

# Name of work

**Annual contract for minor civil maintenance works in residences south side of Main Drive (Zone-02).**

BID DOCUMENT



Office of the Superintending Engineer IWD,  
Indian Institute of Technology, Kanpur

## Indian Institute of Technology Kanpur

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**Superintending Engineer**  
**Institute Works Department**  
**IIT, Kanpur-208016 (U.P.)**

**Name of work: Annual contract for minor civil maintenance works in residences south side of Main Drive (Zone-02)**

The bidder shall upload the following documents and submit the soft copy of the same mentioning the page no against each document as required in the NIT at CPP portal (Providing tick on specified document)

Sl. No.	Particulars	Document required as per NIT	Attached as page No(s).
1.	EMD scan copy	✓	
2.	GST Registration Certificate or GST Undertaking	✓	
3.	ESIC Registration	✓	
4.	EPFO Registration	✓	
5.	PAN Card	✓	
6.	Affidavit for not being Blacklisted / debarred /restrained	✓	
7.	Performance report of works executed	✓	
8.	Structure and Organization of the Agency	✓	
9.	Declaration on Details of the Bidder(s)	✓	
10.	Details of Similar Nature of Works Complete	✓	
11.	Declaration about Site Inspection	✓	
12.	Letter of Transmittal	✓	
13.	CPWD - 7	✓	
14.	Tender certificate	✓	
15.	Tender Acceptance Letter	✓	
16.	Copy of Financial turnover from CA along with audited balance sheets certified from CA/bank UDIN No for current 3years.	✓	
17.	Solvency certificate CA/Bank ** or Net Worth certificate from certified chartered accountant	✓	
18.	Registration details with the Govt. Department (CPWD, BSNL, MES, UPPWD, Central PSUs.)		
19.	Any other documents		

\*\* Bank Solvency: Preferably of the Current Financial Year, but not older than one years

## 1. Notice Inviting e-Tenders

The Superintending Engineer, IWD, IIT Kanpur invites on behalf of Board of Governors of IIT Kanpur online percentage rates tender from eligible firms/ agencies satisfying the eligibility criteria mentioned in the tender document.

NIT No: **08/Civil/D3/2026-27**

1	Name of work	:	<b>Annual contract for minor civil maintenance works in residences south side of Main Drive (Zone-02)</b>
2	Estimated cost (including GST)	:	<b>Rs. 59,75,857/-</b>
3	Earnest Money Deposit(Rs.)	:	<b>Rs. 1,19,517/-</b>
4	Duration of contract	:	<b>Twelve (12) months</b>
5	Last Time & date of submission of bids (Up to)	:	As per CPP portal data ( <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> )
6	Opening of bids	:	As per CPP portal data ( <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> )

The bid forms and other details may be downloaded from Central Public Procurement Portal (<http://eprocure.gov.in/eprocure/app>). Aspiring bidders who have not enrolled / registered in e- procurement should enroll / register themselves before participating through web site <http://eprocure.gov.in/eprocure/app>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at "Instructions for online bid submission."

Bidders can access quotation / tender documents on the website (for searching in the NIC site), kindly go to quotation search option and type 'IIT'. Thereafter, click on "GO" button to view all IIT quotations. Select the appropriate quotation / tender and fill them with all relevant information and submit the completed Quotation / Tender document online on the website <http://eprocure.gov.in/eprocure/app>. as per the schedule given in the next page.

**Note: No manual bids will be accepted. All bids (both Technical & Financial) should be submitted in the e-procurement portal.**

Applicants are advised to keep visiting the above-mentioned websites from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respect including updates thereof, if any. An incomplete application may be liable for rejection.

**Superintending Engineer  
Institute Works Department  
IIT, Kanpur-208016 (U.P.)**

## 2. Information and Instructions for Bidders for E-Tendering

The Superintending Engineer, IWD on behalf of Board of Governors of Indian Institute of Technology Kanpur invites online percentage rate tenders from eligible firms/ specialized agencies satisfying the eligibility criteria mentioned in the document.

1	Name of organization	:	Indian Institute of Technology, Kanpur
2	NIT No.	:	<b>08/Civil/D3/2026-27</b>
3	Location	:	Indian Institute of Technology, Kanpur
4	Tender / Quotation type (open / limited /EOI / Auction / Single	:	Open Tender
5	Tender / Quotation category (services / works	:	Works
6	Type of Contract (work / supply / auction/ service / buy / empanelment / sell	:	Works
7	Form of contract (CPWD-7/8)	:	CPWD-7
8	Work Category (civil / electrical / fleet / management / computer system	:	Civil
9	Is multi-currency allowed?	:	No
10	Date of publishing / issue / start	:	As per CPP portal
11	Document download start date	:	As per CPP portal
12	Document download end date	:	As per CPP portal
13	Date & time of pre-bid meeting	:	As per CPP portal
14	Venue of pre-bid meeting	:	As per CPP portal
15	Last date & time of uploading of bids	:	As per CPP portal
16	Date & time of opening of Technical bids	:	As per CPP portal
17	Bid Validity Days	:	90 days after opening of technicalbid
18	Earnest Money Deposit (EMD)	:	<b>Rs. 1,19,517/-</b>

19	No. of Bids / Covers (1 / 2 / 3 / 4)	:	2
20	Address for communication	:	Office of Executive Engineer, IWD, IIT, Kanpur-208016 (U. P.)  Contact no. 0512-259-6253, 0512-259-6718
21	Email address	:	<a href="mailto:seiwd@iitk.ac.in">seiwd@iitk.ac.in</a>

The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.

1. Information and instructions for bidders posted on website shall form part of bid document.
2. The bid document consisting of drawings, specifications, schedule of quantities of items to be executed, schedule of stages for payment as applicable and the set of terms & conditions of the contract to be complied with and other necessary documents can be seen and downloaded free of cost from [www.eprocure.gov.in](http://www.eprocure.gov.in)
3. Those contractors not registered on the website mentioned above, are required to get registered beforehand. Only e-bids shall be accepted in CPPP portal through e-tendering processes.
4. The intending bidder must have valid Class-III digital signature to submit the bid.
5. On opening date, the contractor can login and see the bid opening process. After opening of bids, he will receive the competitor bid sheets.
6. Contractor can upload documents in the form of JPG format and PDF format.
7. Contractor must ensure to quote rate of each item. The column meant for quoting rate in figures appears in pink colour and the moment rate is entered, it turns sky blue.

In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).

However, if a tenderer quotes nil rates against each item in item rate or does not quote any percentage above / below / at par on the total amount of the tender or any section/ sub head in percentage rate tender, the

tender shall be treated as invalid and will not be considered as lowest tenderer.

8. The “Eligibility/technical Bid” shall be opened first on due date and time as per the evaluation scheme. The “Financial Bid” of bidders qualifying the technical bid shall be opened on a later date as to be announced in CPP portal.
9. The bidders are advised to visit the site before submission of bids to have more clarity about the site conditions and availability of space for execution of the work.
10. All modifications/addendums/corrigendum’s issued regarding this bidding process shall be uploaded on website only.
11. The department reserves the right to reject any or all bids without assigning any reason thereof and may restrict the list of qualified bidders to any number deemed suitable by it, if too many bids are received satisfying the minimum laid down criteria.
12. The rates for all items of work, shall unless clearly specified otherwise, include cost of all operations and all inputs of labour, material, T&P, scaffolding, wastages, watch and ward, other inputs, all incidental charges, all other taxes (inclusive of GST), cess, duties, levies etc. required for execution of the work.
13. If claimed, The enlistment of the contractors should be valid on the last date of submission of bids. In case the last date of submission of bid is extended, the enlistment of contractor should be valid on the original date of submission of bids.
14. The description of the work is as follows: “**Annual contract for minor civil maintenance works in residences south side of Main Drive (Zone-02).**”
15. The work is estimated to cost **Rs. 59,75,857/-**. However, this estimate given is mere approximation for guide. **The works shall be carried out based on the requirement on a quantity take off sheet (QTO)/work order, approved by the Executive Engineer up to a maximum value of Rs. 1.30 Lacs at a time under normal circumstances and up to Rs. 2.50 Lacs at a time under exceptional cases.**
16. Agreement shall be drawn with the successful bidders on prescribed Form No. CPWD 7 which is available as a Govt. of India Publication and also available on website [www.cpwd.gov.in](http://www.cpwd.gov.in). Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
17. The time allowed for carrying out the entire work will be **Twelve (12)** months from the date of start as defined in **Schedule “F”** or from the first date of

- handing over of the site, whichever is later, in accordance with the phasing as detailed in special conditions of contract in the bid document.
18. The site for the work will be handed over as per the special terms and conditions of the document.
  19. An approval programme of completion submitted by the contractor after award of work based on the milestone given in the tender.
  20. The bid document consisting of NIT, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website [www.eprocure.gov.in](http://www.eprocure.gov.in) free of cost.
  21. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
  22. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he/she need not re-enter rate of all the items) but before last time and date of submission of bid as notified.
  23. Copy of documents as specified in the bid shall be scanned and uploaded to the e-tendering website within the period of bid submission.
  24. The bid submitted shall be opened as per the details provided in the CPP portal at IWD office. The date of opening of Financial Bid shall be informed through web site after the opening of financial bid
  25. The bid submitted shall become invalid if:
    - (i) The bidder is found ineligible.
    - (ii) If the bidder does not deposit original EMD to the office of Executive Engineer, Div-III, IWD, IIT Kanpur**
    - (iii) The bidder does not upload scanned copies of all the documents stipulated in the bid document.
    - (iv) If a tenderer quotes nil rates against each item in item rate or does not quote any percentage above / below / at par on the total amount of the tender or any section/ sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
  26. The contractor whose bid is accepted will be required to furnish performance guarantee of 5% of tendered value within the period specified in Schedule F. This guarantee shall be in the form of Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form.
  27. In case the contractor fails to deposit the said performance guarantee within

the periodas indicated in Schedule 'F' including the extended period if any, the contractor shall be suspended for two years and shall not be eligible to bid for IITK tenders from the date of issue of suspension order.

