

INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY ESTATE OFFICE, POWAI, MUMBAI, MAHARASHTRA – 400 076

TEL. 022 2576 4995 E-mail: drestate@iitb.ac.in

IIT Bombay invites digitally signed Technical Bid & Financial Bid for following work from the contractors having **similar** experience in Central Government Departments / State Government Departments / Central or State Autonomous Bodies / State or Central Public Sector Undertakings & Large Private Organizations. The detail of work is given below:

Sr. No.	Name of Work	Estimated Cost (In Rs.) Incl. 18% GST	EMD (Rs.)	Time Limit	RFX No.
	External/Internal repair, including painting of the store, computer room, and 1 st floor corridor in the old Hospital Building. EO/A/HILLSIDE/WKS-92/24-25		Rs. 2,40,000/-	06 months	6100001890

Intending bidders needs be register themselves on IIT Bombay portal i.e. https://portal.iitb.ac.in/vrp/index.jsp to get User ID and Password. View the open tender on https://ep.iitb.ac.in/irj/portal Please visit https://portal.iitb.ac.in/vrp/vrp_srm_docs.jsp for configuration process and user manual. For queries regarding vendor registration please contact on 022 – 2159 3001(ASC ITelp-desk) and for queries regarding online Bid submission please contact to +91 82915 56277/6377 or mail at srm@iitb.ac.in.

Date and time of submission of tender documents digitally are from 30.09.2024 to 16.10.2024 till 11:15 a.m.Date of opening of Technical Bid will be 16.10.2024 at 11.30 a.m. and and Financial Bid 23.10.2024 (Tentative)

Interested contractors/agencies are requested to upload Technical bid and Financial bid on the SRM tendering portal of IIT Bombay.

- (A) All contractors/agencies should upload technical bid with the following documents on SRM tendering portal, failing to which their tender will be summarily rejected from the tendering process:
 - 1) i. Experience of having successfully completed works during the last 7 years ending last day of the month previous to the one in which applications are invited:

Three similar completed works costing not less than the amount equal to 40% of estimated cost put to tender,

OR

Two **similar completed works,** costing not less than the amount equal to 60% of the estimated cost put to tender OR

One similarcompleted work of aggregate cost not less than the amount equal to 80% of the estimated cost.

AND

- ii. One completed work of any nature (either part of (i) or a separate one) costing not less than the amount equal to 40% of the estimated cost put to tender with some Central Government Departments / State Government Departments / State or Central Autonomous Bodies / State or Central Public Sector undertakings.
- 2) Detail statement for work completed, work in hand including balance commitment of work should be enclosed for last three year commencing from 1st April and ended with 31st March and contractor should submit his details as per Annexure'A' format with support of xerox copies of work order and work completion certificates, otherwise the bid capacity will not be calculated and his technical bid will be summarily rejected, and no Financial Bid will be opened. (All contractors/agencies are hereby informed that they should upload Technical bid as per format of Annexure "A", changing in format is not allowed).
- 3) Upload a scan copy of the information in respect of **manpower/mandays** for above said work must be given **in undertaking** with official signature and seal/stamp, otherwise tender will be **rejected**.
- 4) Bank Solvency certificate 40% of estimated amount issued within one year from any Nationalized / Schedule Bank from the date of publishing of Tender.
- 5) P. F. registration certificate.
- 6) P. F. challans of last 12months.
- (i) ESIC registration certificate and copies of ESIC challans of last 12months.
 OR
 - (ii) Contractors' all risks insurance (CAR policy) / Mediclaim policy.
- 8) PAN card.
- 9) GST registration certificate.
- 10) Income Tax Return for last 03 years i.e. of 2021-22, 2022-23 and 2023-24.
- 11) List of Equipment's, Machinery, Tools.
- 12) List of Technical Staff with copies of their Degree/diploma certificate.

- 13) The contractors who were empanelled under Estate Office under (2018-23) list need not have to upload Demand Draft. The contractors other than empanel list that are applying for tender need to upload a scan copy of Demand Draft / Pay Order for Rs.2,40,000/-(EMD amount) drawn in favour of "The Registrar, IIT Bombay" on online Tendering Portal.
- 14) Power of Attorney, if any.
- 15) Proof of Constitution: An affidavit in case of Sole Proprietorship, Partnership Deed in case of Partnership Firm, Article of Association in case of Private / Public Limited Companies.
- 16) Labour Licence obtained during last 03 years.

Note:

Work will be carried out under the supervision of consultant engineers. The bills will be verified and processed by engineers from IIT Bombay, following the usual procedures.

Since the hospital is located in a silence zone, all work will be scheduled and carried out in accordance with the working hours specified by the hospital authority from time to time.

Those contractors who do not have documents mentioned above from <u>Sr. No. 1 to 16</u> need not apply as it is mandatory documents to qualify in technical bids.

Upload all your relevant documents in the serial order mentioned above. It is **advisable** not to make more than <u>03 folders of 5MB</u> while uploading documents.

The work will be executed with lowest bidder as per the terms and conditions of work order and tender documents signed by the lowest bidder. (All agencies are requested to upload a scan copy of Terms and Conditions with official signature and seal/stamp on SRM online tendering portal)

The validity of the bids will be valid for 6 months from the date of opening of tender.

If agency fails to submit the above mentioned documents by uploading to the online portal, their technical bid may be rejected.

Litigation history of the agency is required to be uploaded along with the application. Tender would not be awarded if any inquiry proceeding / criminal case is found pending against the agency.

No work will be subleted to third party. If found payment of final bill will not be processed and the contractor's name will removed from the enlistment without giving him further notice.

Contractor's/Agencies/Proprietor's are requested to give Power of Attorney to your representative to deal any matter with any Officers or Staff of IIT Bombay on behalf of you or your agency.

Rates of an estimate are based on CPWD-DSR-2021 and Market rate Analysis.

The **Pre-bid meeting** will be held on <u>07.10.2024 at 03:00 p.m.</u> in the Estate Office, IIT Bombay conference room. **Contractors** who wish to attend shall intimate to this office with number of visitors attending it with their names at <u>drestate@iitb.ac.in</u> in an advance on or before 05.10.2024 upto 01:00 p.m. Tenderers should be send by email all their queries, latest by 15.00 hours one day before to the scheduled Pre-bid meeting date to <u>drestate@iitb.ac.in</u>

The contractor have to quote his own rates online against each item of work and need to select N5 tax code thereafter.

Scan and upload all the above mentioned documents in "C folder" of online SRM tendering protal.

