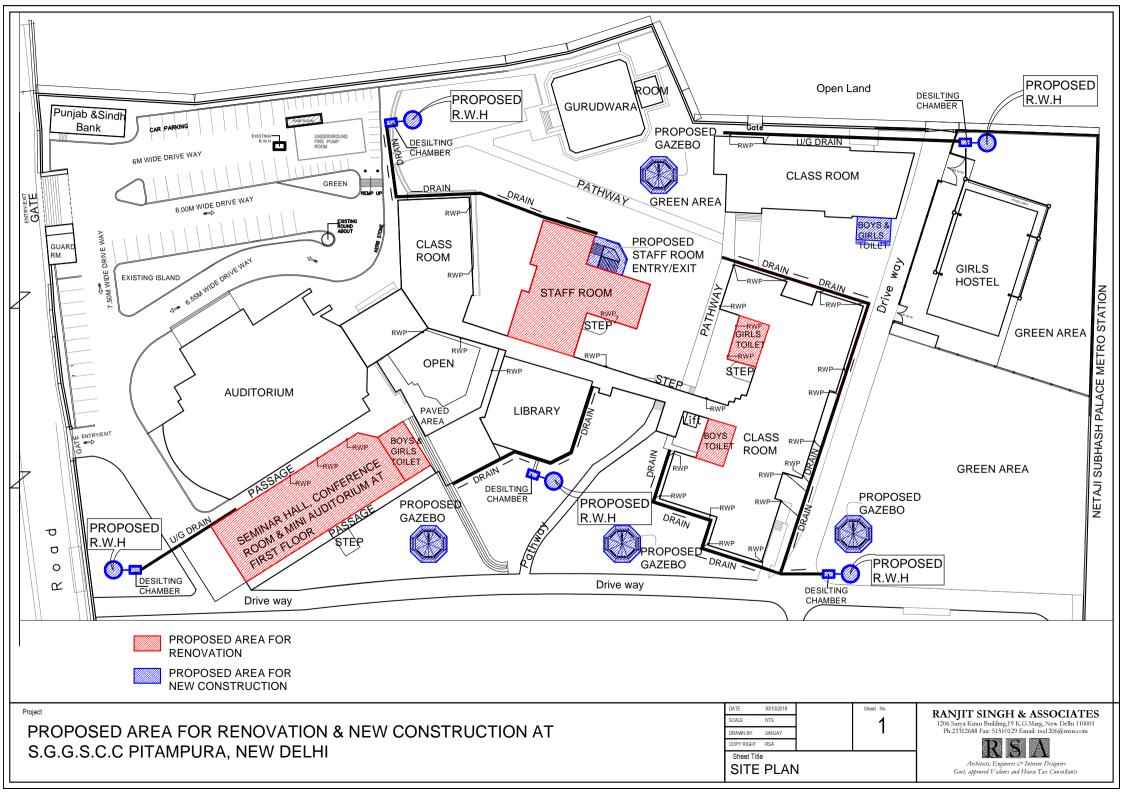
S.No.	Details of Materials / Equipment	Manufacturer's Name	
49	Food Crusher for Sink	Enviro	
		Venus	
		Zach- Rajguru	
50	FRP/GRP- SMC water tank	Devi Polymers pvt. Ltd.	
		Smartage	
		Binani	
51	FRP/GRP storage tanks	Sintex	
52	Y Strainer CI	Leader	
		Marck-Cair	
		Zoloto	
53	Hydropneumatic System	Aquasub Engineering	
		CRI Pumps	
		Dharani pumps	
		Grundfos	
		Kirloskar	
		Nocchi	
		Nanfang	
		Willo – Mather & Platt	
54	Storm Water Drainage & Sewage	Aquasub Engineering	
	Sump Pumps (Submersible)	CRI Pumps	
		Darling	
		Dharani	
		Grundfos	
		Kirloskar	
		KSB	
		Kishor	
		Nocchi	
		Mody	
		Willo – Mather & Plantt	
55	Transfer Pumps	Aquasub Engineering	
		CRI Pumps	
		Dharani	
		Grundfos	
		Kirloskar	
		KSB	
		Nanfang	
		Nocchi	
		Willo - Mather & Platt	
56	Self-Priming Pumps	Aquasub Engineering	

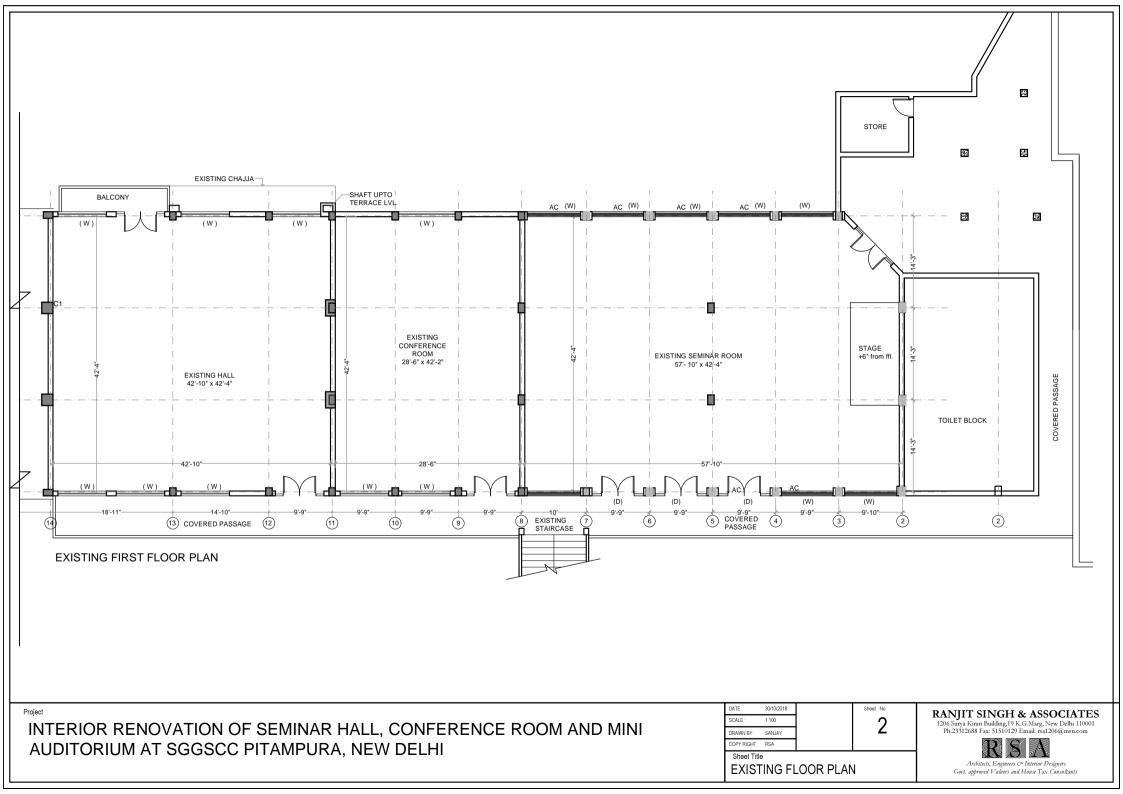
S.No.	Details of Materials / Equipment	Manufacturer's Name
		CRI Pumps
		Johnson
		Kirloskar
57	Borewell Pump	Aquasub Engineering
		CRI Pumps
		Grundfos
		Kirloskar
58	Anti Vibration Mounting & Flexible	Cori
	Connections	Dunlop
		Flexionics
		Easyflex
		Resistoflex
		VIMPA
59	Pressure Gauge	Fiebig
		H Guru
60	Water Meter (Mechanical Type)	Dasmesh
		Kranti
		Kent
61	Level Controller & Indicator (Water)	Pumptrol
		RM Engg. Works, Ahmedabad
62	Paints	Asian Paints
		Berger
		ICI
		Shalimar Paints
63	MH / Water Tank Plastic Steps	KGM
		Patel
		Pranali Industries
64	Insulation for Hot Water Dines	Armacell – Armaflex
04	Insulation for Hot Water Pipes	K-Flex
		Thermaflex
65	Electric Hot Water Generator / Heat	A.O. Smith
03	Pump	A.O. Sillidi Spherehot
		Spnerenot Venus
		Riello
66	Solar Haating	A.O Smith
00	Solar Heating	
		Ecotherm Magazan (Grance)
		Megason (Greece)
		Overtrap