28. The contractor whose bid is accepted will also be required to furnish BOCW registration of deposit or deducing work and program chart (Time and Progress) within the period specified in Schedule 'F'.
29. Intending Bidders are advised to inspect and examine the sites and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, making proper arrangements to the site for smooth operation, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. Bidder shall be deemed to have full knowledge of the sites whether he inspects it or not and no extracharge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder 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 of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Institute and local conditions and other factors having a bearing on the execution of the work.
30. Intending Bidders are advised to get familiarized with the specifications /rules related (i.e., **Annual contract for minor civil maintenance works in residences south side of Main Drive (Zone-02)**)to the work as approved by the competent authority and various policies related to C &D waste and other environmental guidelines of the institute pertaining to the. Bidder shall be deemed to have full knowledge of such rules and regulations whether he has read it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. In case of reduction of scope of work or no work is possible to carry out on account of such issues, no cost shall be payable to them. Submission of a bid by the bidder implies that he has read this notice and all other documents and has made himself aware of the Institute Regulations and other factors having a bearing on the execution of the work.
31. The competent authority on behalf of the Board of Governors does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bidsreceived without assigning any reason. Bids in which any of the prescribed conditions is not fulfilled or any condition

- including that of conditional rebate is put forth by the bidders shall be summarily rejected.
32. Canvassing whether directly or indirectly, in connection with bids is strictly prohibited and the bids submitted by the bidders who resort to canvassing will be liable to rejection.
  33. The competent authority on behalf of the Board of Governors reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
  34. The contractor shall not be permitted to bid for works in the Institute Works Department responsible for award and execution of contracts, in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive) in IWD. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the Office of IWD/ Institute Works Department. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
  35. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government services without the prior permission of the Government of India in writing. This contract is liable to be canceled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's services.
  36. The bids for the work shall remain open for acceptance for a period of Ninety (90) days from the date of opening of bids. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the Institute shall, without prejudice to any other right or remedy, be at liberty to suspend the bidder for one year.
  37. This notice inviting Bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 7 days from the stipulated date of start of the work, will sign the contract.
  38. The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at

the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto

39. Standard C.P.W.D. Form 7 or other Standard C.P.W.D. Form as applicable.
40. The bid document will include the following components:
  - (a) CPWD-7 and CPWD-6 including Schedule A to F for all the components of the work, Standard General Conditions of Contract for CPWD 2023 as amended/modified up to last date of submission of the bid.
  - (b) General / specific conditions, specifications applicable to all components of the work.
41. The eligible bidders shall quote percentage rates after considering all the components of the work.
42. After acceptance of the bid by competent authority, the Executive Engineer, IWD shall issue letter of award on behalf of the Board of Governors to the contractor. After the work is awarded, the contractor will have to enter into one agreement with Executive Engineer, IWD. One such signed set of agreement shall be handed over to Engineer-In-Charge as applicable.
43. Entire work under the scope of bid shall be executed under one agreement.
44. The requirement of technical staff given in various specialized works is as per requirements given in clause 32 of NIT document. The actual deployment of these technical staff will be as per execution of work and direction of the Executive Engineer, IITK. **In case of non-deployment, a penalty of Rs. 10,000/- per month shall be levied from the contractor.**
45. The bill for work components shall be facilitated by Engineer-in-Charge to the contractor.
46. The Final bill must be submitted to the Office of IWD, IIT Kanpur and the bills shall be based on milestones.
47. The work shall be treated as complete when all the components of the work are complete.
48. It will be obligatory on the part of bidder to sign the contract document for all components before the first payment is released.
49. In case of reduction in scope of work no claim on account of reduction in value of work, loss of expected profit, consequential overheads etc. shall be entertained.
50. A team of officers from Indian Institute of Technology Kanpur may visit the office/ site of work of bidders for establishing their credibility and verification

of submitted documents

51. The mentioned work is urgent as requested by client/Institute and to be completed strictly in given time schedule as per special terms and conditions. The contractor has to deploy the labour and supervisory staff in shifts to meet the targeted completion date. The work may be executed in extended shifts or two shifts. The rates quoted by the contractor will be deemed to be inclusive of any extra expenditures on account of this reason. Nothing shall be paid on this account.
52. The competent authority on behalf of the Board of Governors reserves the right to terminate the contract if,
  - a) Any violation of labour law has been observed.
  - b) Any of the construction workers engaged in the works under this contract is found also engaged in Service Contracts of the Institute at the same time.
53. The competent authority on behalf of the Board of Governors reserves the right to disqualify an agency for
  - (a) Non-compliance of Institute orders
  - (b) Violation of Institute policies as established by the Competent Authority in the best interests of the Institute.

#### **Payment & Schedule:**

**All running bills for each work and the final bill for the work shall be facilitated by Engineer-in-Charge. The bill must be submitted to the Office of Institute Works Department, IIT Kanpur. An approved quantity take off (QTO) sheet/Work order must be part of all bill submissions for clearance of these bills.**

## **2.2 Instructions for Online BID Submission**

This tender document has been published on the Central Public Procurement Portal (URL: <http://eprocure.gov.in/eprocure/app>). The bidders are required to submit softcopies of their bids electronically on the CPP portal, using valid Digital Signature Certificates (DSC). The instructions given below are meant to assist the bidders in registering on the CPP portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP portal.

More information useful for submitting online bids on the CPP portal may be obtained at <http://eprocure.gov.in/eprocure/app>

### **2.2.1 Registration**

1. Bidders are required to enroll on the e-procurement module of the Central Public Procurement portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)) by clicking on the link, “click here to enroll”. Enrolment on the CPP portal is free of charge.
2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for the accounts.
3. Bidders are advised to register their valid e-mail address and mobile number as part of the registration process. These would be used for any communication from the CPP portal.
4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (class 2 or class 3 certificates with signing key usage) issued by any certifying authority recognized by CCA India (e.g. Sify / TCS / nCode/ eMudhra etc.) with their profile.
5. Only one valid DSC should be registered by a bidder. Please note that bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
6. Bidder then logs in to the site through the secured log-in by entering their user ID Password and the password of the DSC / eToken.

### **2.2.2 Searching for tender documents**

1. There are various search options built in the CPP portal to facilitate bidders to search active tenders by several parameters. These parameters could include tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP portal

2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. The tenders can be moved to the respective “My Tenders” folder. This would enable the CPP portal to intimate the bidders through SMS /e-mail in case there is any corrigendum issued to the tender document.
3. The bidder should make a note of the unique Tender ID assigned to each other; in case they want to obtain any clarification/help from the Helpdesk.

### **2.2.3 Preparation of bids**

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bids. Please note the number of covers in which the bid documents have to be submitted. Any deviations from these may lead to rejection of the bids.
3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black & white option.
4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g., PAN card copy, annual reports, auditor’s certificates, etc.) has been provided to the bidders. Bidders can use “My Space” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

### **2.2.4 Submission of bids**

1. Bidder should log into the site well in advance for bid submission so that he / she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. A standard BOQ Format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other

format is acceptable. Bidders are required to download the BOQ file, open it and complete the white colored [unprotected] cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

OR

In some cases, financial bids can be submitted in PDF format as well (in lieu of BOQ).

4. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
5. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done.
6. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
7. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
8. Add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

#### **2.2.5 Assistance to bidders**

1. Any queries relating to tender document and the terms and conditions contained therein should be addressed to the tender inviting authority for a tender or the relevant contact person indicated in the tender.
2. Any queries relating to the process of online bid submission or queries relating to CPP portal in general may be directed to the 24 x 7 CPP Portal Help Desk.

#### **2.2.6 General instruction to bidders**

1. The tenders will be received online through portal

<https://eprocure.gov.in/eprocure/app>. In the technical bids, the bidders are required to upload all the documents in PDF format.

2. Possession of a valid class II / III Digital Signature Certificate (DSC) in the form of smart card / e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through <https://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the website <https://eprocure.gov.in/eprocure/app> under the link "Information about DSC".

Tenderers are advised to follow the instructions provided in the "Instructions to the tenderer" for the e-submission of the bids online through the Central Public Procurement Portal for e-procurement at <https://eprocure.gov.in/eprocure/app>.

Superintending Engineer  
Institute Works Department  
IIT, Kanpur-208016 (U.P.)

### **2.3 List of documents to be scanned and uploaded within the period of bid submission**

The following mandatory documents to be submitted with online bid submission:

The Online bids (complete in all respect) must be uploaded online in two Envelops as explained here: -

#### **2.3.1 Envelope - 1: Technical Bid**

The following mandatory documents to be provided as a **single PDF** file in the same sequence as listed for an eligible bid:

1. EMD scanned copy shall be submitted along with the technical bid and original have to be submitted in the office of the tender inviting authority \*\*
2. GST Registration Certificate or GST Undertaking as per 5.1
3. EPF & ESI Registration
4. Copy of PAN card
5. Affidavit for not being blacklisted/debarred/restrained as per 5.2
6. Performance report of works executed as per 5.3
7. Structure and Organization of the Agency as per 5.4
8. Declaration on Details of the Bidder(s) as per 5.5
9. Details of Similar Nature of Works Completed as per 5.6
10. Declaration about Site Inspection as per 5.7
11. Letter of Transmittal as per 5.8
12. CPWD-7 as per 5.9
13. Tender Certificate as per 5.10
14. Tender Acceptance Letter as per 5.11
15. Financial Information as per 5.12
16. Solvency certificate as per 5.13 (minimum 40% of estimated cost put to tender)  
**Or** Net Worth Certificate from certified Chartered Accountant as per 5.14
17. **Registration details with the Govt. Department (CPWD, BSNL, MES, UPPWD, Central PSUs.)**

**\*\* Earnest money in the form of Demand Draft of pay order or Banker's Cheque or Deposit at Call Receipt or Fix Deposit Receipt drawn in favor of "The Director, IIT Kanpur" shall be scanned and uploaded to the e-Tendering website by the bidder within the period of bid submission. The hardcopy of earnest deposit receipt (EMD) shall be submitted in the office of Executive Engineer Div-III, IWD, IIT Kanpur before the Date & time of opening of technical bids as specified in the above bid document.**

### 2.3.2 Envelope - 2: Financial Bid

Price bid should be submitted in BOQ format

## 3. Eligibility Criteria

### 3.1 Eligibility criteria for contractors

The eligible contractors mean registered in appropriate class and category with CPWD, BSNL, MES, UPPWD, Central PSUs

#### Eligible Bidders

Eligible bidders should satisfy the following criteria for an eligible bid:

**1. Average annual financial turn over:** Average annual financial turnover of composite works /civil works should be at least 30% of the estimated cost of work put to tender during the last 3 consecutive financial years by the certified Chartered Accountant. Audited turnover statements to be furnished as proof of the same duly certified by chartered accountant along with Profit & Loss Statements.