IIT Bombay reserve its rights to reject any or all tenders without assigning any reason and without any reference.

No queries will be entertained within 24 hours prior to the opening of the tender. We kindly request all contractors to upload their quotations well in advance of the submission deadline to ensure a smooth and timely process.

sd/-Superintending Engineer (I/C)

TO BE UPLOADED ON SRM TENDERING PORTAL WITH FINANCIAL BID

ANNEXURE 'A' (FORMAT) TECHNICAL BID

File No.: EO/A/HILLSIDE/WKS-92/24-25

Name of Work : External / internal repair, including painting of the store, computer room and 1^{st} floor corridor in the old Hospital building.

Name of the Contractor -----

Sr. No.	Name of Client	Name of Works	2021-22 (In Lakhs)	2022-2023 (In Lakhs)	2023-2024 (In Lakhs)	2024-2 (În La	
						Completed	Balance
			-	_	_	-	-
				-	-	-	
		Total Amount (In Lakhs)	-	-			

Note: Contractor must submit his details as per Annexure 'A' with declaration stating that he is possessing all the original copies of work orders and experience certificates, it will be produced as and when required to IIT Bombay. However, if it is found false at later stage, the contractor will be debarred or blacklisted. Whereas, if information is not submitted as per Annexure 'A' format his bid capacity will not been calculated and his tender will be summarily rejected.

Superintending Engineer (I/C)

Signature of Contractor Name & Address in full

WORKS UNDERTAKING

EO/A/HILLSIDE/WKS-92/24-25

To, Superintending Engineer (I/C) Indian Institute of Technology, Powai, Mumbai – 400 076.

Sub : External / internal repair, including painting of the store, computer room and 1st floor corridor in the old Hospital building.

Dear Sir,

We are hereby quoting all the rates for the attached schedule of short tender of the above mentioned job.

We hereby accept & signed all the General Terms and Conditions and special Conditions of Contract.

The work will be completed within specified time limit of 06 Months as mentioned in the notice inviting for short tenders.

The following information is required to be provided. If fails to do so, the tender will be assumed incomplete and hence the same will be rejected.

I / We agree to keep the tender open for One Hundred and Eighty (180) days from the due date of its opening / One Hundred and Eighty days from the date of opening of financial bid in case tenders are invited on 2/3 envelope system and not to make any modification in its terms and conditions.

 No. of Unskilled casual labour to be required per day. No. of Skilled casual labour to be required per day. 	: :
The Mandays required for completion of work.	:
Thanking you,	

Yours faithfully,

Signature of the Contractor With official Seal / Stamp of the firm

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY. POWAI, MUMBAI-400 076.

EO/A/HILLSIDE/WKS-92/24-25

ESTATE OFFICE

Name of work :- External / internal repair, including painting of the store, computer room, and 1st floor corridor in the old hospital building. \checkmark

Schedule of Work

	Schedule of Work		
Sr. No.	Description of Work	Qty.	Unit
	Part A: Structural Repairs & Addition/Alteration:		
1	Horizontal Net for safety of drive ways & cars: P/F Safety Nets having openings not more than 50 mm X 50 mm, with adequate supports, as directed by the consultants, so as to protect the Surroundings, open-spaces around the building, etc. complete as directed.	319	m2
2	Providing and fixing securely 12mm thick plywood for making temporary partition during execution of work at site, supported by Necessary Framework of Wood, and fixing the plywood sheets and removing the same after completion of work and taking out dismantled material out of IIT campus etc. completed as directed.	79	m2
3	Carefully removing internal or external plaster of any thickness, in patches or any length without damaging structure, brickwork in the vicinity, by using electric cutting tools including cutting a groove first to demarcate exact area of damage taken place, stacking the debrises within 500 meter, cleaning the site etc. complete, including covering the furniture, floor, windows and partitions with plastic sheets while chipping with double scaffolding. Note:- a) No extra payment shall be made for extra thickness removed. b) Proper tools to be used for removal of concrete and it should be seen by contractor no damage on the other side / nearby area will be taken place and if required other portions are to be checked by the contractors with respect to the damage before commencement of the work.	1848	m2
4	Removing doors and window frame with shutters of any size and type with fittings (if available) and handing over the same to IIT, as directed. If the material is Disposed off/ taken out the IIT Campus, if directed, then the Recovery for material taken out shall be as under: a) Recovery of wood scrap will be done @ Rs. 25 per kg, of material taken out. b) Recovery of Aluminium scrap will be done @ Rs. 120 per kg, of material taken out. c) Recovery of Structural steel will be done @ Rs. 20 per kg, of material taken out.	88	m2
5	Dismantling burnt brick masonry (in cement mortar) with plaster including sorting out serviceable bricks and lowering down debrises, stacking the same and debris separately upto a distance of 500 meters or spreading the debris as directed.	25	m3
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6	Chipping the RCC surface and cleaning the rusted reinforcement and exposed surface by wire brush mechanical device or any other established method and applying rust passivator solution of Krishna Conchem, approved make and quality with cotton waste swab to reinforcement and allowing to dry the same for 24 hours, brushing of loose particles and applying 1st coat of rust preventing coating of polymer and cement slurry in 1:1 proportion with soft brush without adding water including applying another coat of rust preventing after 4 hours allowing Air curing for 24 hours etc. including scaffolding etc. complete. Stacking the debris upto a distance of 500 meters or spreading as directed.	236	m2
7	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 500 metres lead as per direction of Engineer - in- charge. Including removing the existing steels. Contractor will be allowed to take away old steels and for which 5% deduction will be made of schedule rate this item.	36	m3
8	Dismantling plain cement concrete work including breaking concrete by chiselling, wedging etc., and stacking the debris upto a distance of 500 meters or spreading as directed.		m3
9	Removing the old cement Tiles or any type of tiles from floor / wall carefully including levelling the surface, cleaning the site, stacking the debrises etc., upto 500 meter, etc., complete.		m2
10	Disposing debris, loose stones, boulders, concrete pieces broken etc. collected and stacked as directed including loading in trucks, transporting out of IIT Campus including obtaining approval from Government/ private land owners for disposing off on to their approved location. The contractor will be solely responsible for disposing debrises out of campus and the debris are to be removed from site within 72 hours from stacking (30% voids will be deducted for debris, loose stones, boulders, concrete pieces, from actual measurement of Truck/Vehicle).	196	m3
11	Removing soling without dust nuisance including sorting out the stone chips and debris separately and stacking upto distance of 500 meters as directed.	99	m3
	Excavation for foundation, Plinth protection, etc. in earth, soil of all types, sand, gravel, soft and hard murum, soft rock etc. including removing the excavated materials up to a distance of 50 meters beyond the site of work and Depth/ lift up to 1.50 meters, stacking and spreading as directed preparing the bed for the foundation and necessary dewatering using pump, backfilling, ramming, watering, including shoring and strutting, providing necessary barricading around excavated area etc. complete.	220	m3
13	Carefully removing all types of false ceilings, Partitions, Panelling, along with frame work, without damaging other parts/ structure, rectifying the damages including scaffolding and stacking the sections at site for refixing and taking the damaged false ceiling sheets and ceiling frame sections if any, outside campus etc. all complete as directed.	20	m2
14	Carefully removing Chain link including disposing the removed material, etc. all complete as directed. Contractor will be allowed to take away old Chain link and for which 5% deduction will be made of schedule rate this item.	38	_ m2