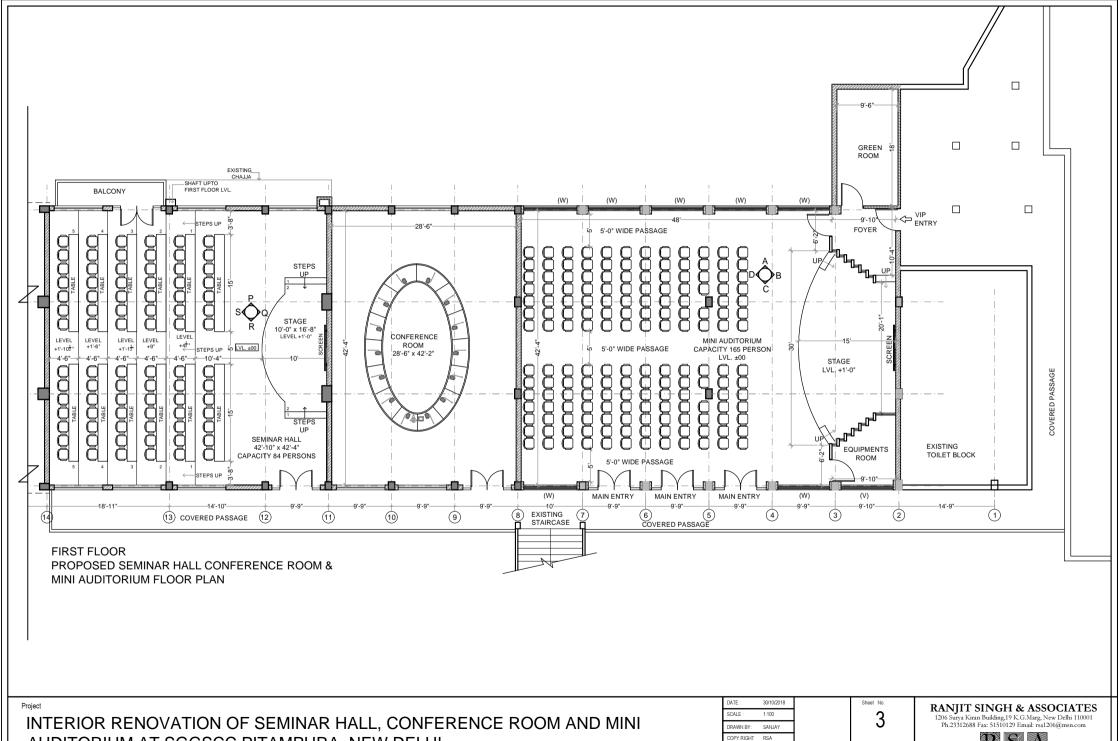
	LIST OF APPROVED MAK	KES FOR SANITARY WORKS
S.No.	Details of Materials / Equipment	Manufacturer's Name
		Solinteks
		Tata BP Solar
		Vijay Solar
67	Grease Trap/Separator	ACO
		Wade
68	Welding Rods	Ador
		Cosmos
		Prima (S)
		Super Bond (S)
69	Fastener	Fisher
		Hilti
		Mungo
		Powers
70	Fire Sealant	Birla 3 M
		Hilti
		Powers
		Promat
		STI (USA)/ Fire master
71	Manhole (prefabricated)	OK Play
		Supreme
72	Temperature Sensor / Gauge	Forbes Marshall
		Danfoss
		Wika
73	Vacuum Sewer System	Roediger Vacuum
74	Syphonic Roof Drainage System	Geberit
		George Fisher
		Neuva Terrain
		Saint Gobian

LIST OF CUTTING, ALTERATION AND CORRECTION IN THE FINANCIAL BID

S.NO.	TENDER	TENDER	DETAIL OF MODIFICATION MADE
	PAGE NO.	ITEM NO.	



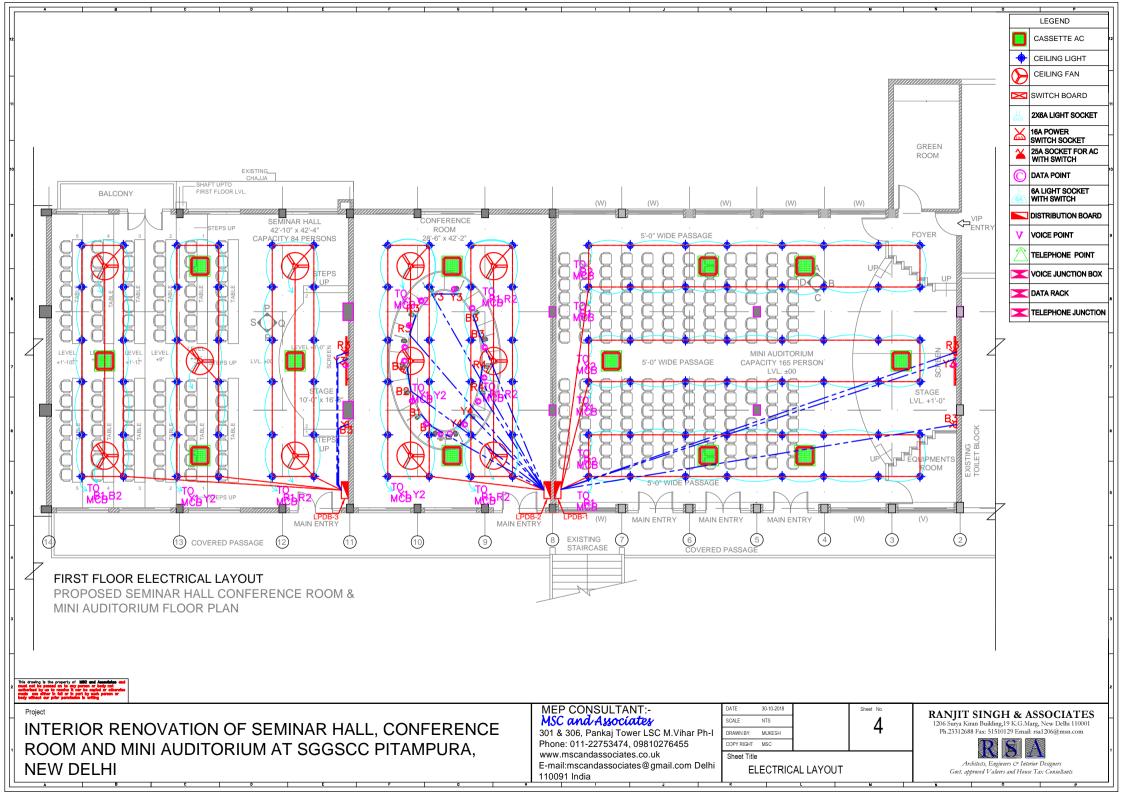


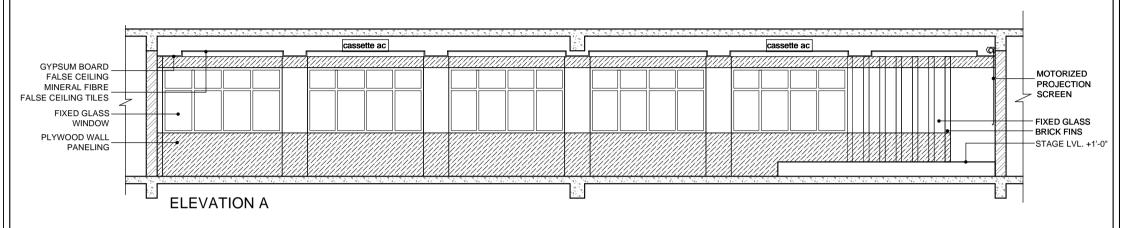


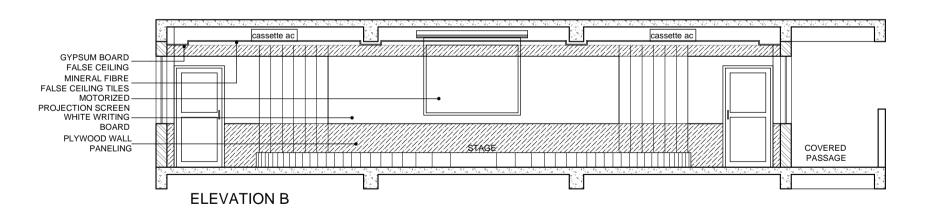
AUDITORIUM AT SGGSCC PITAMPURA, NEW DELHI

PROPOSED FLOOR PLAN









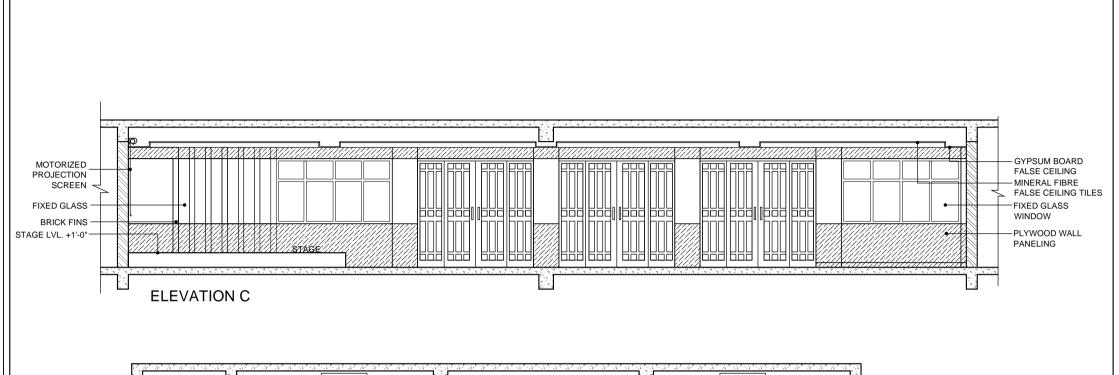
Drainat

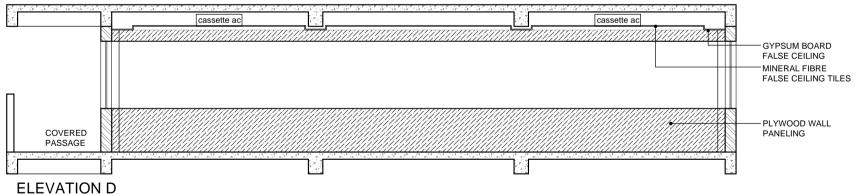
INTERIOR RENOVATION OF SEMINAR HALL, CONFERENCE ROOM AND MINI AUDITORIUM AT SGGSCC PITAMPURA, NEW DELHI