#### 2. Experience

(Firms/Contractors must have completed satisfactorily)

- i) One similar work of 80% value of the estimated cost put to tender Or
- ii) Two similar works of 60% value of the estimated cost put to tender Or
- iii) Three similar works of 40% value of the estimated cost put to tender

Works completed during last 7 years ending last day of the month previous to the one in which applications are invited.

And

One completed work of similar nature costing not less than the amount equal to 40% of the estimated cost put to tender with Central Government Department / Central Autonomous Body / Central Public Sector Undertakings /State Government Department.

- 3. Definition of similar work:** Similar type of work means “Renovation / Annual repairs & maintenance of works in residential houses/ apartments/ quarters / offices/ laboratories” done with any Central Government Department / Central Autonomous Body / Central Public Sector Undertakings /State Government in last 7 years.

**Eligible bidders must also satisfy the following conditions and ensure submission of all documents mentioned in 2.3**

1. **Legal:** Unregistered Partnership Firm and Joint Venture or Consortium are not eligible.
2. **Registration:** Bidder should be registered with the Income Tax Department (PAN), Employees Provident Fund (EPF) Organization, Employees State Insurance (ESI) Corporation & GST. Bidders are not eligible in absence of these documents.
3. **Office:** Bidders have to establish its local accessible office registered with local GSTIN at IIT Kanpur to run the awarded work.

#### **4. Bid Evaluation and Award**

The following process will be followed for the Technical and Financial Bids Evaluation:

##### **4.1 Technical Bid Evaluation**

- Technical bids received complete in all respects covering the entire scope of work including original EMD, will only be opened.
- The technical bid evaluation is done only for bidders who satisfy the minimum criteria by submitting documentary proof supporting eligibility criteria and the bids of agencies who have not submitted these documents are liable to be rejected without notice.

##### **4.2 Financial Bid Evaluation**

For financial bids, the following points shall be followed:

- After evaluation of Pre-Qualification Documents, a list of short listed agencies will be prepared.
- Thereafter the financial bids of only the qualified and technically acceptable bidders shall be opened at the notified time, date and place in the presence of the qualified bidders or their representatives, if present.
- The bid shall remain valid for Ninety (90) days from date of opening of eligibility bids/Technical bid.
- In tenders of similar scope of work intended within the same time frame, the L-1 bidders for each tender may be brought at par with lowest bidder among both tenders.
- If the same bidder emerges as L-1 in both works, he shall be considered only for the package having higher estimated cost (ECPT). And the L-2 bidder of the other tenders has to agree on the L-1 rates for award of the work.

## NOTE

The employer reserves the right, without being liable for any damages or obligation to inform the bidder, to:

- Amend the scope and value of contract to the bidder.
- Reject any or all the applications without assigning any reason.

Any effort on the part of the bidder or his agent to exercise influence or to pressurize the employer would result in rejection of his bid. Canvassing of any kind is prohibited.

## 5. Various Forms and Formats

### 5.1 GST registration Certificate

Proforma for Undertaking regarding obtaining GST registration Certificate of TheState in which work is to be taken up

(Undertaking to be furnished on a 'non-judicial' stamp paper worth Rs.100/-)

(Scanned copy of this notarized undertaking to be uploaded at the time of submission of bid, if required)

If work is awarded to me, I/we shall obtain GST registration Certificate of the State, in whichwork is to be taken up within one month from the date of receipt of award letter or before release of any payment by IITK, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or forany action taken by IITK or GST department in this regard.

Signature of bidder

OR

(An authorized Officer of the firm with stamp)

Signature of Notary with Seal

## **5.2 Affidavit for not being blacklisted/debarred/restrained**

**Proforma for AFFIDAVIT for not being blacklisted/debarred/restrained**

**(AFFIDAVIT to be submitted on a 'Non-Judicial' stamp paper worth Rs.100/)  
(Scanned copy of this notarized affidavit to be uploaded at the time of submission of bid)**

I/we undertake and confirm that our firm/partnership firm has not been blacklisted and/or debarred/restrained by any Central Govt./ State Govt. Agency/ Autonomous body of the Central or State govt./ PSU etc. Further that, if such information comes to the notice of the Institute, then I/we shall be debarred for bidding in the Institute in future forever. Also, if such information comes to the notice of the Institute on any day before date of start of work, the competent authority shall be free to cancel the agreement and to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

Signature of bidder

OR

(An authorized Officer of the firm with stamp)

Signature of Notary with Seal

### **5.3 Performance report on work executed**

#### **Proforma of Performance report on works referred to in Financial Information**

(To be printed in Company's Letterhead)

(Scanned copy of the Performance Reports to be uploaded at the time of submission of bid)

1. Name of work/project & location:
2. Agreement no.:
3. Estimated cost:
4. Tendered cost:
5. Date of start:
6. Date of completion:
7. Stipulated date of completion:
8. Actual date of completion:
9. Amount of compensation levied for delayed completion, if any:
10. Amount of reduced rate items, if any:
11. Performance Report:
  - (a) Quality of work: Outstanding / Very Good / Good /Poor
  - (b) Technical Proficiency: Outstanding / Very Good / Good /Poor
  - (c) Resourcefulness: Outstanding / Very Good / Good /Poor
  - (d) General Behavior: Outstanding / Very Good / Good /Poor

Signature of Executive Engineer or Equivalent

Dated:

#### **5.4 Structure and Organization of the Agency**

##### **Proforma of providing Structure and Organization of the Bidding Agency (To be printed in Company's Letterhead)**

(Scanned copy of the Structure and Organization Document to be uploaded at the time of submission of bid)

1. Name & address of the bidder:
2. Telephone no./Telex no./Fax no.:
3. Email address for Communication:
4. Legal status of the bidder (attach copies of original document defining the legal status):
  - (a) An Individual:
  - (b) A proprietary firm:
  - (c) A firm in partnership:
  - (d) A limited company or Corporation:
5. Particulars of registration with various Government Bodies (attach attested photocopy)

##### **Organization / Place of registration Registration No.**

- 1.
- 2.
- 3.
6. Names and titles of Directors & Officers with designation to be concerned with this work.
7. Designation of individuals authorized to act for the organization
8. Has the bidder, or any constituent partner in case of partnership firm, ever been convicted by the court of law? If so, give details.
9. Any other information considered necessary but not included above.

**Signature of bidder**

## 5.5 Declaration on Details of the Bidders

### Proforma of Declaration on Details of the Bidders (To be printed in Company's Letterhead)

(Scanned copy of the Performance Reports to be uploaded at the time of submission of bid)

#### DECLARATION

I/We, ..... hereby declare that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I/we have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

Particulars of the bidder as per following details:

1.	Name of the firm / organization	:	
2.	Type of the firm / organization: Public Ltd, / Private Ltd./ Registered firm	:	
3	Registered office	:	
4	Address of office	:	
5	Contract people	:	
6	Name & designation	:	
7	Land line & mobile no.	:	
8	Email	:	
9	PAN No.	:	
10	GST No.	:	
11	EPF Registration No.	:	
12	ESI Registration No.	:	
13	EMD/FDR/DD No. & Date.	:	
14	Registration details with the Govt. Department (CPWD, BSNL, MES, UPPWD, Central PSUs)		
15	Validity of the registration with the Govt. department		

16	Tendering limit as per the registration department		
17	Has the applicant ever been required to suspend any project for a period of more than six months continuously after Commencement of work?	:	If so, give the name of the project and reasons of suspension of project
18	Has the applicant ever been convicted by a court of law?	:	YES / NO, If yes give details of the case
19	Details of any litigation in which the applicant is / was involved.	:	
20	All forms submitted as desired in the bid	:	Yes / No
21	Undertaking regarding no subletting of work.	:	

We further declare that our organization has not been blacklisted /delisted or put to any holiday by any Institutional agency / Govt. Department / Public Sector Undertaking in the last three years.

Signature of Bidder(s) with seal

Dated:

**5.6 Details of Similar Nature of Works Completed**

Proforma for submission of Details of Eligible Similar Nature of Works Completed\*during the Last Seven Years ending previous day of the last date of submission of tenders (Scanned copy of the Performance Reports to be uploaded)

The contractor needs to submit the information in the following tabular format:

Sr. No	Name of work / project and location	Owners or sponsoring organization	Const of work in crores of rupees	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Litigation/ arbitration cases pending /in Progress with details*	Name and address / telephone number of officers to whom reference may be made	Whether the work was done on back to back basis Yes/ No
1	2	3	4	5	6	7	8	9	10

\* Indicate gross amount claimed and amount awarded by the Arbitrator.

Signature of bidder(s) with seal

Dated:

## 5.7 Declaration About Site Inspection

### Declaration about Site Inspection

(By Bidder)

To  
The Superintending Engineer,  
IWD, IIT,  
Kanpur

**Subject: Submission of Tender for the work of "Annual contract for minor civil maintenance works in residences south side of Main Drive (Zone-02)**

Dear Sir/Madam,

It is hereby declared that as per terms and conditions of this tender document, I/ We the bidder inspected and examined the subject site and its surrounding and satisfy myself / ourselves as to the nature of the ground and sub-soil (so far as is practicable), the forms and nature of the site./ ourselves before submitting the bid, the accommodation which may require and all necessary information as to risks, contingencies and other circumstances which may influence or affect our bid have been obtained. I/We the bidder shall have full knowledge of the site and no extra charge consequent upon any misunderstanding or otherwise shall be claimed in later date. I /We bidder shall be responsible for arranging and maintaining at own cost all materials,tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by me/us implies that I / We have read this notice and all other contract documents and has made myself /ourselves aware of the scope and specifications of the work to be done and local conditions and other factors having a bearing on the execution of the work.