15	Providing and applying an effective bond coat of Polymer (SBR) approved by IITB and cement in the proportion of 1:1 by using brush in multiples coats as required to accommodate the whole thickness of polymer modified mortar wherever required including scaffolding wherever required on the surface of old concrete / repaired concrete Polymer (SBR) of approved manufacturer should have the following properties: Suspended solid particles should not be less than 40% Specific gravity should not be more than 1.01 · PH should not be less than 8.5 Note: The actual consumption of polymer shall be measured for payment on weight basis. Challans & GST Tax Invoices of authorized dealer will be verified.	328	Kg.
16	Providing and Placing in position Ready-mix Polymer mortar manufactured by BASF, Dr. Fixit, M.C. Bouchmey, and adding water in the proportion of 1:0.14 (Polymer mortar: water) or as specified by the manufacturer, at any floor over the prepared RCC surfaces in layers as directed (thickness of each layer shall not exceed 10 to 15mm) including mixing the polymer mortar with water using forced action mixer including double scaffolding wherever required, mild curing will be done with water for 3 days etc. complete. (payment will be paid for the actual quantity of polymer mortar used on weight basis. Challans & GST Tax Invoices of authorized dealer will be verified)	20597	Kg.
17	Providing and laying super fluid micro concrete of approved manufacturer at any floor after reinforcement treatment coat including mixing with 10mm to 5mm size quartz aggregate in the ratio of 1 part super fluid micro concrete to 0.75 part of quartz aggregate by weight providing marine plywood formwork in line and level, cleaning, curing etc. complete. The compressive strength of super fluid micro concrete should not be less than 20N / mm2. (Payment will be paid for the actual quantity of only micro concrete used on weight basis. Weight of the Aggregates added shall not be paid. Challans of authorized dealer will be verified)	4323	Kg.
18	Providing and fixing in position Thermo-Mechanically Treated bars of grade Fe-500 D or more, for reinforcement of various diameters, for Repairs, for R.C.C. footings, foundations, slabs, beams, columns, canopies, staircases, chajjas, lintels, pardies, coping, fins etc. as per detailed designs, drawings and schedules including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	908	Kg.
19	Drilling Holes & Epoxy material Drilling straight and inclined holes upto 200mm depth and upto 20mm dia in concrete / masonry using electrically operated drilling machine and fixing steel including scaffolding. Epoxy material of approved brand like Araldite for fixing (Anchoring) of Reinforcement Steel bars of various diameters (especially Stirrups), into the concrete. (Payment will be paid for the actual quantity of Epoxy material used on weight basis. Challans & GST Tax Invoices of authorized dealer will be verified)	1996	Nos
20	Providing and Injecting material of approved brand like Hilti HIT-RE 500 V3 in RCC including fixing various diameter (10 to 16mm) reinforce bars including drilling hole as per manufacturer specifications, blowing out the hole and finishing etc. complete as directed. This item does not include P/F Anchor Bolts. The Steel/Bolts to be anchored by this Hilti material shall be paid under Item of Steel Reinforcement.	20 /	Nos

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21	Grouting existing RCC structure as per following operations including scaffolding, sealing leak paths with lead wool, removing nipple, plugging the hole with neat cement paste by ram packing, cleaning etc. complete. 1) Add Sunplex powder (manufacture by Sunanda) (or approved equivalent, as approved) 1 kg in one bag of cement of 50 kg with adequate water, or as per manufacturer's specifications. 2) Using mechanical means of pressure grouting with the above mix. The pressure shall be 5-10 psi. 3) The grouting to be done into the cracks of ceiling, walls, columns & beams if necessary. 4) After through grouting sealing the holes with neat cement paste. Weight of only Cement shall be measured for payment)	468	Kg.
22	Epoxy Grouting to existing RCC structure/ Uncoursed Rubble Masonry as per following operations including scaffolding, sealing leak paths with lead wool, removing nipple, plugging the hole with neat cement paste by ram packing, cleaning etc. complete. 1) Grouting by Low Viscosity Epoxy Injection of material of approved brand like Epco- KP/HP-250 including Resin & Hardener. 2) Using mechanical means of pressure grouting with the above mix. 3) The grouting to be done into the cracks of Uncoursed Rubble Masonry, columns & beams if necessary. 4) After through grouting sealing the holes with neat cement paste.	12	Kg.
23	Laying dry trap/ rubble stone soling of required thickness including hand packing and compacting etc. complete using stones supplied by IITB, including transporting stone from various locations from IIT campus area up to working site and cutting the stone in required size, etc., as per requirement, complete.	47	m3
24	Laying dry trap/ rubble stone soling of required thickness including hand packing and compacting etc. complete using stones bought by the contractor, including transporting up to working site and cutting the stone in required size, etc, as per requirement, complete.	47	m3
25	Providing Uncoursed Rubble Masonry (using stones supplied by IITB) of trap stones in cement mortar 1:6 (Cement: Sand/Grit) including racking out joints when plastering is to be done, striking out joints, watering and pointing with cement mortar 1:3 on outside exposed faces, including providing header stones @ 1 header per sqm. to the full thickness of wall, providing weep holes, with 110mm dia PVC. pipes including collecting and transporting stone stacked within campus of IIT-B, cutting stones/boulders in pieces as per requirement, scaffolding etc. complete as directed.	7	m3 /
26	Providing Uncoursed Rubble Masonry (using stones bought by the contractor) of trap stones in cement mortar 1:6 (Cement: Sand/Grit) including racking out joints when plastering is to be done, striking out joints, watering and pointing with cement mortar 1:3 on outside exposed faces, including providing header stones @ 1 header per sqm. to the full thickness of wall, providing weep holes, with 110mm dia PVC. pipes including transporting stones, cutting stones/ boulders in pieces as per requirement, scaffolding etc. complete as directed.	2	m3 /
27	P/A Pointing (Raised and cut pointing) on stone work with cement mortar 1:3 (1 cement : 3 fine sand), as directed, all complete.	38	m2 ′.