SCALE : DRAWN BY: COPY RIGHT	1:100 SANJAY RSA	5
Sheet Title	9	EVATIONS

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







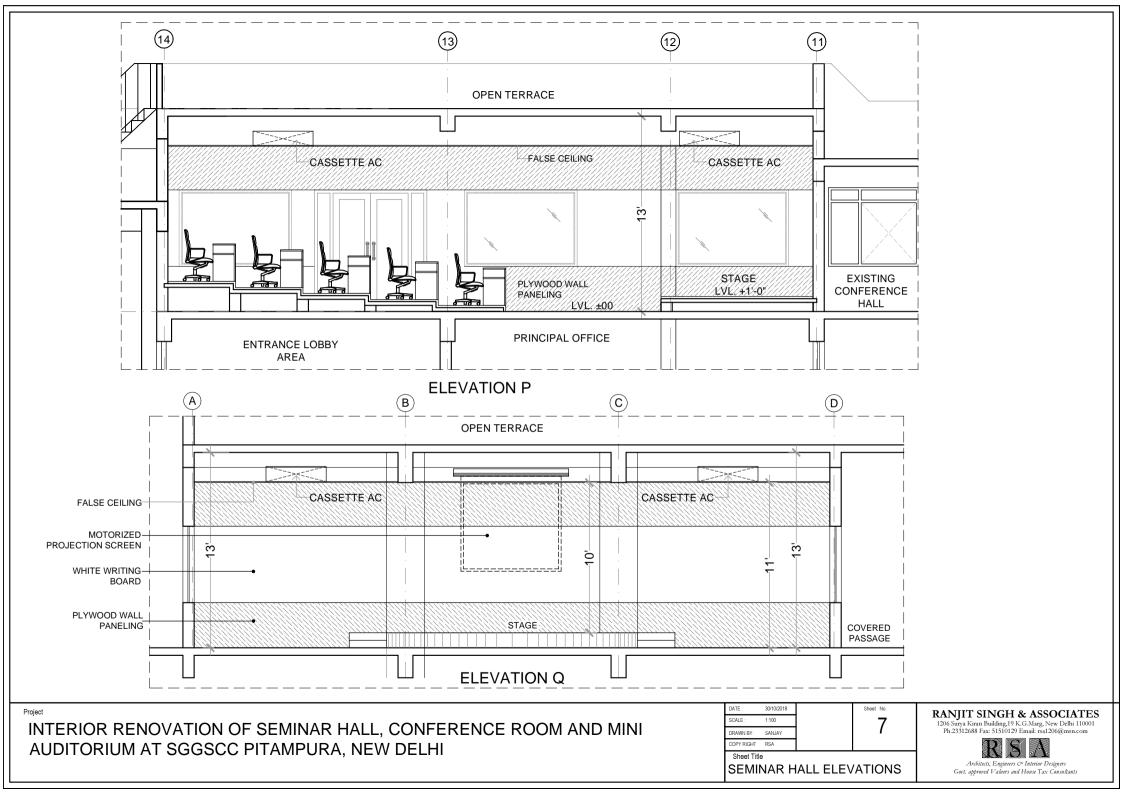
INTERIOR RENOVATION OF SEMINAR HALL, CONFERENCE ROOM AND MINI AUDITORIUM AT SGGSCC PITAMPURA, NEW DELHI

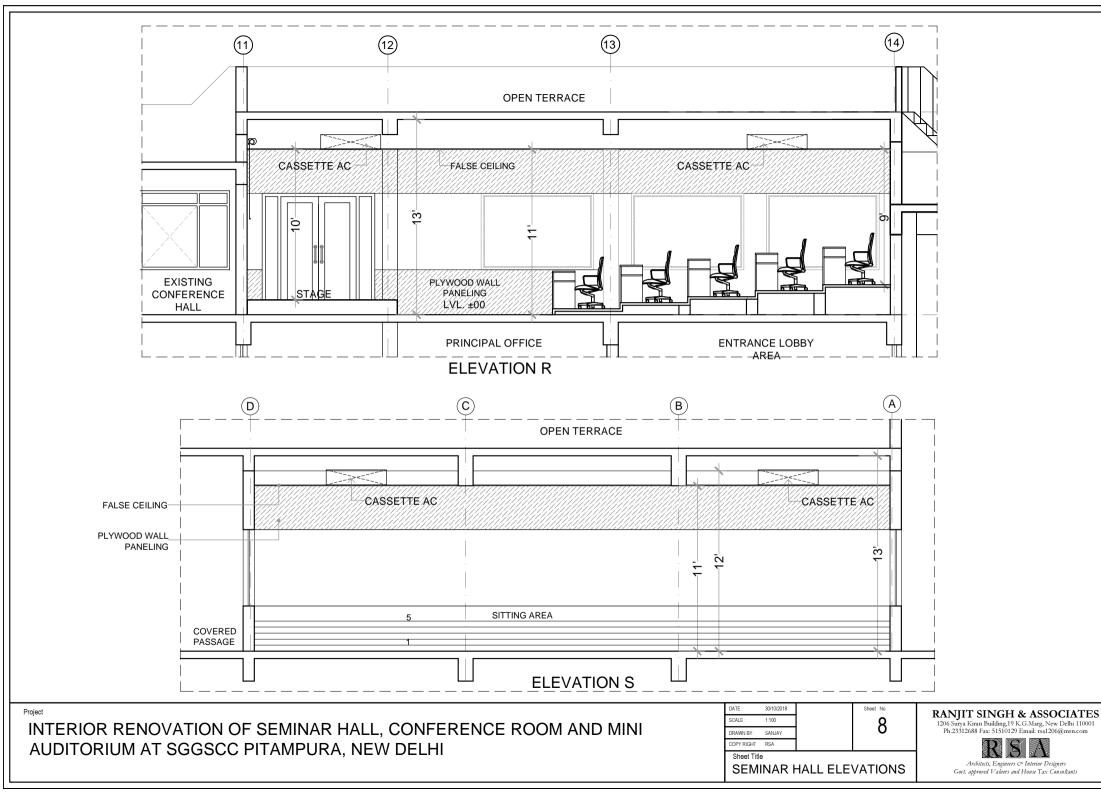
DATE :	30/10/2018		Sheet No.
SCALE :	1:100		6
DRAWN BY:	SANJAY		O
COPY RIGHT	RSA		
Sheet Title	9		
MINI A	AUDIT	ORIUN EL	EVATIONS