Sincerely

(Duly authorized signatory of the Bidder)

## 5.8 Letter of Transmittal

To  
The Superintending Engineer,  
IWD, IIT, Kanpur- 208016

**Name of Work: Annual contract for minor civil maintenance works in residences south side of Main Drive (Zone-02)**

Dear Sir/Madam

Having examined details given in Notice and bid document for the above work, I/we hereby submit the relevant information.

1. I/We hereby certify that all the statements made and information supplied in the enclosed forms and accompanying statement are true and correct.
2. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. I/We also authorize the Executive Engineer, IWD, Indian Institute of Technology Kanpur or his representative(s) to approach individuals, employers, firms and corporation to verify our competence, work experience, and general reputation.
4. I/we submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following eligible completed works:

Sl. No.	Name of work	Amount	Certificate issued by
1			
2			
3			

### CERTIFICATE

It is certified that the information given in the enclosed eligibility bid are correct. It is also certified that I/We shall be liable to be debarred, disqualified/ cancelation of enlistment in case any information furnished by me/us found to be incorrect.

Signature(s) of Bidder with seal

Enclosures:

Date:

## 5.9 CPWD-7

### CPWD-7

#### PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

Tender for the “Annual contract for minor civil maintenance works in residences south side of Main Drive (Zone-02)

1. To be uploaded as per details uploaded in CPP portal at [www.eprocure.gov](http://www.eprocure.gov)
2. To be opened in the presence of tenderers who may be present at the time of opening in the Executive Engineer, IWD, IIT Kanpur.
3. The pre-qualification/Technical bid shall be opened first on due date and time as mentioned above. The time and date of opening of financial bid of contractors qualifying the technical bid shall be communicated to them at a later date.

#### TENDER

(To be signed in Company's Letterhead)

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F Specifications applicable, Drawings & Designs, General Rules and Directions, General Conditions of Contract (For construction works) 2023, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Board of Governors within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for Ninety (90) days from the due date of its opening and not to make any modification in its terms and conditions.

I/We have deposited EMD for the prescribed amount in the office of concerned Executive Engineer as per the bid document.

If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said Board of Governors or his successors, in office shall without prejudice to any other right or remedy, be at liberty to take action as per GCC 2023. Further, if I/We fail to commence work as specified, I/We agree that

Board of Governors or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clauses 12.2 and 12.3 of the tender form.

Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back-to-back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for tendering in Indian Institute of Technology Kanpur in future forever. Also, if such a violation comes to the notice of Indian Institute of Technology Kanpur before date of start of work, the Executive Engineer, IWD shall be free to forfeit the entire amount of Performance Guarantee.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information / derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety & integrity of IIT Kanpur.

Signature(s) of Contractor(s) with seal

Dated:

Address

Occupation

**5.10 Tender Certificate**

(To be given on Company Letter Head)

Date: .....

To,  
Executive Engineer,  
IWD, IIT,  
Kanpur-208016(U.P.)

Sub: Certificate of compliance as per Rule 144 (xi) GFR's 2017  
Tender Reference No: .....

**Name of Tender / Work:** .....

Dear Sir,

1. "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

2. "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all the requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Yours Faithfully,

(Signature of the Bidder(s), with Official Seal)

### 5.11 Tender Acceptance Letter

(to be give on company letter head)

To,  
The Superintending Engineer  
IWD, IIT, Kanpur

Sub: Acceptance of terms & conditions of tender. Reference no.

Name of Tender / Work: .....

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: as per your advertisement, given in the above-mentioned website(s).
2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No..... to ( including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/ organization too have also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(s) / corrigendum(s) in its totality / entirety.
5. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public sector undertaking.
6. I / We certify that all information furnished by our Firm is true & correct and, in the event, that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official  
Seal)

**5.12 Financial Information**

**Proforma for providing Financial Information**

(Scanned copy of the completed information sheet to be uploaded at the time of submission of bid)

Financial Analysis: Details to be furnished duly supported by figures in balance sheet/ profit & loss account for the last three financial years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

<b>Financial Years</b>	2020-21	2021-22	2022-23	2023-24	2024-25
<b>Gross Annual turnover</b>					
<b>Profit/Loss</b>					

Signature of Chartered Accountant with Seal

Signature of bidder(s)

### 5.13 Banker's Certificate from a scheduled Bank

Proforma of Banker's Certificate from a Scheduled Bank

(To be printed in Bank's Letterhead)

(Scanned copy of the Certificate to be uploaded at the time of submission of bid)

This is to certify that to the best of our knowledge and information that M/s./Sh .....having marginally noted address, a customer of our bank are/is respectable and can be treated as good for any engagement up to a limit of Rs ..... (Rupees .....). This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

.....  
(Signature for the Bank)

#### NOTE:

1. Bankers certificates should be on letter head of the Bank, addressed to tendering authority.
2. In case of partnership firm, certificate should include names of all partners as recorded with the Bank.

**5.14 Net Worth Certificate by certified Chartered Accountant**

**Proforma of Net Worth Certificate by certified Chartered Accountant**

(To be printed in Letterhead of Chartered Accountant)

(Scanned copy of the Certificate to be uploaded at the time of submission of bid)

This is to certify that as per the audited Balance Sheet and Profit & Loss statement of the account during the financial year ....., the net worth of M/s./Sh.....(Name & Registered Address of individual/firm/company) as on 31.3.2025 is Rs. (Rupees.....) after considering all liabilities. It is further certified that the net worth of the company has not eroded by more than 30% in the last three years ending on 31.3.2025.

.....  
(Signature of the Chartered Accountant)

.....  
(Name of the Chartered Accountant)

.....  
(Membership No. of ICAI)

.....  
(Date & Seal)

**5.15 Proforma for Contract for Removal of Defects after Completion In Respect of Water Proofing Works**

Contract for Removal of Defects after Completion In Respect of Water Proofing Works

(BASEMENT/LOWER GROUND FLOOR/UNDER GROUND TANK/ROOF)

The Agreement made this..... day of Two thousand Twenty Five and between.....

son of (hereinafter called the Guarantor of the one part) and the BOARD OF GOVERNORS (hereinafter called the Government of the other part).

WHEREAS THIS agreement is supplementary to a contract (hereinafter called the contract) dated ..... and made between the GUARANTOR OF THE ONE part and the Government of the other part, whereby the contractor, inter alia, undertook to render the buildings and structures in the contract recited completely water and leak-proof.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak-proof for 08 (eight) years from the date after the maintenance period prescribed in the contract.

NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak proof and the minimum life of such water proofing treatment shall be ten years to be reckoned from the date after the maintenance period prescribed in the contract.

Provided that the Guarantor will not be responsible for the leakage caused by earthquake or structural defects or misuse of roof or alteration and for such purpose:

- a) Misuse of roof shall mean any operation which will damage proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof.
- b) Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts.
- c) The decision of the Engineer-in -charge with regard to cause of leakage/seepage shall be final.

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render the building water proof to the

satisfaction of the Engineer-in-charge at his cost and shall commence the work for the rectification within seven days from the date of issue of the notice from the Engineer- in-charge calling upon him to rectify the defects failing which the work shall be done by the department by some other agency contractor at the GUARANTOR's risk and cost. The decision of the Engineer-in-charge as to the cost payable by the Guarantor shall be final and binding.

That if guarantor fails to make good all defects or commits breach there under then the Guarantor will indemnify the principal and his successors against all loss, damage, cost expense otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and/or cost incurred by the Government the decision of the Engineer-in-Charge will be final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed by the Obliger. . . . .  
..... and by. and for and on behalf of the PRESIDENT OF INDIA on the  
day, month and year first above written SIGNED, SEALED AND delivered by  
OBLIGOR in the presence of :

1. ....
2. ....

SIGNED FOR AND ON BEHALF OF THE BOARD OF GOVERNORS BY in the  
presence of:

1. ....
2. ....

## 6 Proforma of Schedules

Operative schedules shall be supplied separately to each intending tenderer

SCHEDULE "A"	Schedule of Qty	Uploaded separately
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### SCHEDULE 'B'

Schedule of materials to be issued to the contractor:

S. No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue
1	2	3	4	5
NIL				

### SCHEDULE 'C'

Schedule of Tools and Plants to be hired to the contractor

S. No.	Description	Hire charges per day	Place of issue
1	2	3	4
-----NIL-----			
<b>SCHEDULE "D"</b>		Extra schedule for specific requirements/document for the work, if any:	As attached in tender form.
<b>SCHEDULE "E"</b>		Schedule of component of other Materials, Labour, POL etc. for price escalation	N. A.
<b>SCHEDULE "F"</b>		Reference to General Conditions of contract.	
<b>Name of Work:</b>		<b>Annual contract for minor civil maintenance works in residences south side of Main Drive (Zone-02).</b>	
<b>Estimated cost of the work:</b>		<b>Rs. 59,75,857/-</b>	
<b>Earnest money</b>		<b>Rs. 1,19,517/-</b>	
<b>Performance Guarantee</b>		5% of the tendered value of the work	
<b>Security Deposit</b>		2.5% of the tendered value of the work	

**General rules and direction:**

Officer inviting tender	<b>Superintending Engineer, IWD, IIT, Kanpur</b>
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**Definitions:**

<b>2(vi)</b>	Engineer-in-charge	
	For civil item works	<b>Executive Engineer, IWD, IIT Kanpur</b>
<b>2(viii)</b>	Accepting authority	<b>DOIP/Superintending Engineer, IWD, IIT Kanpur</b>
<b>2(x)</b>	Percentage on cost of materials and labour to cover all overheads and profits	15%
<b>2(x)(b)</b>	<b>Standard Schedule of Rates: Civil Items of Work:</b>	<b>D.S.R. 2023 – GST with up to date correction Slips</b>
<b>2(xi)</b>	Department	IWD, IIT Kanpur
<b>9(ii)</b>	Standard CPWD contract Form:	GCC maintenance 2023, CPWD form-7 as modified & corrected up to date.
<b>Clause 1</b>	i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance ii) Maximum allowable extension with late fee @0.1% per day of performance guarantee amount beyond the period as provided in i) above	15 Days  7 Days
<b>Clause 1A</b>	Applicable. The Defect liability period shall be <b>One year</b> from the date of handing over of the assigned <b>works to the user/Institute</b>	