28	Providing and casting in situ Plain Cement Concrete (PCC) in volumetric proportion 1:1.5:3, using stone aggregate for flooring, etc., as directed including centering, formwork, compacting, dewatering, roughening the surface if special finish is to be provided and curing, etc., complete, as directed.	58,	m3
29	RCC for Chajja: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1:2 (having strength not less than 25N/mm2) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for all other R.C.C. chajjas including for Annex bldg. chajjas, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing. The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item. The dimensions, Shape & design shall be exactly matching with existing Chajjas. The Line-Level, Finish is the essence of this item.	2	m3
30	RCC for Columns: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1:2 (having strength not less than 25N/mm2) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for R.C.C. Columns, at any level, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing. The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item.		m3
31	R.C.C. for Beams, Lintels, etc.: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1:2 (having strength not less than 25N/mm2) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for R.C.C. Beams, Lintels, etc., at any level, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing. The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item.	6	m3
32	RCC for Slabs: Providing and casting in situ Reinforced Cement Concrete (RCC) using volumetric proportion 1:1:2 (having strength not less than 25N/mm2) using Cement of approved Brand & Grade, using sand as fine aggregate, trap metal, for R.C.C. Slabs, at any level, either for full slabs or Parts of Slabs, as directed, including centering, formwork, compacting, roughening the surface if special finish is to be provided and curing, excluding steel reinforcement and including casting cubes and testing. The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item. The Item shall include cost of Centering, Shuttering, Formwork, supports, staging, Scaffolding, etc. complete. Reinforcement Steel shall be paid separately under relevant item.	3	m3

33	Screed Concrete for Repairs: a) P/A polymer slurry/bonding coat of approved brand of Polymer & Cement in ratio 1:1, to exposed RCC members (Slab) within 30 minutes of P/Casting of concrete b) P/L Concrete screed of conc. 1:1:2 Volumetric Mix (Strength not less than 25 N/mm2), over the treated surface of the floor slab, average thickness 50mm. Centering, Shuttering is not needed for this Item.	21	m2 -{
34	Providing second class burnt brick masonry with best available approved quality well burnt bricks having crushing strength of 35 kg./square cm. and maximum water absorption of 20%, in cement mortar 1:4 in half brick thick wall including providing RCC Band (patli) of M-20 concrete (1:1½:3), 100mm x 100mm to the full length of wall at every one meter height, using two numbers 8mm dia tor steel reinforcement, scaffolding, racking out joints and curing complete.		m2
35	Providing second class burnt brick masonry with IS approved quality well burnt bricks having crushing strength of 35 kg. / square cm. and maximum water absorption of 20% in cement mortar 1:6 in superstructure including striking joints, racking out joints, curing, cleaning and scaffolding complete.		m3
36	Providing Single Coat cement plaster of required thickness, not less than 12mm thick, in single coat, in cement mortar 1:4 (without neeru finish) over concrete or brick surfaces, in all positions with the use of scaffolding/step ladder, including Pre-Wetting, Cleaning, curing, etc., all complete.	795 /	m2
37	Providing and applying white cement based Birla make wall care putty of average thickness 1mm, over plaster/ concrete surface in proper line / level to prepare surface even and smooth for including preparing the wall surface for the application of wall care putty etc. complete as directed.	795	m2
38	Providing Double Coat Sand face plaster using approved screened sand, in all positions including base coat as per required thickness (to match the existing surface) in cement mortar 1:4 using water proofing compound (as per manufacture's specification) and curing the same for not less than two days and keeping the surface of base coat rough to receive the sand faced treatment 8mm thick in cement mortar 1:3 using water proofing compound (as per manufacture's specification), finishing the surface by taking out grains and curing for 14 days, scaffolding etc. complete. Cement slurry shall be applied on the first coat, before application of the second coat, as directed.	1053	m2
	Rough cast/Pebble Dash plaster (matching with existing finish), upto any height above ground level with a mixture of sand and gravel or crushed stone from 6 mm to 10 mm nominal size, dashed over and including the fresh plaster in two layers, under layer 12 mm cement plaster 1:4 (1 cement: 4 coarse sand) using water proofing compound (as per manufacture's specification) and top layer 10 mm cement plaster 1:3 (1 cement: 3 fine sand) mixed with water proofing compound (as per manufacture's specification).	12	m2 /

40	Providing and Applying waterproof plaster in single coat in CM 1:3 of required thickness as directed, using approved screened sand, using water proofing compound (as per manufacture specification), over a Bond coat of Polymer-Cement Slurry (Cement 1 part: Polymer 1 Part), in all positions, including scaffolding, cleaning, curing for 14 days, etc. Complete.	160	Sqmt
41	Providing and laying water proofing cement concrete (IPS) at any level, over Chajjas, inside Pond at basement, etc., as directed, to average 50mm thick with 1:1.5:2 cement concrete laid to proper level and slope using silt free clear river sand including compaction, filling joints, adding recommended waterproofing admixtures as per manufacturer's specifications, marking false marks as directed to give appearances of tiles of 30cm x 30cm or other approved size laid diagonally / square, finishing with extra cement in any colour as directed, testing the treatment by ponding with water for 14 days, providing waterproofing guarantee for 7 (seven) years in requisite non judicial stamp paper in favor of IITB including all lead and lift etc. Complete.	77	m2
42	Providing temporary steel supports such as tubular steel props 50mm dia, as required for supporting system till the repaired-work of the beam, column, slab, chajja, etc. is completed in all respects as directed and when required in any floor of any height inside and outside of the building and removing the supporting system as directed without damaging the structure.	90	Nos
43	P/F Kota stone slab flooring 25 mm thick, over 20 mm (average) thick base, laid over Bedding with cement floats, and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete. The Base/ Bedding shall be of cement mortar 1:4 (1 cement: 4 coarse sand). The measurement shall be taken of finished Areas/ Dimensions.	110/	m2
44	P/F Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars over & including 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	10	m2
45	Providing and laying vitrified tiles(non skid matt finish) for Flooring & Skirting of size not less than 600 X 600 mm (thickness not less than 8mm), with water absorption less than 0.08%and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.	307 /	m2
40	Providing and fixing Ist quality ceramic wall tiles of size 600 X 300 mm or more, conforming to IS: 15622 (thickness not less than 6mm), of approved make, in all colours, shades of any size as approved by Engineer-in-Charge, in skirting, and dados, over 12 mm thick plaster 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.	92	m2