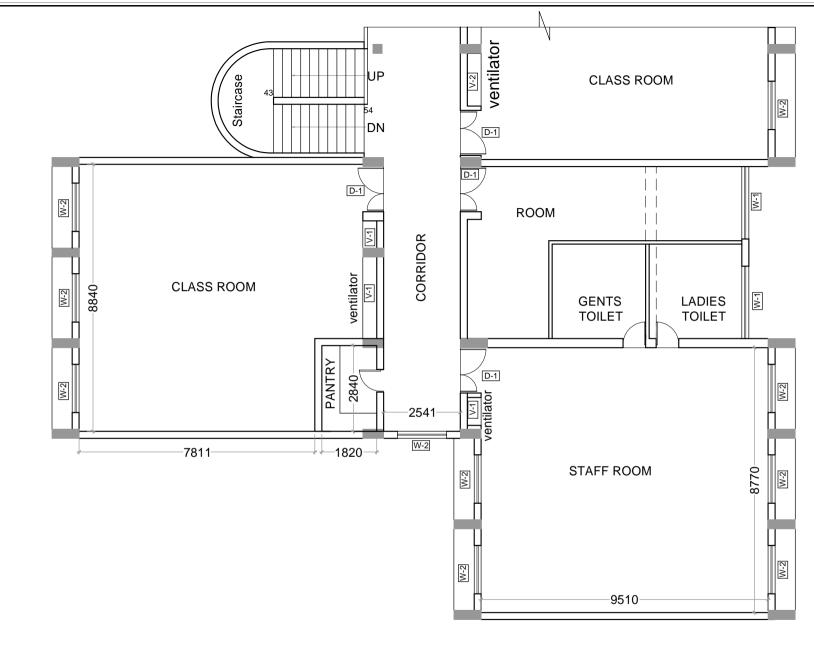
RANJIT SINGH & ASSOCIATES

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









EXISTING GROUND FLOOR PLAN

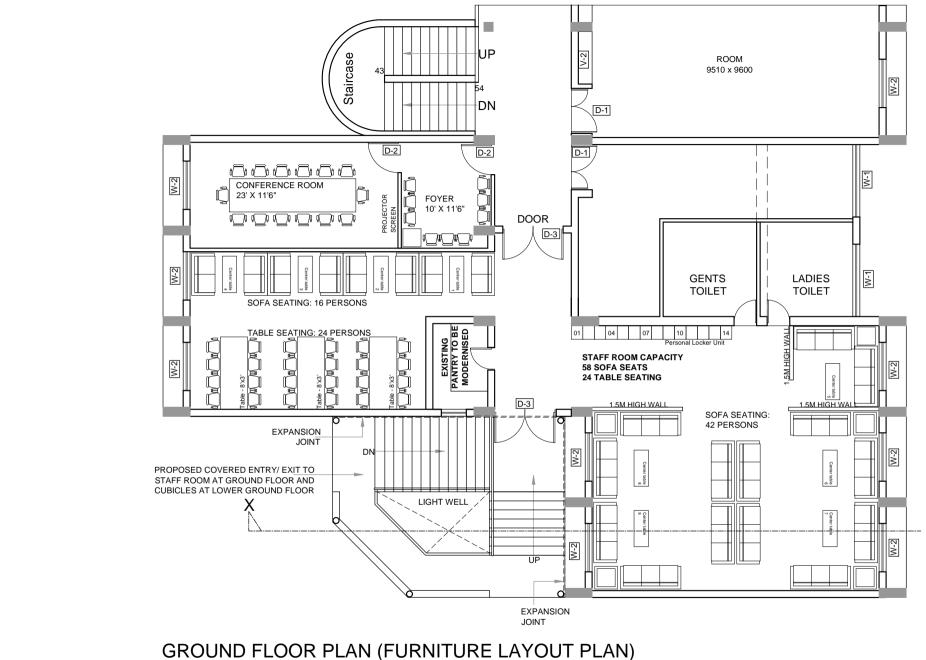
CONSTRUCTIN OF NEW COVERED ENTRY/EXIT AND REVOVATION WORKS FOR STAFF ROOM & BASEMENT FLOOR AT SGGSCC PITAMPURA, NEW DELHI

9 **EXISTING GROUND FLOOR PLAN**

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



Govt. approved Valuers and House Tax Consultant.



GROUND FLOOR PLAN (FURNITURE LAYOUT PLAN)

CONSTRUCTIN OF NEW COVERED ENTRY/EXIT AND REVOVATION WORKS FOR STAFF ROOM & BASEMENT FLOOR AT SGGSCC PITAMPURA, NEW DELHI

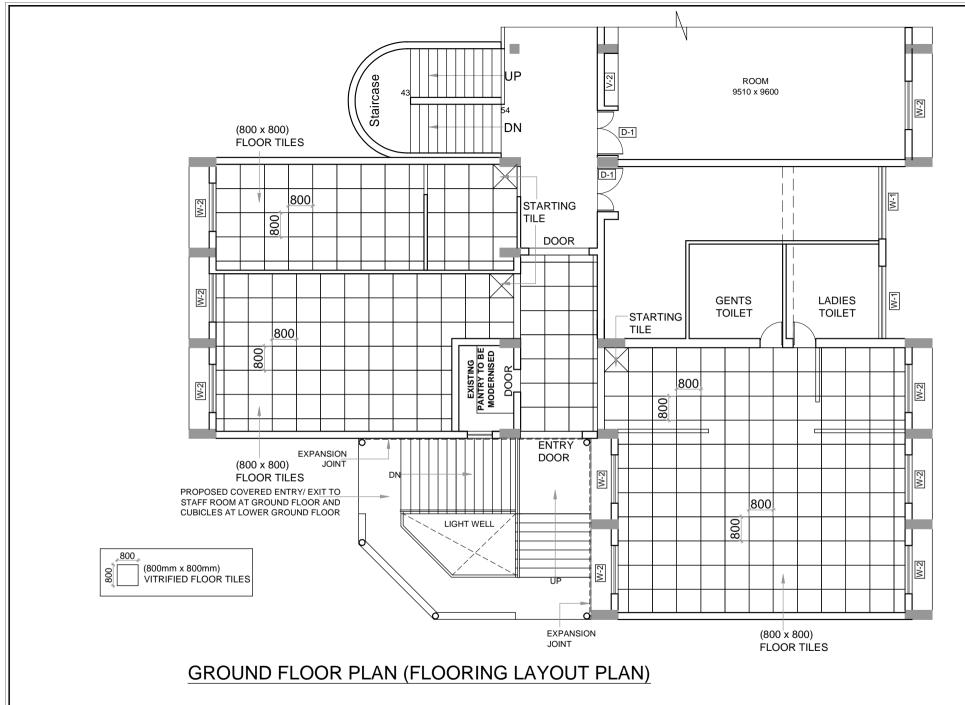
FURNITURE LAYOUT PLAN

RANJIT SINGH & ASSOCIATES

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



Govt. approved Valuers and House Tax Consultant.



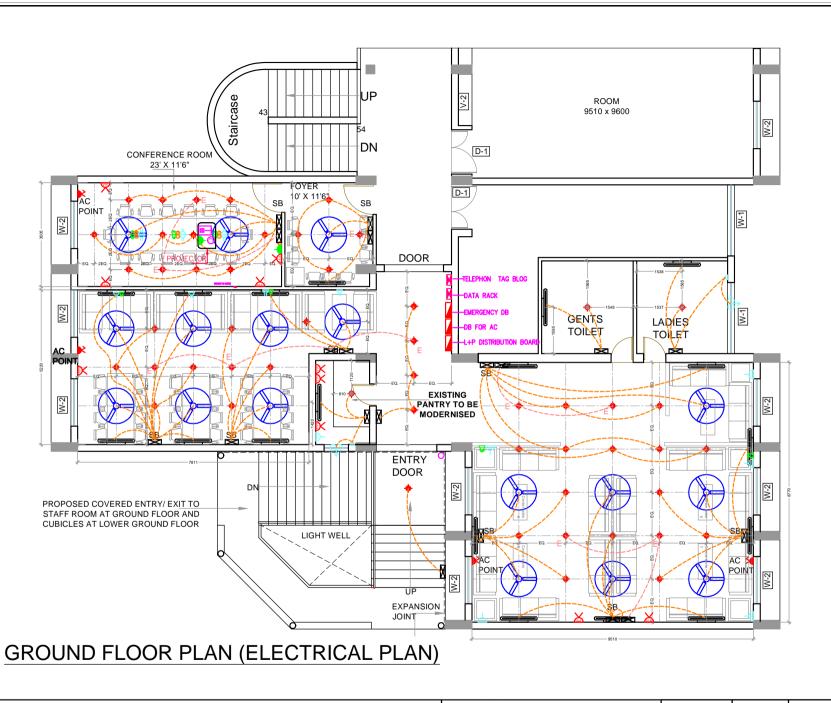
CONSTRUCTIN OF NEW COVERED ENTRY/EXIT AND REVOVATION WORKS FOR STAFF ROOM & BASEMENT FLOOR AT SGGSCC PITAMPURA, NEW DELHI

DATE : SCALE :	30/ 10/ 2018 1:100		Sheet No.
DRAWN BY:	SANJAY		11
COPY RIGHT	RSA Fitle		
		LAYOUT F	PLAN

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



Govt. approved Valuers and House Tax Consultants



This drawing is the property of MSC and Associates on must not be passed on to any person or body not authorised by us to receive it nor be copied or otherwise mode use either in full or in part by such person or body without our prior permission in writing

LEGEND: -

S.NO. DESCRIPTION (HT 1200MM FFL) CASSETTE AC (3.75KW) 6A LIGHT SOCKET WITH SWITCH (HT 600MM FFL) 16A POWER SWITCH SOCKET (HT 600MM FFL) 6A SOCKET FOR EXHAUST FAN DISTRIBUTION BOARD 2X6A LIGHT SOCKET 16A UPS SOCKET PROJECTOR POINT 12 25A SOCKET WITH SWITCH FOR (AC)(HT 2200MM FFL) 13 1200MM CEILING FAN 14 15 1X28W WALL LIGHT CFL FIXTURE (HT 2250MM FFL)

Project

CONSTRUCTIN OF NEW COVERED ENTRY/EXIT AND REVOVATION WORKS FOR STAFF ROOM & BASEMENT FLOOR AT SGGSCC PITAMPURA, NEW DELHI

MEP CONSULTANT:

MSC 'n' Associates

301 & 306, Pankaj Tower LSC M.Vihar Ph-I Delhi 110091 India Phone: 011-22753474, 09810276455