<b>Clause 2</b>	Authority for fixing Compensation under Clause 2	<b>SE, IWD, IIT, Kanpur. Or successor thereof</b>
<b>Clause 2A</b>	Whether Clause 2A shall be applicable	Yes
<b>Clause 5</b>	i) Number of days from the date of issue of letter of acceptance for reckoning date of start ii) Time allowed for execution of work	22 days  12 Months
<b>i)</b>	Number of days from the date of issue of letter of acceptance for reckoning date of start	<b>22 days</b>
<b>ii)</b>	<b>Mile stone</b>	Time allowed for execution of work along with the amount to be withheld in case of non-achievement of milestone are shown in Tables 6
<b>Authority to decide</b>	<b>Extension of time</b>	<b>EE/ SE, IWD, IIT, Kanpur. Or successor thereof</b>
<b>Clause 6A</b>	Computerized Measurement of bills	<b>APPLICABLE</b>
<b>Clause 7</b>		<b>APPLICABLE</b>
<b>Clause 10A</b>	Material to be provided by the contractor	<b>APPLICABLE</b>
<b>Clause 10B (ii), (iii)</b>	Whether clause 10-B (ii) and 10-B (iii) shall be applicable.	<b>NOT APPLICABLE</b>
<b>Clause 10 C</b>	Component of labour expressed as percentage of value of work	<b>NOT APPLICABLE</b>
<b>Clause 10 CA</b>		<b>NOT APPLICABLE</b>

Clause 10 CC	Increase/Decrease in Price of materials/wages	NOT APPLICABLE		
Clause 11		CPWD Specifications of all Civil items (CPWD Civil specification vol.1 and vol.2, 2019), with correction Slips issued up to the last date of receipt of tenders and as per <a href="#">NIT for Civil Works</a> .		
Clause 12: Type of work		Original Work		
Clause 12.2 & 12.3: Deviation limit beyond which clause 12.2 & 12.3 shall apply for Building works	Apply for Building works	100 %		
Clause 16	<b>Competent Authority for deciding reduced rates for Civil items of work</b>	As per table 7		
Clause 17	Defect liability period	One year and those listed in Special Conditions of Contract		
Clause 18	List of mandatory machinery, tools & plants to be deployed by the contractor at site	As per the scope of work		
Clause 32	Requirement of Technical Representative(s)	As per table 9		
<b>If the Contractor commits default in commencing the execution of the work as aforesaid, the performance guarantee shall be forfeited.</b>				
<b>Table 6 Major milestones of the project</b>				
The contractor should always keep his establishment ready to commence the work immediately after the issue of the work of any amount. Work requests of urgent nature should be included in works order at the earliest after receiving orders from the Engineer in charge. The time schedule for the issued works should be as per this Table				
Sl. No.	Spending limit	Maximum lead time to start the work with	Maximum completion duration	Amount to be deducted in case of non

		an approved work orders		-achievement of milestone (% of the cost of the work order, every week after completion of maximum duration)
1	Works costing up to Rs. 50,000.00	3 days	14 days	5
2.	Workscosting up from Rs. 50,000.00 to Rs. 1,30,000.00	7 days	21 days	5
3	Workscosting up from Rs. 1,30,000.00 TO Rs. 2,50,000.00	7 days	28 days	5

The detailed program chart approved by the engineer-in-charge shall indicate how the resources will be deployed by the contractor to maintain desired progress and for the completion of the work within the specified period. If the submitted program is approved, the milestone shall be redefined accordingly by the Superintending Engineer, IWD Indian Institute of Technology Kanpur. The amount to be withheld in such a case, for non-achievement of milestone(s), shall remain unaltered i.e., 1% of tendered amount

1.	Time allowed for execution of work	<b>12 months</b>
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**Table 7 Authority to decide**

1.	Extension of time (EOT)	EE/ SE, IWD IIT Kanpur
2.	Rescheduling of milestones	SE, IWD, IIT, Kanpur
3.	Shifting of start in case of delay in handing over of site.	SE, IWD, IIT, Kanpur

**Table 8: Materials for which all India Wholesale Price Index to be followed Nearest Materials (other than cement, reinforcement bars and the structural steel) for which All India Wholesale Price Index to be followed)**

Sl. No.	Material covered under this clause	Base Price (including GST) of Materials, covered under clause 10 CA
1.	Portland Pozzolana Cement (PPC)/ Ordinary Pozzolana Cement	NIL

2.	Steel for Reinforcement TMT Fe 500D primary manufacturer	NIL
3.	Structural steel (Primary producers)	NIL

**Table 9: Requirement of Technical staff as per Clause 32**

Sl. No.	Qualification	Number	Minimum Experience in years	Designation	Rate at which the recovery shall be made from the contractor in the event of not fulfilling provision of Clause 32
1.	Graduate / Diploma	1	5	Project / Planning / construction / billing Engineer (Civil)	Rs. 25000/- (Rupees Twenty Five Thousand only) per month, per person

Note: Assistant Engineers retired from Government services who are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10 years relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineer.

The details of appointed engineers/technical staffs have to be verified and approved by Engineer- in-charge

<b>Clause 42</b>		
i)	a) Schedule/ statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates 2023 printed by CPWD	NIL
ii)	Variations permissible on theoretical quantities	NIL
a)	Cement for works with estimated cost put to tender not more than Rs. 5 lakhs. For works with estimated cost put to Tender is more than Rs. 5 lakhs	NIL

b)	Steel reinforcement and structural steel Sections for diameter, section and category.	NIL
c)	All other materials	NIL

#### RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

Sl No	Description of items	Rates in figures and words at which recovery shall be made from the contractor	
		Excess beyond permissible variation	Not Applicable
1.	Cement (PPC)	Double the Issue rate	Not Applicable
2.	Steel reinforcement (TMT Bars)	Not Applicable	Not Applicable

## **7 Scope of work**

### **7.1 Brief of the works**

1. Replacement of damaged flush door shutter.
2. Replacement of damaged Glazed window shutter
3. Replacement of damaged Wiremesh window shutter
4. Relaying of damaged CC floor.
5. Relaying of damaged Vitrified tiles
6. Replacement of damaged GI pipe line
7. Replacement of damaged PVC water storage tank.
8. Replacement of damaged CI pipe line
9. Replacement of damaged Sanitary fittings
10. Replacement of damaged GI fittings etc.

**Note: The scope of the works listed above is indicative only. For the details of the works, please refer to the BoQ and the work has to be done strictly as per the specifications in the BoQ.**

### **7.2 Materials Verification**

The contractor shall inform the Engineer in charge in advance, for verifying the measurement of the concealed items if any like reinforcement bars, pipes laying etc., done by the contractor on the very day of the above said events.

### 7.3 List of Preferred Makes for Civil Works (as applicable)

Preferred makes of materials to be used in the work are as under. In case of non-availability of these makes, the Engineer-in-charge may allow use of alternative BIS makes of materials in the work. Non-BIS marked materials may be permitted by the Engineer-in-charge. This is a general list of makes. All makes applicable as per Schedule of Quantities must be as per the Institute preferred make.

Sl. No.	Material description	Manufacturer / Brand Name
1.	Ready Mix Concrete	Ultratech Concrete, ACC Ready Mix and RMC India
2.	Cement (PPC/OPC)	ACC, Ultratech, Vikram, Shree Cement, Abuja, JK Cement, Century Cement, Jaypee Cement & Prism Cement.
3.	White Cement	Birla White, J.K. White
4.	Reinforcement Steel	SAIL, Tata Steel Ltd, RINL, Jindal Steel & Power Ltd. and JSW Steel Ltd
5.	Waterproofing compounds, admixtures, plasticizer, super plasticizer, curing compounds	Fosroc, ROFF/Dr. Fixit (Pidilite Industries), STP Ltd., Sika, BASF, Ardex Endura & Parma Construction Aids Pvt. Ltd.
6.	Integral water proofing compound with cement (for plaster & mortar)	Fosroc: Conplast 421, Dr. Fixit : LW+, Sika: Sikacim, Asian Paint: SmartCare Vitalia & equivalent product of BASF, STP Ltd., Ardex Endura, Perma Construction Aids Pvt. Ltd.
7.	Water proofing compound for bathroom/ toilet /balcony & other wet area	Fosroc: Bush Bond, STP Ltd.: Shalcrete, CICO: Tapecrete, Dr. Fixit : Pidifine 2K, Sika : Topseal 107, Asian Paints: Damp Block 2K & equivalent
8.	Crystalline water proofing compound	Product of BASF, Ardex Endura, Perma Construction Aids Pvt. Ltd. Fosroc: Bushbond TGP, Dr. Fixit : Dr. Fixit Krystalline, Sika: Sika 101h, Asian Paints: SmartCare & equivalent product of BASF, Ar- dex Endura, STP Ltd., Perma Construction Aids Pvt.
9.	Grouts, Tile Adhesive	Laticrete, STP Ltd., Kajaria, BASF, Perma, Ardex Endura, JK White & Ferrous Crete.
10.	Structural steel	SAIL, Tata Steel, Rashtriya Ispat Nigam Ltd. (RINL), JSW Steel Ltd., Jindal Steel & Power Ltd.
11.	Polycarbonate sheet	GE Plastic, LEXAN & MG Polyplast
12.	Profile steel sheet	Ezydeck of TATA, Lloyd Superdeck, JSW, Jindal
13.	Particle board	Action TESA, Merino, Archidply & Orion Doors
14.	Laminates	Action TESA, Greenlam, Century Ply, Merino, Archidply, Virgo & Orion doors