47	Providing and laying colour veined granite slabs 18 to 20mm thick of approved quality colour and veins for platform, door / windows sill / claddings, Top of Parapet wall in Passages, partitions on a bed of 1:4 cement mortar or including base coat of 12mm thick plaster for vertical faces including rounding / moulding of nozzles / adjust, filling joints with white cement to match colour of slab, curing polishing etc. complete.		
	8.2.2.1: Area of slab upto 0.50 sqm	39 /	m2 /
	8.2.2.2: Area of slab over 0.50 sqm	94 /	m2
48	Providing and fixing Kadappa stone slab for platform of approved type and design 20 to 30mm thick in cement mortar 1:4 including providing and fixing border patti on front edge, filling joints, curing, cleaning etc. complete.	73 /	m2′
49	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-incharge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	218	kg
50	Removing and re-fixing existing grills with necessary modification, welding, cutting, replacing damaged member (new mild steel will be paid separately) etc. completed as directed.	23	m2
51	Providing and fixing mild steel grill work for window, ventilator, partition weighing 15 kg. per sqm as per drawing including necessary welding and painting with one coat (one coat of red lid oil paint and two coats of oil paint of approved shade) of anti-corrosive paint etc. complete.	113	m2
52	Add for extra weight or deduct for less weight over item no. 67 for fabricating such as cutting, shaping, riveting etc. mild steel for grill works including welding and painting with one coat of red lid oil paint and two coats of oil paint of approved shade.	150	Kg.
53	Providing and fixing in position two track aluminium sliding windows (two glass shutter & one mosquito Jali Shutter)using sections of size 61 mm x 31mm x 1.3 mm (not less than 0.659kg/mtr) thick for bottom, sides and top. The shutter should be of bearing bottom of size 40 mm x18 mm x 1.25 mm (not less than 0.417kg/mtr) thick, top member of size 40 mm x 18 mm x 1.20 mm (not less than 0.475kg/mtr) thick, Interlocking section size of 43 mm x 27 mm x 1.30 mm (not less than 0.558kg/mtr) thick and handle section of size 43mm x 18 mm x 1.30 mm (not less than 0.424kg/mtr) thick including providing and fixing 5mm thk. glass & mosquito Jali (with shutter) in the shutter using rubber gasket, approved quality minimum two nos. PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fittings, etc. complete as directed by Engineer in charge.(Note: All aluminium sections and fitting are 15 micron anodized/ powder coated).	13	m2

54	Providing and fixing in position three track aluminium sliding windows (2+1: two glass shutter & one mosquito Jali Shutter) using sections of size 92 mm x 31mm x 1.30 mm thick for bottom, sections of size 92 mm x 31mm x 1.30 mm (0.933kg/mtr) thick for sides and top. The shutter comprising of bottom and top member of size 40 mm x 18 mm x 1.25 mm (0.417kg/mtr) thick , interlocking section of size 40 mm x 18 mm x 1.10 mm (0.469kg/mtr) thick and handle section of size 40mm x 18 mm x 1.25 mm (0.417kg/mtr) thick including providing and fixing 5mm thk. glass & mosquito Jali (with shutter) in the shutter using rubber gasket with require fittings such as approved quality minimum two nos. PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fittings, etc. complete as directed by Engineer in charge.(Note: All aluminium sections and fitting are 15 micron anodized/ powder coated).	12	m2
55	Providing and fixing in position four track aluminium sliding windows (3+1: three glass shutter & one mosquito Jali Shutter) using sections of size 122 mm x 31mm x 1.30 mm thick for bottom, sections of size 92 mm x 31mm x 1.30 mm (0.933kg/mtr) thick for sides and top. The shutter comprising of bottom and top member of size 40 mm x18 mm x 1.25 mm (0.417kg/mtr) thick , interlocking section of size 40 mm x 18 mm x 1.10 mm (0.469kg/mtr) thick and handle section of size 40mm x 18 mm x 1.25 mm (0.417kg/mtr) thick including providing and fixing 5mm thk. glass & mosquito Jali (with shutter) in the shutter using rubber gasket with require fittings such as approved quality minimum two nos. PVC rollers for each shutter, necessary locks, handles, PVC lining and other required fittings, etc. complete as directed by Engineer in charge.(Note: All aluminium sections and fitting are 15 micron anodized/ powder coated).	19	m2
56	Providing, making and fixing fully glazed aluminium partition/windows/cladding at any height, of any size using 63mm x 38mm x 1.65mm (not less than 0.942kg/mtr)15 micron / powder coated anodized aluminium single groove partition section and 63mm x 38mm x 1.53mm (not less than 0.942kg/mtr) 15 micron / powder coated anodized aluminium double groove partition section for frame, providing and fixing 5mm thick clear plain glass fixed with glazing clips, rubber gasket etc. Complete.	27	m2
	Supplying, fabricating and fixing in position openable window comprising of only Frame & Shutters made out of Z sections as described, using aluminium sections 42 x 37 x 1.5mm (not less than 0.724 kg/mtr) size aluminum Z section for window shutter, 28 x 14.5 x 1.5mm size (not less than 0.286 kg/mtr), aluminum clip for window shutter, 45 x 45 x 1.5mm size (not less than 0.764 kg/mtr), 37mm x 37mm (not less than 0.820 kg/mtr) angles 2mm thick, 5mm thick plain or frosted glasses with rubber gasket, 3 Nos. S.S. hinges 75mm size (heavy) on each window shutter, aluminum tower bolt 100mm size 1 Nos on each leaf, aluminum stay 200mm to 250mm long 1 No per leaf, aluminum handle 1 Nos. per leaf etc. complete.(all aluminium sections should be 15 micron anodized / powder coated section). This Item of Openable Part shall be paid either independently wherever it is Stand-Alone, or shall be paid after deduction of the same quantity from the Item of Fixed Windows/Partitions.	22	m2
	Re-fixing the Removed Aluminium/wooden door/windows frames with shutters by making minor modification (if required) with new screws, Hardware/ fittings, Bearings, etc., complete as directed.	56	m2