E-mail:mscandassociates@yahoo.co.uk www.mscandassociates.co.uk

DATE :	30/ 10/ 2018	ı
SCALE :	1:100	l
DRAWN BY:	SANJAY	l
COPY RIGHT	RSA	l

GROUND FLOOR

ELECTRICAL LAYOUT

12

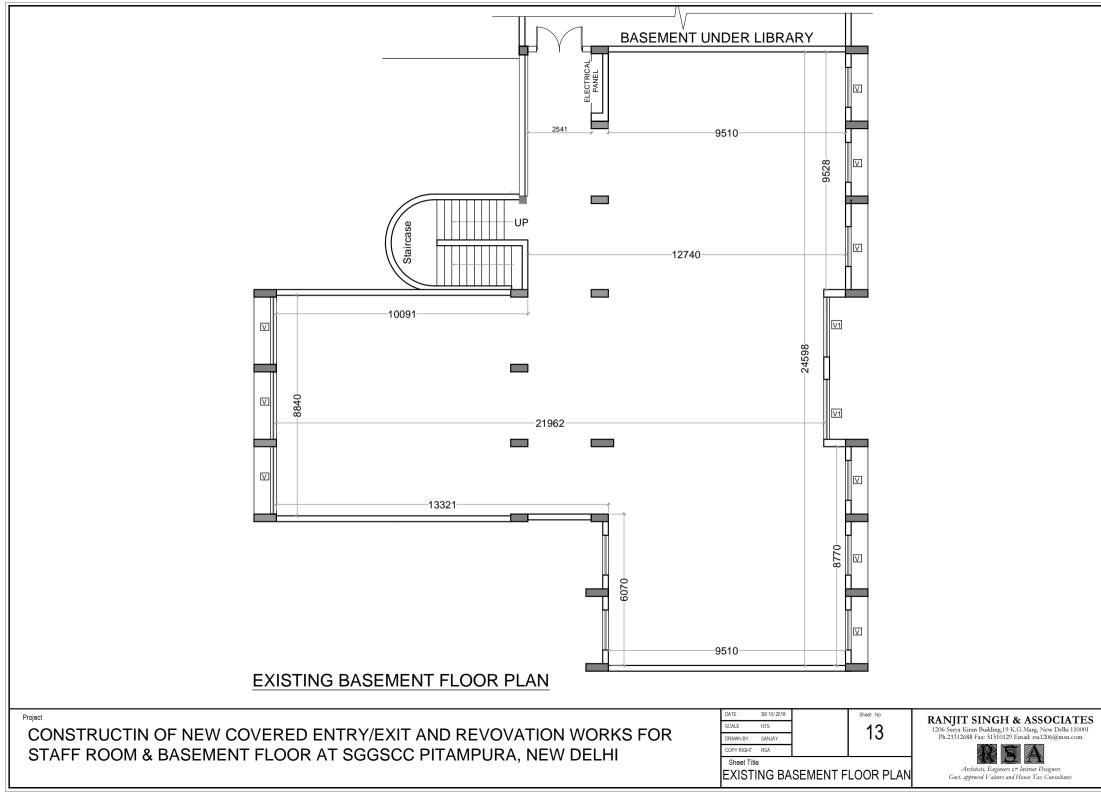
RANJIT SINGH & ASSOCIATES
1206 Surya Kiran Building,19 K.G.Marg, New Delhi 110001