15.	Flush door shutters	Duro, Century, Durian, Archidply, Green Ply, JAYNA (Jain Wood Industries), Jain Doors Pvt. Ltd., GREENPANEL & Orion Doors Note: Only ISI marked flush door shutters to be used.
16.	Fire rated doors	Signum fire protection, Shakti Metdoor, NAVAIR, Promat, Thrislington, Sukri & Bhawani. If fire rated glass is integral part of fire rated door than it should be of one of the following makes: Pyroguard, Saint Gobain, Asahi India, Pilkington & Schott
17.	False ceiling system	Armstrong, USG Boral, Saint Gobain, Aerolite, Interarch, Hi- steel of PR Ceiling Products
18.	Plywood / Veneer	Greenply, Century, Merino, Durian, Archidply, GREENPANEL & Orion Doors.
19.	Melamine polish	Asian Paints melamine gold, Wudfin of Pidilite & Timbertone of ICI dulux.
20.	Floor spring & door closer	Godrej, Dormakaba, Dorset & Kich
21.	Aluminum section	Hindalco, Jindal & Indian Aluminium Co.
22.	Anodized aluminum hardware (Heavy Duty)	Kilon, Alualpha, Classic & Ebco.
23.	Clear/ Float/Frosted/Toughen Glass/ Refractive glass	Saint Gobain, AIS & Modiguard
24.	Stainless steel railing, Accessories etc.	JINDAL, Dormakaba, Kich, GEZE, Godrej & Hardwyn
25.	SS fittings for doors & window	Jindal, Dormakaba, Kich, Dorset, Godrej, Ozone & Define
26.	Silicon based water re- pellant /weather sealant	GE Plastics, STP Ltd., Dow Corning, Waker, BASF & Pidilite (Dr. Fixit/ Roff
27.	Poly-Sulphide Sealant	Fosroc, STP Ltd., Pidilite (Dr. Fixit/Roff), Sika & BASF
28.	Mosaic tiles/Chequered Tiles	Ultra Tiles, NITCO, Hyper, Mayur & Pavcon,
29.	Glazed Ceramic Tiles	Kajaria, Johnson, Somany or equivalent as per EIC
30.	Vitrified Tiles (Antiskid /Matt /Glazed)	Kajaria, Johnson, Somany or equivalent as per EIC
31.	Paver block & Kerbstone	Pavcon, Hyper, Mayur, KK, Power, Sharda & Navya
32.	Cement Based wallputty	Asian Paints, Birla Wall Care, JK, White

33.	Oil bound washable distemper / dry distemper	Asian Paints (Professional Acrylic Distemper), Nerolac: Beauty Acrylic Distemper, Berger: Bison Acrylic Distemper & Dulux ICI: Maxilite
34.	1st quality acrylic distemper (washable/ready mix / Low VOC)	Asian Paints (Tractor Aqua Lock Paint), Berger: Commando or equivalent paints of Nerolac & ICI-Dulux
35.	Acrylic emulsion paints	Asian Paints: (Professional Premium Interior, Emulsion Paint), Nerolac: Beauty Gold, Berger: Rangoli Total Care & ICI Dulux: Super Cover, Indigo
36.	Plastic emulsion paint	Asian Paints: (Apolite Heavy Duty Premium Emulsion Paint), Nerolac: Impression, Berger: Easy Clean & ICI Dulux: 3 in 1
37.	Premium acrylic emulsion paints (Interior)	Asian Paints: (Royale Luxury Emulsion), Nerolac: Impression, Berger: Silk & ICI Dulux: Velvet Touch, Indigo
38.	Textured exterior paint	Asian Paints, Nerolac, Berger Paints, Ultratech Paints & Luxture
39.	Acrylic smooth exterior paint	Asian Paints: (Apex/Professional Premium Exterior Emulsion), Nerolac: XL, Berger: Weather Coat & ICI Dulux: Weather Shield, Indigo
40.	Premium acrylic smooth exterior paint with silicon additive	Asian Paints: Apex Ultima, Nerolac: XL total, Berger: Weather Coat all Guard & ICI Dulux : Weather Shield Max
41.	Synthetic Enamel Paint	Asian Paints: Apcolite Premium Gloss Enamel, Nerolac: Synthetic Hi gloss, Berger: Luxol Hi gloss & ICI Dulux: Gloss Synthetic enamel.
42.	Cement Primer	Nerolac, Berger (BP white), STP Ltd., Asian (Decoprime WT) & ICI (White primer).
43.	Steel primer (Red Oxide Zinc Chromate Primer)	Asian Paints, Nerolac, Berger & ICI
44.	Wood primer	Asian Paints (wood primer - White/Pink), Berger, ICI & Nerolac
45.	Epoxy paint	Asian Paints, STP Ltd., Nerolac, Berger, ICI, Kansai, & Akzo Nobel
46.	Fire paint	Asian paint, STP Ltd., Akzo Nobel, PROMAT, & JOTUN

47.	GI/MS Pipe	Tata, Jindal (Hisar) & Prakash Surya
48.	GI Fittings	Unik, AVR & Zoloto
49.	HDPE Pipes	Reliance, Jain Pipes, ORIPLAST & Supreme
50.	DI Pipes & fittings	Electrosteel, Jindal, TATA DUCTURA, Kapil Ansh & & Kesoram
51.	UPVC pipe and fittings	Astral, Supreme, Prince, M/s Skipper Ltd, Ashirwad & Prayag Polymers Pvt. Ltd
52.	SW Pipes (BIS approved)	Anand, Parry & Perfect
53.	Centrifugally Cast (Spun) Iron Pipes & Fittings /Hub less pipes& fittings	NECO, BIC, Kapilansh, SKF, Raj Pattern Makers & Founders Pvt. Ltd. or any other ISI marked make
54.	CI Manhole covers, frames & GI Gratings	NECO, BIC, SKF & Kapilansh,
55.	SFRC Manhole covers & gratings	K K Jain & Pragati
56.	CP brass fittings (Superior range)	Jaquar, Grohe & Roka.
57.	CP brass fittings (Normal Range)	ESSCO (by Jaquar), Parryware, CERA, Kerovit (Kajaria), Johnson & Prayag Polymers Pvt. Ltd.
58.	Sanitary ware, fittings & accessories	Kerovit (Kajaria), CERA, Jaquar, Parryware, Hindware & Prayag Polymers Pvt. Ltd.
59.	Mirror glass	Atul, Modi Guard & Golden Fish
60.	CPVC Pipe & fitting	Astral, Superme, Prince, M/s Skipper Ltd., Ashirwad & Prayag Polymers Pvt. Ltd.
61.	Stainless steel sink	Neelkanth, Niralli, Jyna & Prayag Polymers Pvt. Ltd.
62.	FRP doors shutters & frame	Jayna, Fiberways, Jain Doors Pvt. Ltd. & Selected Product Co,
63.	Extruded polystyrene insulation board	Dowcorning, Supreme, Texas & Analco
64.	Gypsum plaster	Ferrous Crete, Gyproc Saint Gobain, Ultra Tech & J K White

65.	Floor hardener	Ironite, Perma, STP Ltd., Ferrok & Hardonate
66.	Modular Expansion Joint	Herculus, Sanfield India Ltd & Vexcolt
67.	Glass Wool	Dow Corning, UP Twiga & Isover
68.	uPVC door/window/ventilator	Fenesta, Komerling, Rheau, Veka, Duroplast, Aluplast & Advika Profiles Pvt. Ltd. (Fabrication and installation will be done by profile
69.	uPVC doors and window hardware	Manufacturer or his authorized fabricator). Roto, Dorset, DNV Accado & Kinlong
70.	AAC block Adhesive	UltraTech, Perma, Ardex Endura & Ferrous Crete
71.	PVC Water Tank	Syntex & Vectus
72.	AAC Block	MAX Blocks, UltraTech, HIL & BILTECH ACE & Gravit
73.	Modular Kitchen	Everyday/Hettich/Steel Art Brand Baskets of AISI 304(18/8); Hettich/Hafele Brand Auto closing, Concealed Hinges; DMS/ Dynasty/ Indoline brand shutter
74.	Aluminum shuttering	Knest, S-form, Durand Forms (India) Pvt. Ltd. & Mivan
75.	MS Tubular windows & Pressed Steel door frames	Jangid Engineering Works, AGFUV, Sen Harvic, Navair Delhi & Sukriti Delhi
76.	Dash fasteners /Anchors	Hilti, Bosch & Fischer

## **8 Terms & Conditions of Contract**

### **8.1 Timely Completion**

1. The work included in this tender is of urgent nature.
2. The work of all components must be started simultaneously and has to be delivered together or early within the given time schedule.
3. The contractor has to deploy the labor and supervisory staff in shifts to meet the targeted completion date. The work may be executed in extended shifts or two shifts.
4. Number of days from the date of issue of letter of acceptance for reckoning date of

start shall be as per Schedule. If the Contractor commits default in commencing the execution of the work as aforesaid, the performance guarantee shall be forfeited.

5. The detailed program chart approved by the engineer-in-charge shall indicate how the resources will be deployed by the contractor to maintain desired progress and for the completion of the work within the specified period. If the submitted program is approved, the milestone shall be redefined accordingly by the Executive Engineer of IWD, IITK. The amount to be withheld in such a case, for non-achievement of milestone(s), shall remain unaltered. Any delay in achieving the milestone must be compensated within the limitations of time imposed in the Contract document
6. The contractor shall procure the required materials in advance so that there is sufficient time for testing of the materials and approval of the same before use in the work, as required.

## **8.2 Rates**

1. Unless otherwise provided in the schedule of quantities of the work the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the building (Inclusive of GST) and nothing extra shall be payable to him on this account.
2. The rates for all items of work shall, unless clearly specified otherwise, include cost of all labours, materials and other inputs involved in the execution of the item irrespective of whether they have been specifically mentioned in the tender document or not.
3. In case the same item (s) appear more than once in the schedule of work / BOQ under the same sub head or among the different subhead of works, the lowest rate quoted for that item (s) shall be considered for the particular item(s) wherever appeared in any part of BOQ / Schedule of works for the purpose of tender evaluation although web generated e-price bid may incorporate different quoted rate for same item(s) as per the quoting pattern of the tenderer. The tendered amount thus worked out shall be final & shall be binding on the contractor.
4. The rates quoted by the contractor will be deemed to be inclusive of any extra expenditure of this reason. The contractor has to increase the manpower or other tools etc. to do the work as per requirement of the work at his own expenses. Nothing shall be paid on this account.
5. The contractor shall provide at his own cost suitable weighing, surveying and leveling and measuring arrangements as may be necessary at site for checking. All such equipments shall be got calibrated in advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.
6. Other agencies may also simultaneously execute and install the works and the

contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings, trenches etc. as may be required for such related works (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be available as specified elsewhere in the contract) and the contractor shall fix the same at the time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.