59	Providing and fabricating structural steel works in rolled sections like joists, channels, angles, tees, hollow sections and any other required sections etc. as per detailed designs & drawings for supports, rafters, purlins, railing, staircase and any other work including fixing in position with connecting plates, braces and welding, riveting, bolting as necessary including one coat of primer & two coat of oil paint, scaffolding etc. complete.	100	kg
60	Supplying, fabricating and fixing in position fully opaque single leaf aluminum anodized openable door shutter using aluminum standard door section 60mm x 40mm (not less than 1.055 kg/mtr) for all verticals, top & bottom members, providing and fixing 16 gauge perforated aluminium sheet, including heavy duty hinges, 1' long decorative stainless steel handles 2 nos., lock and other require fittings etc. all complete as directed. (All aluminium sections should be 15 micron anodized/ powder coated and fittings should be approved before installation)	17	m2
61	Supplying, fabricating and fixing in position aluminium louvered ventilator using aluminum box section of size 63mm x 37mm (not less than 1.054 kg/mtr) for outer frame, aluminium flat of size 25mm x 5mm of weight not less than 0.337 Kg/mtr for fixing louvers of size 79mm x 30.3mm x 2mm of weight not less than 0.599 Kg/m (Jindal section 20782), filling all gaps with appropriate fillers, screws, bolts etc. all complete as directed. (All aluminium sections should be 15 micron anodized/ powder coated)	2	m2
62	Providing & Fixing of G.I Lay-in perforated metal ceiling system manufacture by Armstrong consisting of 600x600mm size grid with fleece laying in tiles of pre-coated galvanized steel in 0.4/0.5 mm thickness in required colour with 15mm wide T - section silhouette flanges of required colour having rotary stitching on the main Runner including P/F 1200mm & 600mm cross Tees as per manufacturer specifications.		m2
63	Providing, Making and Fixing Aluminium Partition using 63mm x 38mm x 1.65mm (not less than 0.942kg/mtr) 15 micron / powder coated anodized aluminium single groove partition section and 63mm x 38mm x 1.53mm (not less than 0.942kg/mtr) 15 micron / powder coated anodized aluminium double groove partition section for frame, providing and fixing aluminium perforated 15 micron anodized sheet having 16 gauge of approved pattern fixed with glazing clips, rubber gasket etc. Complete.	22	m2 /
64	Providing & fixing in position Partitions made by using framework of Aluminum Pipe Sections of size 2.5" x 1.5"x 16G, at 600mm c/c as frame with 12mm thick commercial plywood finish on both sides of the Partition. The partition shall be filled up by insulation of Fibre Glass having 50 mm thickness, density of 32 Kg/M3, Including making necessary arrangement of raceway with removable type panels for electrical/ lan/ telephone work with all required hardware etc. complete as directed.	14	m2
65	Providing & fixing 1mm thick designer or solid colour laminate of century, green lam, royal touch, Marino brand with approved pattern and design on partition/ door shutter/ door frame/ over window including, making necessary groves wherever required as per standard practice including cost of Fevicol etc. complete as directed.	10	m2 /
66	Providing & fixing veneer 4mm thick, Century Veneers/ Natural Veneers, of approved design on partition/ door shutter/ door frame/ over window including, making necessary groves wherever required as per standard practice including cost of Fevicol etc. complete as directed.	11	m2

67	Providing and fixing wall paneling made out of 50 x 25 mm CCTW frame, Panel size of 600 x 600 mm center to center, or as per site condition, covered by 12mm thick commercial plywood finished with 1mm thick design Laminate/sunmika of approved brand and color including all fittings such as nails, mirror screws with cap of approved quality, fevicol and other required fittings, making panels removable type as and when required etc. completed as directed	5	m2
68	Removing & Re-fixing existing partitions: Carefully removing existing partitions and re-fixing the old removed aluminium frame partitions with existing glass / particle boards etc. with new screws, nails, rubber gasket, beading and other required fittings including cutting making good the partition including scaffolding etc. all complete as directed.	9	_m2
69	Supplying, fabricating and fixing in position aluminium anodized single or double leaf openable door shutter using aluminum standard door section 80mm x 40mm (not less than 1.139kg/mtr) for verticals, top and bottom, providing and fixing aluminium perforated 15 micron anodized sheet having 16 gauge of approved pattern fixed with glazing clips, rubber gasket including using 3 nos stainless steel hinges 4" long for each shutter, 9" long handles 2 nos. for each shutter, lock, stainless steel tower bolt 8" long 1 no for each shutter, P/F 'U' channel for border etc. all complete as directed. (All aluminium sections should be 15 micron anodized/ powder coated)	15	m2
70	Providing, fabricating and fixing in position partly opaque and partly glazed aluminum anodized openable door in single or double leaf shutter using aluminum standard door frame section 63.50x49.50x1.70mm@1.158kg/rmt,shutter section for verticals member 85x44.45x1.80mm@1.301kg/rmt,and middle member 83.50x44.45x1.70mm@ 1.243kg/rmt,114.03x44.45x1.29mm@1.139kg/rmt for bottom & top member of 83.50x44.45x1.49mm 1.055kg/rmt, 4mm thick aluminium composite sheet up to 1200mm height or as directed by Engineer incharge and 5mm thick bajri glass(Modi guard/saint gobain) above opaque panels, glazing clips, rubber gasket including using 3 nos stainless steel hinges 5" long for each shutter, 9" long stainless steel handles 2 nos. for each shutter,Godrej lock, stainless steel tower bolt 8" long 1 no for each shutter and other required fittings etc. all complete as directed. (All aluminium sections should be 15 micron anodized)	17	m2
71	Providing and fixing aluminium section for frame work of various work of required size of 15 micron anodized including fixing with required fittings such as screws and other required fittings including fixing in proper alignment, rectifying all damaged, P/F wood inside frame for fixing hinges etc. completed as directed.	25	Kg.
72	Providing and Fixing solid core flush door in single or double leaf having thickness not less than 32mm of commercial type of exterior grade, approved commercial plywood facing both side without glazing and venetians, all necessary beads, moulding and lipping, 8" long stainless steel tower bolt 1 no for each shutter, 6 lever Godrej mortise lock with handle with triplicate keys and other required fittings etc. complete (without frame). (Fittings will be approved by Engineer in charge before fixing)	5	m2 /