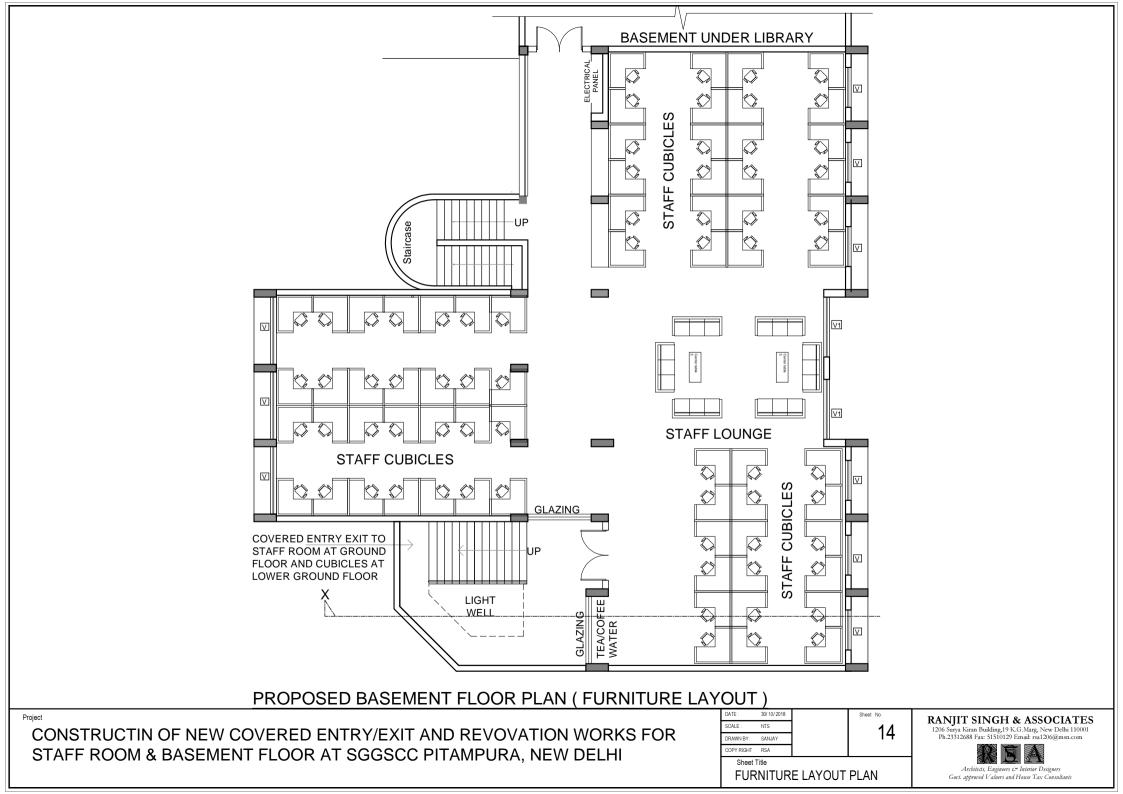
ARCHITECT

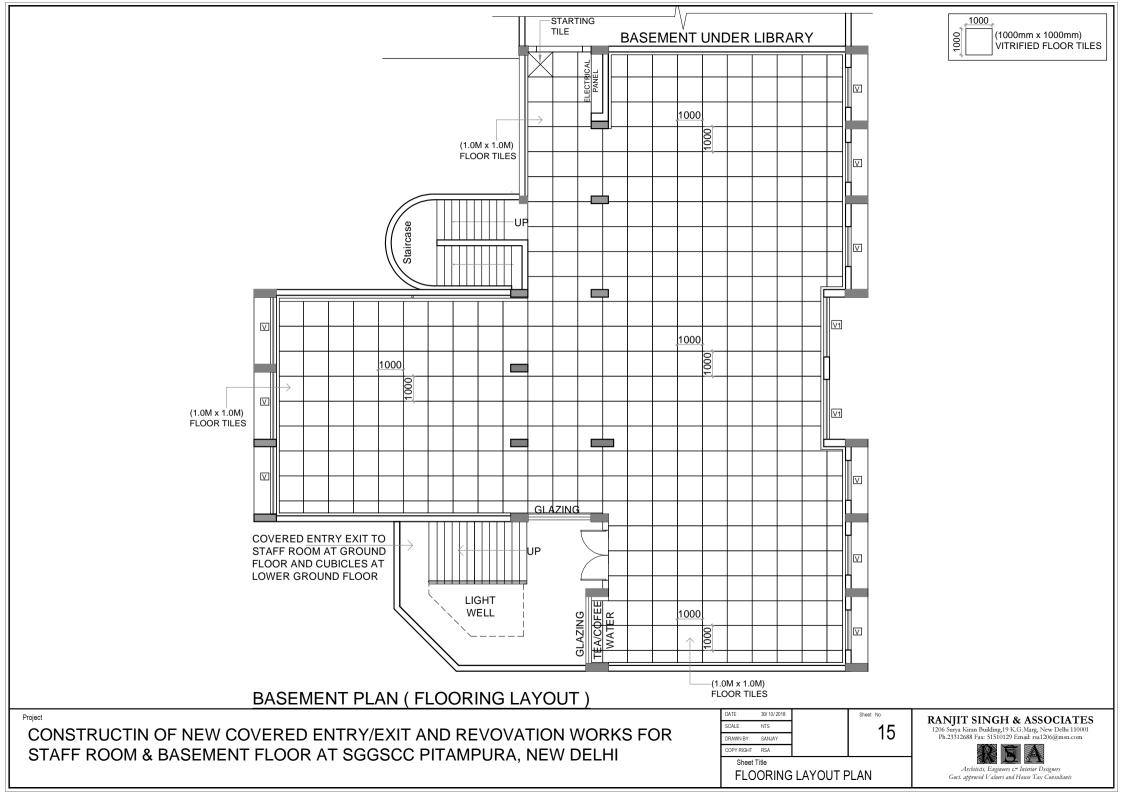


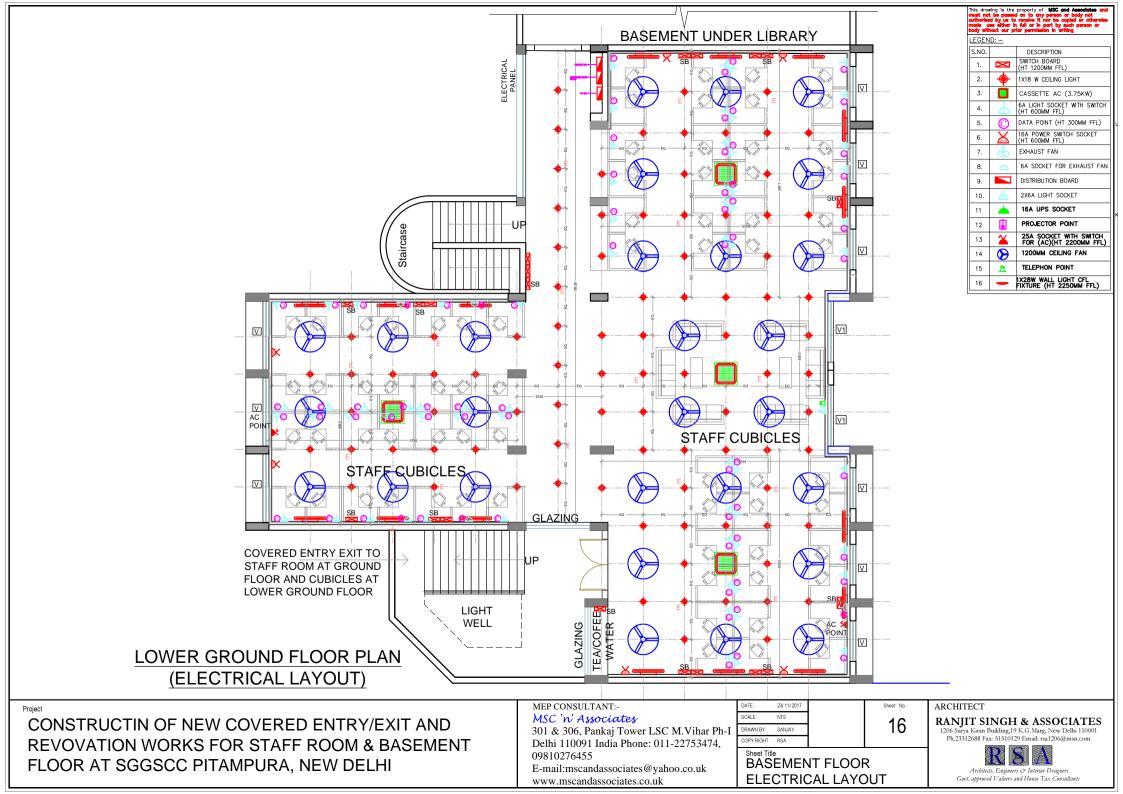


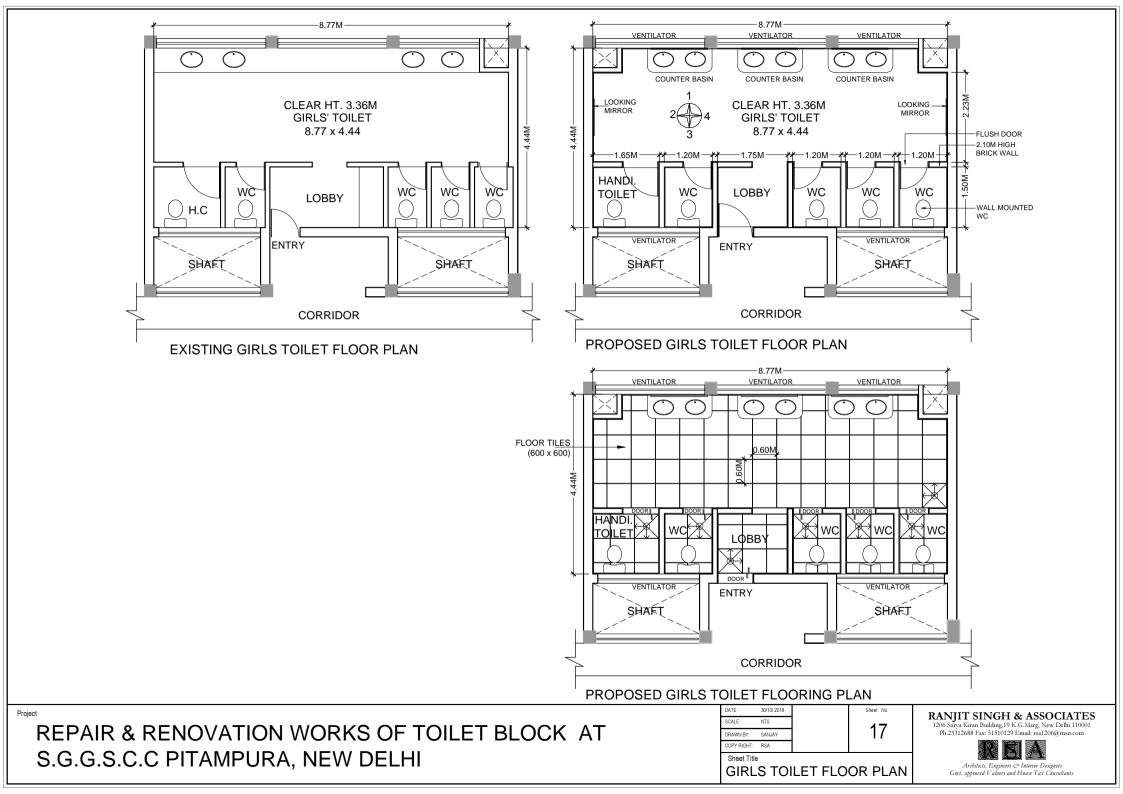
Architects, Engineers & Interior Designers Govt. approved Valuers and House Tax Consultants

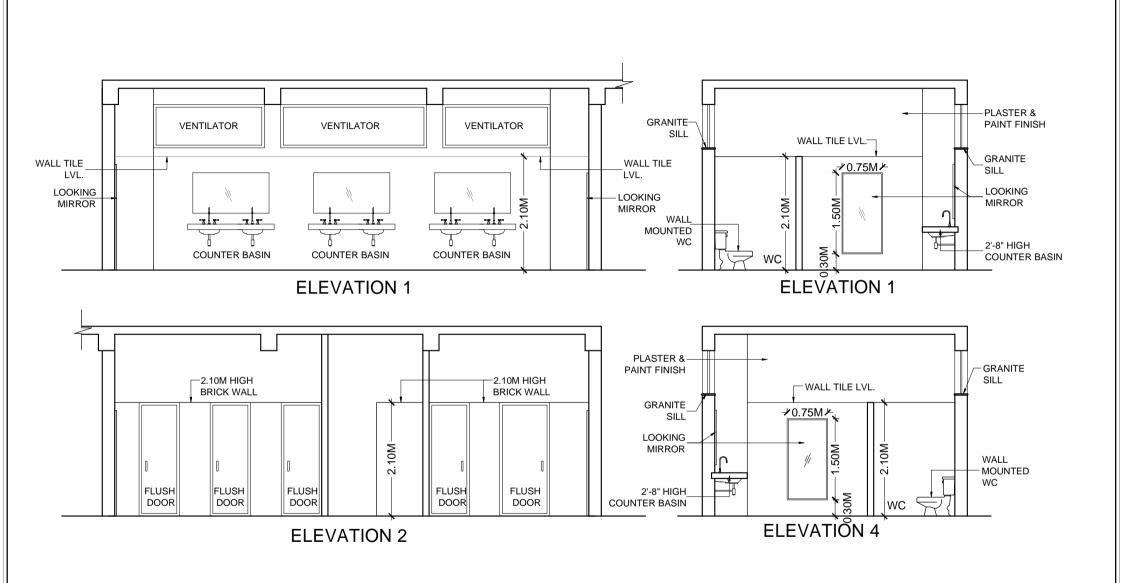












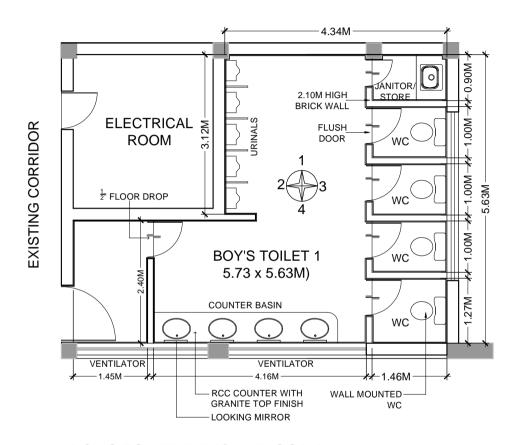
REPAIR & RENOVATION WORKS OF TOILET BLOCK AT S.G.G.S.C.C PITAMPURA, NEW DELHI

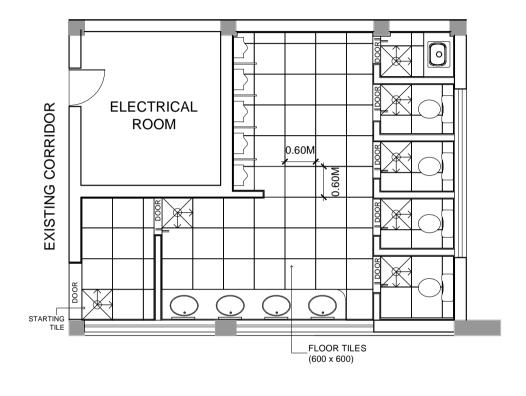
DATE :	30/10/ 2018		Sheet No.	Γ
SCALE :	NTS		10	l
DRAWN BY:	SANJAY		10	l
COPY RIGHT:	RSA			
Sheet Title)			l
GIRL	S TOI	LET ELE	VATIONS	