7. All material shall only be brought at site as per program finalized with the Engineer-in-Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.
8. Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to approved manufacturers specifications where CPWD Specifications are not applicable. The contractor should get the materials (fixtures/fittings) tested from approved labs wherever required at his own cost.
9. The contractor shall be responsible for the watch and ward / guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the client department. No extra payment shall be made on this account.
10. The rates quoted by the Contractor are deemed to be inclusive of site clearance, setting out work, profile, establishment of reference bench mark(s), taking spot levels, construction of all safety and protection devices, barriers, preparatory works, working during monsoon, working at all depths, height, lead, lift and location etc until / unless specified otherwise and any other incidental works required to complete this work. Nothing extra shall be payable on this account.

### **8.3 Quality and Workmanship**

1. The contractor shall be entirely responsible and answerable for all the works done by him regarding quality, adherence to the laid down specifications, terms and conditions, warranty/guarantee etc. and he shall be liable to bear any compensation that may be levied by the department under any of the clauses of the agreement.
2. The materials having ISI mark shall have precedence over the one conforming to IS Specifications.
3. The proposed is for Institute premises and quality of work is paramount importance. Contractor shall have to engage well experienced skilled labour and deploy modern T & P and other equipment to execute the work.
4. Samples of all materials and fittings to be used in the work in respect of brand manufacturer and quality shall be approved from the Engineer-in-Charge, well in

advance of actual execution and shall be preserved till the completion of the work.

5. All materials used in the work shall be new and of good quality, conforming to the relevant specifications as per good engineering practice. All the materials proposed to be used in the work should be approved from Engineer in Charge before use in work.
6. Articles bearing BIS certifications mark shall only be used unless no manufacturer has got BIS/ISI mark for the particular material. Any material/fitting whose sample has not been approved in advance and any other unapproved material brought by the contractor shall be immediately removed as soon as directed. Where the make of any particular material is not specified in the Contract document, the material shall be supplied as per makes desired by the engineer-in-charge.
7. It will be the responsibility of the contractor / bidder to ensure use of genuine materials in the work. The department reserves the right to get (any / all materials / components) inspected by the manufacturer or their authorized representatives at any stage of the execution of work. If any of the materials, supplied and used in work is found spurious at any stage, then the department reserves the right to ask the contractor to replace it by genuine one and make suitable recovery till it is done, even if any payment against that material is already made.
8. The contractor should get the make/TDS documents approved before procuring any material at site. The TDS/Make once approved shall not be changed without any valid recorded reasons. No material to be brought and used at site without the prior knowledge & approval of Engineer-in-Charge.
9. The department may ask for any valid document like manufacturer's test certificate, document for purchase of the material, document for import/shipment of imported material etc. as deemed fit by the engineer-in-charge to ascertain genuineness of material supplied by/used in the work by the contractor. The contractor shall remain bound to submit all such documents to the department failing which payment may not be made or if already paid may be recovered/withheld from subsequent running account payment.
10. All equipment and their components, and all the materials to be used in the work shall be suitable for the environmental conditions at the location of the work.
11. The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted. He shall have to submit quality assurance programme within two weeks of the award of work. The quality assurance programme should include method statement for various items of work to be executed along with check lists to enforce quality control.

12. The contractor shall get the source of all other materials, not specified elsewhere in the document, approved from the Engineer-in-Charge. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests etc. shall be done by the contractor at his own cost. Similarly, the contractor shall submit brand/ make of various materials not specified in the agreement, to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it.
13. The contractor shall arrange carrying out of all tests required under the agreement through the laboratory as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including fee for testing. The said cost of tests shall be borne by the contractor/department in the manner indicated below.
  - a) By the contractor, if the results show that the test does not conform to relevant CPWD Specifications / BIS code or specification mentioned elsewhere in the documents.
  - b) By the department, if the results conform to relevant CPWD Specifications / BIS code or specification mentioned elsewhere in the documents.
14. Sample of building materials fittings and other articles required for execution of work shall be got approved from the Engineer-in-Charge. Articles manufactured by companies of repute and approved by the Engineer-in-Charge shall only be used. Articles bearing BIS certification mark shall be used in case the above are not available, the quality of samples brought by the contractor shall be judged by standards laid down in the relevant BIS specifications. All materials and articles brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work.
15. The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material/work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-Charge.
16. BIS marked materials except otherwise specified shall be subjected to quality test at the discretion of the Engineer-in-Charge besides testing of other materials as per the specifications described for the item/materials. Wherever BIS marked materials are brought to the site of work, the contractor shall if required, by the Engineer-in-Charge furnish manufacturers test certificate or test certificate from approved testing laboratory to establish that the material produced by the contractor for incorporation in the work satisfies the provisions of BIS codes relevant to the material and/or the work done.
17. All materials brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.

18. All the material brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
19. The contractor shall be fully responsible for the safe custody of the materials issued to him even if the materials are in double lock and key system.

#### **8.4 Natural calamity:**

No payment will be made to the contractor for any damage caused by rain, snow fall, floods, dampness, fire, sun or any other natural cause whatsoever during the execution of work. The damage to the work due to above reason, if any, shall have to be made good by the contractor at his own cost and no claim on this account shall be entertained.

#### **8.5 Stocking and Disposal of Materials & Debris**

1. The contractor shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, compound wall, services etc. are to be constructed.
2. After completion of work the agency shall remove materials and debris etc. from site as per the direction of Engineer-in-Charge, at no extra cost.
3. Contractor's job will also include removing of all malba and debris arising in the process of painting including washing of floor to remove stains of paint, at no extra cost.
4. The contractor shall conduct work so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose of the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.
5. For construction/renovation works which are likely to generate malba/rubbish to the tune of more than a tempo/truck load, contractor shall dispose of malba, rubbish & other unserviceable materials and wastes at their own cost to the notified/specified dumping ground and under no circumstances these shall be stacked/dumped, even temporarily outside the construction.
6. Dismantled but useful materials/components/equipment, if any, should be returned to the Institute as per the direction of Engineer-in-Charge.
7. The dismantled materials shall not be thrown anywhere in the campus. Proper

space has been marked and these shall be deposited in C & D waste site only.

## **8.6 Painting**

1. Contractor will thoroughly clean all paint marks left here and there due to spilling and splashes of paint at no extra cost.
2. Contractor will first submit the shade cards of relevant make of paint to IIT for approval of color before procuring the paint in bulk.
3. No mixing will be allowed with Stainer to achieve a particular color. Contractor will procure direct colour paint of approved shade and apply directly.
4. Contractor shall have to brought at least 50% quantity of total premium acrylic smooth exterior silicon additives paint and water proofing cement paint and shall deposit it in the custody of concerned site Engineer before start of work. The consumption shall be monitored by the Institute. All empty drums shall have to be kept till completion of the work.
5. Contractor has to make a sample of exterior painting on the surface of wall and after getting approval from the competent authority. The contractor has to finish the rest of work accordingly as per satisfaction of Engineer-in-charge.

## **8.7 Safety and Security**

1. The contractor has to follow all safety norms as laid down in National Building Code of India. All the workers shall be equipped with the required safety gadgets while working at site such as ISI marked helmets, Shoes and safety belts, gumboots, gloves etc.
2. The contractor, the authorized representative(s), workmen etc., shall strictly observe orders pertaining to fire precautions prevailing in the area.
3. The contractor shall be fully responsible for the safe custody of materials brought by him/ issued to him even though the materials may be under double lock key system.
4. Contractor will arrange proper metal ladders, M.S. double scaffolding (for working, painting, etc. at higher levels) at his own cost and will take all safety measures like double harness safety belt, mechanized electrically operated platform etc. If it is observed that work is proceeding without adequate safety precautions, work may be stopped by Engineer-in-charge and in such cases, contractor will be solely responsible for delay and its consequences thereof.
5. The contractor shall be responsible for the watch and ward/guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of

installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.

6. The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night speed limit boards red flags, red lights and providing barriers. He shall be responsible for all dangers and incidents caused to existing / new work due to negligence on his part. No hindrances shall be caused to traffic during the execution of the work.
7. It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
8. The Institute shall not have any responsibility or liability in case of any accident injury to the personnel to the contractor at work site or to the general public at the work site due to mishandling equipment by the personnel of the contractor or any other similar reason. The responsibilities and liabilities for such accidents and incidents shall be borne by the contractor.

### **8.8 Approach to Site**

1. The tenderer shall see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost.
2. Contractor shall take all precautionary measures to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost.

### **8.9 Water proofing**

1. The agency have to associate with the specialized agency, if any requirement for water- proofing works. The agency must sign on MOU with the specialized agency for waterproofing works as per above mentioned format.
2. The agency must submit the declaration as per Format 5.12 on completion of work.
3. The agency has to procure total quantity of water proofing materials at one go and the materials have to be deposited with the department along with the original copy of challan. A record of same should be made on Register issued by Engineer-In-Charge. Engineer-In-Charge has to make dated signature on each bucket. No empty bucket shall be allowed to takeaway till the completion of work. All empty bucket shall be removed after completion of work and checking the theoretical consumption of the material.
4. Water Proofing Treatment: The contractor must associate himself with the

specialized firm, to be approved by the Engineer-in-charge in writing, for water proofing treatment using Liquid Waterproofing Membrane technologies for various structural elements. Guarantee in the prescribed proforma attached with tender document shall be given by the specialized firm, for a period of eight years from the date after the maintenance period prescribed in the contract, which shall be counter signed by the contractor as token of overall responsibility. In addition, 10% (ten percent) of the cost of water proofing items shall be retained as guarantee to watch the performance of the work done. However, half of this retained amount will be released after five years, if the performance of the work done is found satisfactory. If however any defect is noticed during the guarantee period, it shall be rectified by the contractor within seven days of intimation. In case it is not attended to, the same will be got done by another agency at the risk and cost of the contractor. This guarantee deposit can however be released in full if a bank guarantee of equivalent amount for 08 years is produced and deposited with the department by the contractor (see Form 5.12).