73	Providing & Fixing 30 mm thick Fiberglass Reinforced Plastic (F.R.P.) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin, moulded to 3mm thick FRF laminate all around, with suitable wooden blocks inside at required places for fixing of fittings like 100mm brass hinges 3 nos, 200mm brass tadipatti with packing 2no, 150mm brass handles 2 nos and polyurethane foam (PUF)/Polystyrene foam to be used as filler material throughout the hollow panel, casted monolithically with testing parameters of F.R.P. laminate conforming to table - 3 of IS:14856, complete as per direction of Engineer-in-charge.	30	m2
74	Providing and fixing 2 mm thick PVC flooring (vinyl flooring) of approved brand in roll or tile form having properties as per manufacturer specifications of approved shade and in approved pattern on smooth and leveled bed, fixing the flooring as per manufacturer specifications etc. complete.	10	m2
75	Providing and erecting 2.00 meter high temporary barricading by bamboo at site including writing and painting Signage's, glow lamps, reflective signs, marking, flags, caution tape as directed by the Engineer-in Charge. Rate include its maintenance for damages, painting, all incidentals, labour materials, equipment's and works required to execute the job. The barricading shall not be removed without prior approval of Engineer-in-Charge.	103	m2
76	Providing & Fixing/Tying Sacrificial Galvanic Anode, manufactured by Krishna Conchem, for corrosion protection of reinforcement in concrete, as directed including cleaning the reinforcement, at locations as directed.		Nos
77	Providing and fixing hydraulic door closer of approved quality make Godrej/Hyper/Everite and to door shutter including making proper adjustment for smooth operation complete contractor will be allowed to take away old door closer if available and for which 5% deduction will be made of schedule rate of this item	3 _	Nos
	Supplying, fitting and fixing in position floor spring door closer of Hyper or approved make and type with all necessary screws, fittings and fixtures, as directed etc. all materials, tools, plant and labour complete; as directed.		Nos
	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge. Made of G.I. wire of dia 4 mm sqm		m2
80	Providing and applying acrylic synthetic plaster (Dura plaster) of IITB approved make manufacturer over existing cement plaster or concrete surface including removing existing paint/synthetic plaster to receive the acrylic synthetic plaster as per manufacturer specification including all the necessary tools & plants, stepladder etc, complete all as directed by Engineer in charge.	1053	Sqm
			Part A :Total
	Part B: Waterproofing Treatment over terraces, Toilets, etc:		

1	Breaking of existing Waterproofing system on Terrace Slab & toilets: Breaking open existing waterproofing treatment upto mother slab completely & carefully as directed, removing, lowering down & disposing off the debris, as directed, thoroughly brooming, cleaning & washing with water the bare surface of terrace slab as directed.	13	m2
2	Providing and laying waterproofing treatment of 120mm av. thickness consisting of 20mm thick layer in cement mortar 1:3 with water proofing compound as per manufacturer's specs as base, constructing and laying brick bat coba in cement mortar 1:5 with waterproofing compound as per manufaturer's specs and having average thickness of 80mm and finishing with 20mm thick cement plaster layer in cement mortar 1:3 with water proofing compound, including laying glass fiber cloth of approved quality in top layer including all lead, lifts and laid to proper slope to drain off water entirely including watta at the junction of parapet and work upto a height of 300mm or as directed and including finishing the top layer of water proofing treatment with false marking of 30cm x 30cm or as directed and covering the whole treatment with ten years' guarantee, on requisite stamp paper etc. complete.	43	m2
			Part B :Total
	Part C: Plumbing, Drainage, Renovation of Toilets, Sanitary Fixures, etc:		
1	Dismantling of road gully chamber of various sizes including C.I. grating with frame including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead including refilling the excavated gap.	12	Nos
2	Providing and laying 15 mm dia nominal bore I.S.I. approved 'C' class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, back nuts, elbows, tees, reducers, enlargers, plugs, clamps, etc. including necessary drilling in holes in walls / slabs etc. and remaking good the demolished portion to restore the same in original condition neatly and applying primer and two coats of oil painting including necessary scaffolding etc. or as directed including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item etc. complete.	36	Rmt
3	Providing and laying 20 mm dia nominal bore I.S.I. approved 'C' class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, back nuts, elbows, tees, reducers, enlargers, plugs, clamps, etc. including necessary drilling in holes in walls / slabs etc. and remaking good the demolished portion to restore the same in original condition neatly and applying primer and two coats of oil painting including necessary scaffolding etc. or as directed including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item etc. complete.	12	Rmt

4	Providing and laying 25 mm dia nominal bore I.S.I. approved 'C' class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, back nuts, elbows, tees, reducers, enlargers, plugs, clamps, etc. including necessary drilling in holes in walls / slabs etc. and remaking good the demolished portion to restore the same in original condition neatly and applying primer and two coats of oil painting including necessary scaffolding etc. or as directed including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item etc. complete.	24	Rmt
5	Providing and laying 40 mm dia nominal bore I.S.I. approved 'C' class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, back nuts, elbows, tees, reducers, enlargers, plugs, clamps, etc. including necessary drilling in holes in walls / slabs etc. and remaking good the demolished portion to restore the same in original condition neatly and applying primer and two coats of oil painting including necessary scaffolding etc. or as directed including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item etc. complete.	18	Rmt
6	Providing and laying 50 mm dia nominal bore I.S.I. approved 'C' class galvanized iron pipes having weight as per IS specification to walls, ceilings, floors etc. with screwed sockets, back nuts, elbows, tees, reducers, enlargers, plugs, clamps, etc. including necessary drilling in holes in walls / slabs etc. and remaking good the demolished portion to restore the same in original condition neatly and applying primer and two coats of oil painting including necessary scaffolding etc. or as directed including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item etc. complete.	12	Rmt
7	Providing and Fixing 110mm dia. P.V.C. pipes conforming to I.S., with necessary fittings such as bends, tees, single junctions, double junctions, slotted vent, offsets on wall, including proper slope, filling the joints using rubber gasket with solvent, cement etc.including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item completed as directed.	50	Rmt
8	Providing and Fixing 75mm dia. P.V.C. pipes conforming to I.S., with necessary fittings such as bends, tees, single junctions, double junctions, slotted vent, offsets on wall, including proper slope, filling the joints using rubber gasket with solvent, cement including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item etc. completed as directed.	66	Rmt
9	Providing and fixing 25mm dia. nominal bore gun metal gate valve with C.I. wheel of approved quality (screwed end) with required fittings and fixtures etc. completed as directed.	4	Nos
10	Providing and fixing 40mm dia. nominal bore gun metal gate valve with C.I. wheel of approved quality (screwed end) with required fittings and fixtures etc. completed as directed.	2	Nos
11	Providing and fixing 50mm dia. nominal bore gun metal gate valve with C.I. wheel of approved quality (screwed end) with required fittings and fixtures etc. completed as directed.	2	Nos /
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12	Re-fixing existing removed Rain-water pipes upto 4" Dia PVC pipes with required fittings, clips and fixtures etc. completed as directed with scaffolding.		Rmt
13	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:	12	Nos
14	Providing and constructing brick mansonry inspection chamber 900mm x 450mm upto 900mm in depth including cement concrete in M-20 foundation, PCC 10 cm thick channels, brick masonry, plastering on inside and outside as required in cement mortar 1:6 and airtight heavy duty RCC cover with frame work fixed in cement concrete 1:2:4 etc all complete as directed bt Engineer In charge.	6	Nos
15	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design : 150 mm diameter S.W. pipe	40	Rmt
16	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete: 19.1.2 150 mm diameter	40	Rmt
17	Providing and fixing 15 mm nominal bore brass stop cock of approved quality with required fittings and fixtures etc. completed as directed.	3_	Nos
18	Providing and fixing 20 mm nominal bore brass stop cock of approved quality with required fittings and fixtures etc. completed as directed.	3	Nos
19	15 mm dia nominal bore (concealed pipe) Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good.including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item	29	Rmt
20	20 mm dia nominal bore (concealed pipe) Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good.including removing the existing pipe, if available and contractor will be allowed to take away old pipe and for which 5% deduction will be made of schedule rate of this item	18	Rmt
21	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms. 15 mm nominal bore	8	Nos