RANJIT SINGH & ASSOCIATES
1206 Surya Kiran Building,19 K.G.Marg, New Delhi 110001
Ph.23512688 Fax: 51510129 Email: rsa1206@msn.com



Architects, Engineers & Interior Designers Govt. approved V aluers and House Tax Consultants





BOY'S TOILET TYPICAL FLOOR PLAN (GROUND, 1st AND 2nd FLOOR)

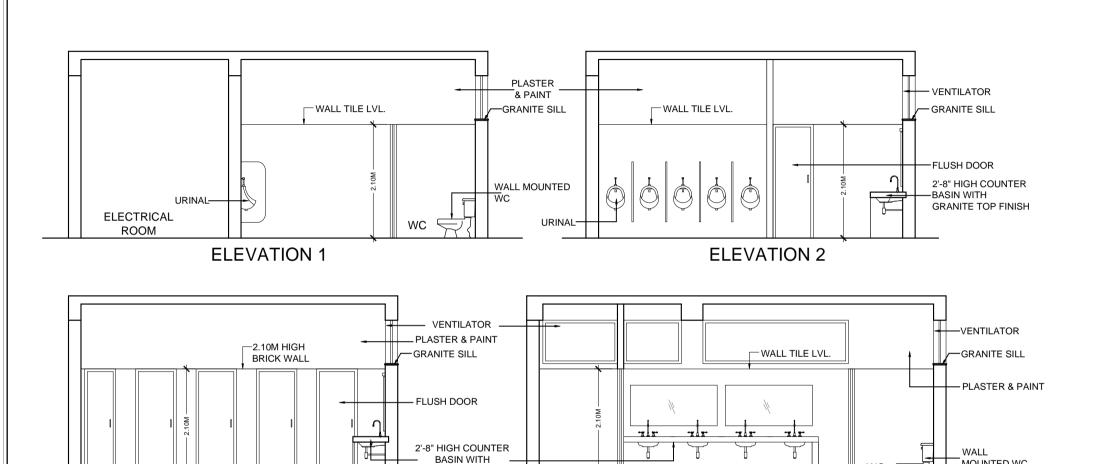
BOY'S TOILET TYPICAL FLOORING PLAN (GROUND, 1st AND 2nd FLOOR)

REPAIR & RENOVATION WORKS OF TOILET BLOCK AT S.G.G.S.C.C PITAMPURA, NEW DELHI

30/10/2018 19 DRAWN BY COPY RIGHT: **BOY'S TOILET FLOOR PLAN**

RANJIT SINGH & ASSOCIATES





GRANITE TOP FINISH

REPAIR & RENOVATION WORKS OF TOILET BLOCK AT S.G.G.S.C.C PITAMPURA, NEW DELHI

ELEVATION 3

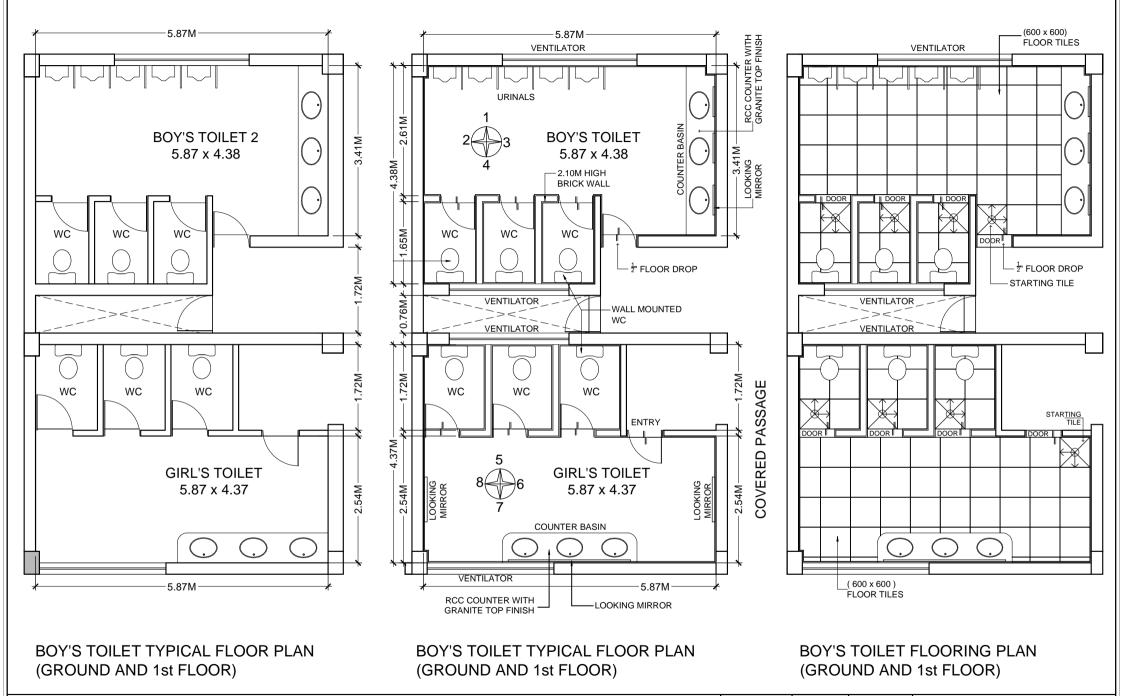
DATE:	30/10/ 2018		Sheet No.
SCALE :	NTS		20
DRAWN BY:	SANJAY		20
COPY RIGHT:	RSA		
Sheet Title)		
BOY'	S TOI	LET ELEC	CATIONS

ELEVATION 4

RANJIT SINGH & ASSOCIATES

MOUNTED WC





REPAIR & RENOVATION WORKS OF TOILET BLOCK AT S.G.G.S.C.C PITAMPURA, NEW DELHI

DATE: 30/10/2018 Sheet No.

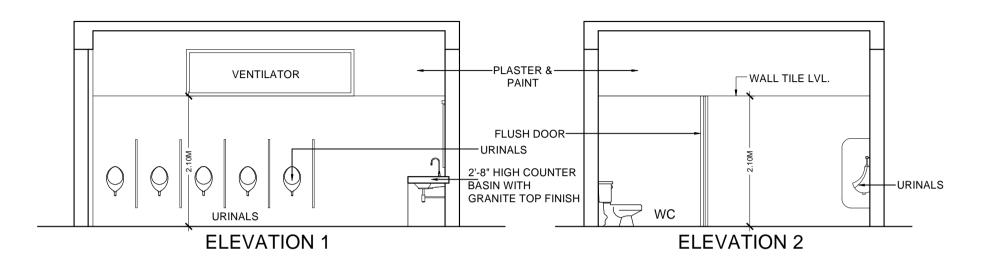
SCALE: NTS
DRAWNBY: SANJAY
COPY RIGHT: RSA

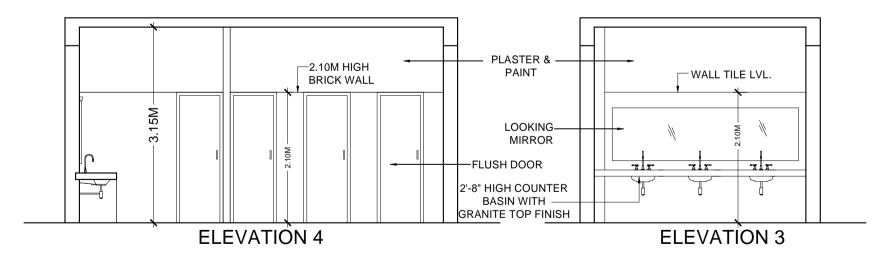
Sheet Title
BOY'S TOILET FLOOR PLAN

RANJIT SINGH & ASSOCIATES 1206 Surya Kiran Building,19 K.G.Marg, New Delhi 110001 Ph.23312688 Fax: 51510129 Email: rsal206@msn.com



Architects, Engineers & Interior Designers Govt. approved Valuers and House Tax Consultants





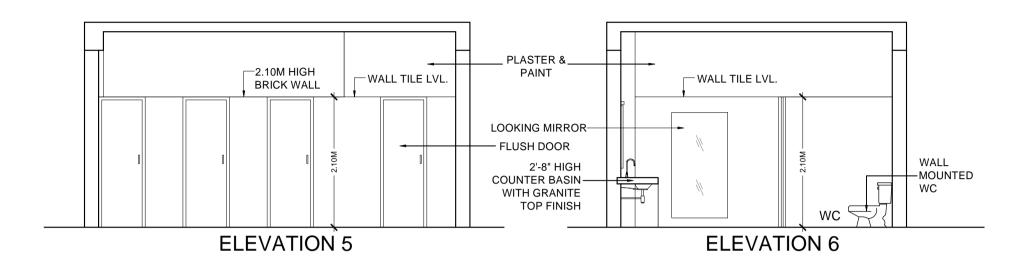
REPAIR & RENOVATION WORKS OF TOILET BLOCK AT S.G.G.S.C.C PITAMPURA, NEW DELHI

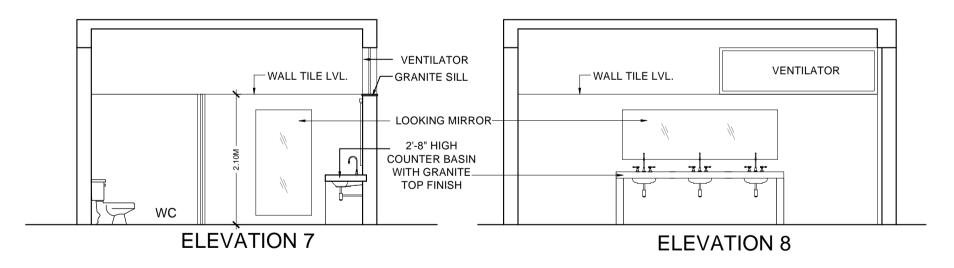
DATE:	30/10/ 2018		Sheet No.
SCALE :	NTS		22
DRAWN BY:	SANJAY		
COPY RIGHT:	RSA		
Sheet Title	Э		
BOY'	S TOI	LET ELE	VATIONS