22	Providing and fixing 75mm Nahani trap fixed with P.V.C. plug bend and piece of P.V.C. pipe upto plug bend, providing brickbat coba waterproofing treatment and finishing the top surface with matching tiles etc. all complete as directed.	0	Nos
23	Providing and fixing oval shape white earthenware below counter wash hand basin of Parryware make including one cold water angle cock of Jaguar make (Continental series), Stainless steel waste coupling, PVC heavy duty flexible pipe up to trap etc. complete as directed.	1	Nos
24	Providing and fixing oval shape white earthenware over counter wash hand basin of Parryware make including one cold water angle cock of Jaguar make (Continental series), Stainless steel waste coupling, PVC heavy duty flexible pipe up to trap etc. complete as directed.	1	Nos
25	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps	1	Nos
26	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink (Nirali Make) as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required: 510 X 1040 mm bowl depth 225 mm		Nos
27	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink (Nirali Make) as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required: Kitchen sink without drain board 610 X 460 mm bowl depth 200 mm		Nos
	Providing and fixing Wall mounted closet STUDIO 20061 (41x36x52)cm along with white seat cover,anchor fastner,washer including removing the old pan and fixing the new with proper position including 2 in 1 tap and jet spray set etc all complete	2	Nos
29	Providing & fixing White vitreous china water closet squatting pan (Indian type) along with "S" or "P" trap including dismantling of old WC seat and "S" or "P" trap at site complete with all operations including all necessary materials, labour and disposal of dismantled material i/c malba, all complete as per the direction of Engineer-in charge. Orissa pattern W.C Pan of size 580 X 440 mm	2	Nos
30	Providing and fixing (600X450mm) mirrors 6mm thick of approved Indian quality copper plated with 4mm thick bakelite/hardner sheet, fixing mirror on wall with Aluminium F channel framework hanging hooks, aluminium angle bracket for all corners, screws etc. all complete as directed.	5	Nos /

31	Constructing brick masonry circular manhole 1.22 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement :4 coarse sand) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 coarse sand: 6 graded stone aggregate 40 mm nominal size) and making necessary channel 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, all complete as per standard design: 19.11.1 1.68 m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately): With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	Nos
32	Extra depth for circular type manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m: With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	Metre
33	Providing and fixing European type white glazed earthenware 580mm water closet pan of IITB approved brand with seat and lid with hinges and rubber buffers 10 litres white H.D.P.E. flushing cistern of IITB approved brand with fittings,pipes and stop tap, with fittings and clamps,exposed pipes and cutting and making good walls and floors etc. complete		Nos
	Part D: Painting & Coating work:		
1	Providing and applying two coats of exterior Acrylic exterior paint including exterior primer of approved colour and shade to the plastered surface as per manufacturers specification including preparing the surface with the help of stepladder etc, complete	1426	m2
2	Providing & Applying priming with ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/steel works	248	m2
3	Providing and applying two coats of synthetic enamel paint of IITB approved brand and shade to wood and steel work with the use of scaffolding, including scrapping, cleaning, covering the floor, windows, instruments during painting etc. complete.	248	m2
4	Providing and applying one coat of seal cement primer IITB approved brand, cleaning the surface with the use of stepladder, scaffolding including scrapping the surface, filling the holes, levelling the entire surface with lambi / palti, covering the floor, windows, instruments during painting etc. complete.	1121	m2
5	Providing and applying Acrylic oil bound distemper of IITB approved manufacturer and of desired colour and shade to old / new surfaces in two or more coats including scaffolding, preparing the surfaces (excluding priming coat), covering the floor, windows, instruments during painting complete.	257	m2 /
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Providing and applying roller finish Acrylic plastic emulsion paint of approved manufacturer and of desired colour and shade to old aceiling & wall surfaces in two coats with the use of stepladder, scrap preparing and levelling the surfaces with Acrylic palty, as manufactures specification (excluding priming coat), covering the windows, instruments during painting complete.	/ new oping, s per 864	m2
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- 1) Note: This schedule of work is given for reference purpose only. Contractors are requested to quote your rates online in financial bid.
- 2) If you will engage labourer 20 or more any day, you have to get labour licence as per contract Regulation & Abolition Act 1970 Rule 1971, and also, you have to keep all such recored for inspection to the Principal Employer. If you will engage labour up to 10 Nos. per day, you have to file returns after completion of work as per Building & Construction Act to the Office of Regional Labour Commissioner (Central), Sion, Mumbai.
- 3) This work is to be executed as per the the clauses mentioned in the tender document signed by you. In addition to the existing safety clause of the tender document a penalty of Rs.5,000/- per case will be recovered from the bills of the particular works, in case any such safety violations are noticed.
- 4) 01% amount will be deducted from the bills for safety related measures which will be reimburse along with the final bill.
- 5) Taxes as per government notification time to time.
- 6) Contractor must pay GST Taxes to concern authority within 30 days time limit after receipt of payment from IIT Bombay & said record must be submitted to IIT Bombay Accounts Section, otherwise action will be taken as deemed fit.
- 7) If any malpractices / fraud / negligent professional behaviour or any discrepancy / inconsistency / disparity / deviation / disagreement / dissimilarity / mismatch noticed, their contract will be terminated by issuing one month notice by following legal procedure and will be blacklisted and informed to all Government Authorities and Organisations.

Superintending Engineer (I/C)

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