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



Architects, Engineers & Interior Designers ovt. approved Valuers and House Tax Consultants



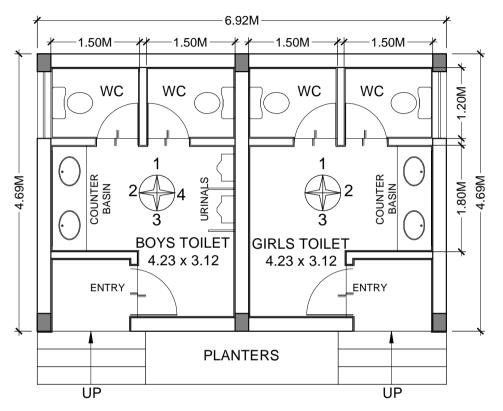


REPAIR & RENOVATION WORKS OF TOILET BLOCK AT S.G.G.S.C.C PITAMPURA, NEW DELHI

DATE :	30/10/2018		Sheet No.
SCALE :	NTS		00
DRAWN BY:	SANJAY		23
COPY RIGHT:	RSA		
Sheet Title)		
GIRL	'S TO	ILET ELE	VATIONS







PLANTERS

UP

PLANTERS

UP

UP

UP

UP

6.92M

PROPOSED BOYS & GIRLS TOILET FLOOR PLAN (NEAR BY GIRLS HOSTEL)

PROPOSED BOYS & GIRLS TOILET FLOORING PLAN (NEAR BY GIRLS HOSTEL)

Project

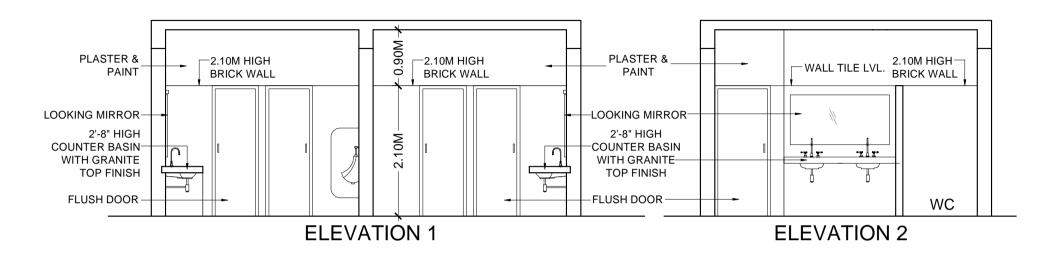
PROPOSED NEW TOILET BLOCK AT S.G.G.S.C.C PITAMPURA, NEW DELHI

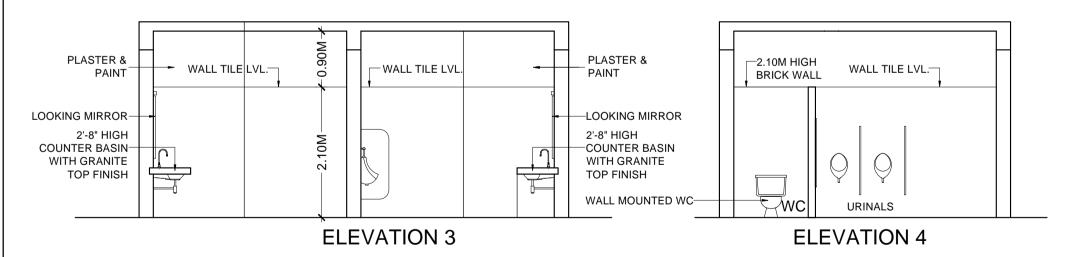
DATE :	30/10/ 2018		Sheet No.
SCALE :	NTS		ا ما
DRAWN BY:	SANJAY		24
COPY RIGHT:	RSA		
Sheet Title	9	•	
GIRI '	S & B	OYS TOII	LET ELEV.

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



Architects, Engineers & Interior Designers ovt. approved Valuers and House Tax Consultant



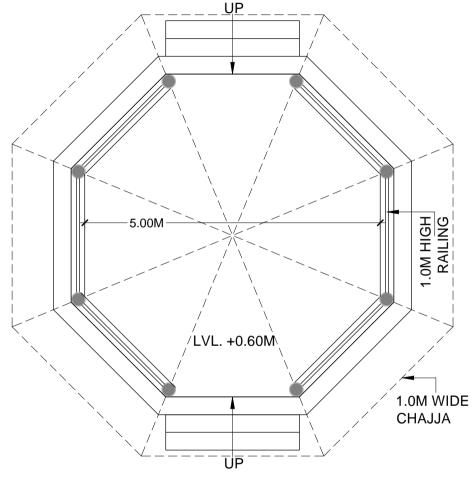


PROPOSED NEW TOILET BLOCK AT S.G.S.C.C PITAMPURA, NEW DELHI

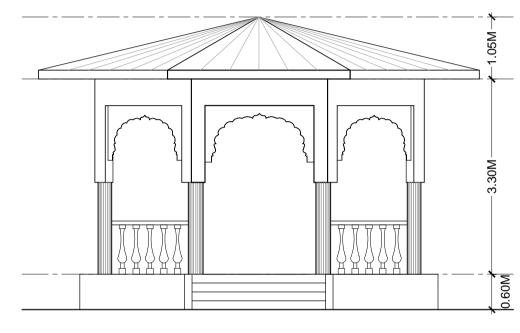
SCALE: N	ITS		
		0.5	
DRAWN BY: S	ANJAY	25	
COPY RIGHT: R	SA		

RANJIT SINGH & ASSOCIATES





PROPOSED GAZEBO FLOOR PLAN (4 NOS.)



PROPOSED GAZEBO ELEVATION

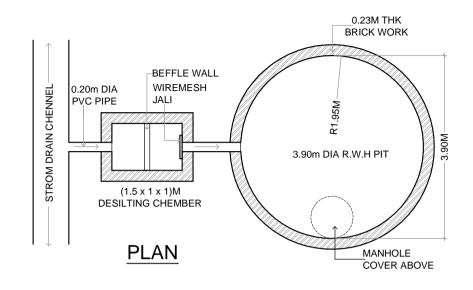
PROPOSED GAZEBO AT S.G.G.S.C.C PITAMPURA, NEW DELHI

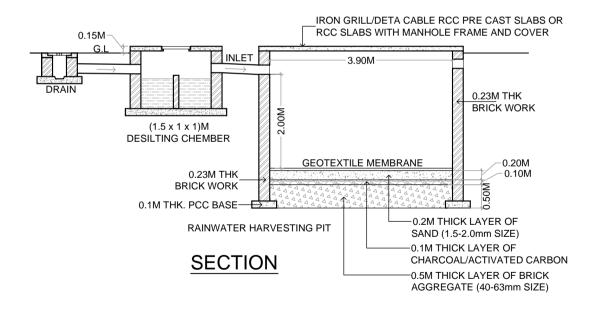
DATE :	30/10/ 2018		Sheet No.	
SCALE :	NTS		00	
DRAWN BY:	SANJAY		26	
COPY RIGHT:	RSA			
Sheet Title				
FLOOR PLAN & ELEVATION				

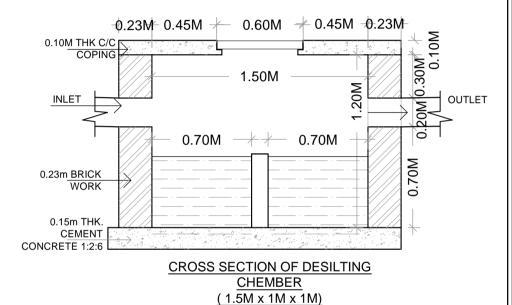




Architects, Engineers & Interior Designers ovt. approved Valuers and House Tax Consultant.







PROPOSED RAINWATER HAEVESTING WORKS AT S.G.G.S.C.C PITAMPURA, NEW DELHI

DATE :	30/10/ 2018		Sheet No.
SCALE :	NTS		27
DRAWN BY:	SANJAY		21
	H PIT	& DESIL	TING

RANJIT SINGH & ASSOCIATES

1206 Surya Kiran Building,19 K.G.Marg, New Delhi 110001 Ph.23312688 Fax: 41510129 Email: rsa1206@msn.com

Govt. approved Valuers and House Tax Consultants