Sl. No.	Roofing and water proofing
1	The following shall NOT be measured separately and shall be deemed to be included in the rates quoted.
2	Preparation of surface for laying of insulation and Waterproofing treatment as required by the specialist Contractors. The surface should be cleared of all loose mortar, dust and waste by hacking and cleaning with wire brush
3	All cutting, dressing, trimming and waste including cutting to required shapes.
4	Work in narrow widths, to required profiles and at all locations as shown
5	Work at all heights and depths.
6	Testing of treated areas in approved manner for performance of the treatment.
7	All protection to the water-proofing surfaces to prevent damage by other trades.
8	The treatment shall carry a guarantee of 08 years, which shall be given by the water - proofing specialist contractor and counter- signed by the main contractor. The main contractor shall be fully responsible for the performance of the water proofing treatment

9	Minor modifications in the contract specifications of the treatment, may be accepted according to the method of the treatment of the respective water-proofing specialist contractor.
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### **8.10 Water and Flooding**

1. The contractor shall have to arrange water of desirable quality for the construction purpose for which he may have to install water purifier at site or might have to bring/ purchase water from outside as per decision of Engineer-in-charge. Nothing extra shall be paid on this account.
2. For works below ground level the contractor shall keep that area free from water. If dewatering or bailing out of water is required the contractor shall do it and nothing extra shall be paid except otherwise provided in the items of schedule of quantity.
3. In case of flooding of site on account of rain or any other cause and any consequent damage, whatsoever, no claim financially or otherwise shall be entertained not withstanding any other provisions elsewhere in the contract agreement. Also, the Contractor shall make good, at his own cost, the damages caused, if any.
4. The water charges (for water connection) shall be borne by the contractor.

### **8.11 Acts and Laws**

1. The Contractor shall keep himself fully informed of all acts and laws of the Central & State Governments, all orders, decrees of statutory bodies, tribunals having any jurisdiction or authority, which in any manner may affect those engaged or employed and anything related to carrying out the work. All the rules & regulations and bye-laws laid down by Collector / MC etc. and any other statutory bodies shall be adhered to, by the contractor, during the execution of work.
2. The Contractor shall also adhere to all traffic restrictions notified by the local authorities.
3. All statutory taxes, levies, charges (including water and sewerage charges, charges for temporary service connections and / or any other charges, as applicable) payable to such authorities for carrying out the work, shall be borne by the Contractor.
4. The Contractor shall arrange to give all notices as required by any statutory / regulatory authority and shall pay to such authority all the fees that is required to be paid for the execution of work. He shall protect and indemnify the Institute and its officials & employees against any claim and /or liability arising out of violations of any such laws, ordinances, orders, decrees, by

himself/herself or by his/her employees or his/her authorized representatives. Nothing extra shall be payable on these accounts.

5. The fee payable to statutory authorities for obtaining the various permanent service shall be borne by the Institute.

#### **8.12 Labour and Laws**

1. The Contractor shall display all permissions, licenses, registration certificates, bar charts, other statements etc. under various labour laws and other regulations applicable to the works, at his site office.
2. Huts for labour are not permitted within the premises of the Institute. No extra cost shall be payable even if the contractor provides such accommodation at a place as is acceptable to the local body.

#### **8.13 Nondisclosure Agreement.**

1. The Agency shall take all precautions not to disclose, divulge and/or disseminate to any third party any confidential information, proprietary information on the Institute business or security arrangements (including but not limited to the Assignment instructions, Schedules and other subsequent Arrangements) and/or business of the Institute. The obligation is not limited to any Scope and the Agency shall be held responsible in case of breach of the confidentiality of Institute's information.
2. If the Agency receives enquiries from Press/Media/Radio/Television or other bodies / persons, the same shall be referred by the Agency to Institute immediately on receipt of such queries.

#### **8.14 Indemnification:**

1. The agency shall be directly responsible to indemnify the Institute against all charges, dues, claims, etc. arising out of the disputes relating to the dues and employment of the personnel deployed and further for any claim/compensation against all damages and accidents caused due to negligence on the part of the agents, employees and other personnel of the agency.
2. That the contractor shall keep the IITK indemnified against all claims whatsoever in respect of the employees deployed by the contractor. In case any employee of the contractor so deployed enters in dispute of any nature whatsoever, it will be the primary responsibility of the contractor to contest the same. In case IITK is made party and is supposed to contest the case, IITK will be reimbursed for the actual expenses incurred towards Counsel Fee and other expenses which shall be paid in advance by the Contractor to IITK on demand. Further, the contractor shall ensure that no financial or Any other liability comes on IITK in this respect of

any nature whatsoever and shall keep IITK indemnified in this respect.

#### **8.15 Force Majeure:**

If at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosion, epidemics quarantine restriction, strikes, lockouts or acts of god (hereinafter referred to as events) provided notice of happenings of any such event, is served by party seeking concession to the other as soon as practicable, but within 21 days from the date of occurrence and termination thereof. Provided the Party satisfies Institute adequately of the measures taken by it. Neither party shall, by reason of such event, be entitled to terminate this contract, nor shall either party have any claim for damages against the' other in respect of such non-performance or delay in performance. Further, the services under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist and the decision of Institute as to whether the services have to resume or not shall be final and conclusive, provided further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, Institute may at his option, terminate the contract.

#### **8.16 Dispute resolution**

1. The institute reserves the right to amend rules whenever and wherever considered necessary and appropriate. The same shall be intimated to the agency in due course.
2. Any dispute arising out of and in relation to this agreement shall be referred to the arbitration by sole arbitrator to be appointed by Director of the Institute. The arbitration would be conducted and governed by and under the provisions of Arbitration Act, 1996 and its amendments. Any legal dispute will be subject to jurisdiction of Kanpur Courts only and no other court shall have the jurisdiction.
3. Any dispute arising out of and in relation to this agreement shall be referred to the arbitration by sole arbitrator to be appointed by Director of the Institute. The arbitration would be conducted and governed by and under the provisions of Arbitration Act, 1996. Any legal dispute will be subject to jurisdiction of Kanpur Courts only and no other court shall have the jurisdiction.

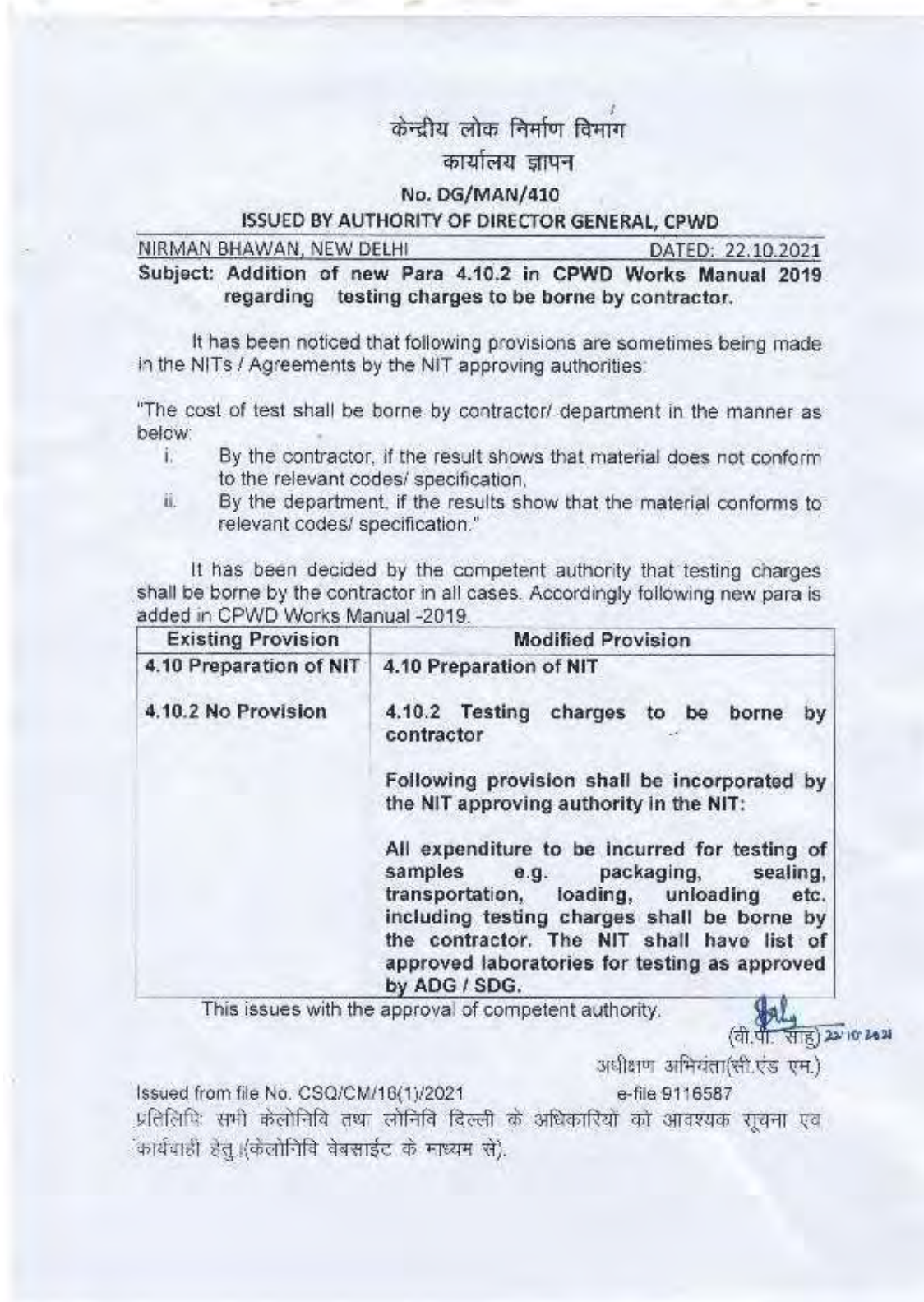
#### **8.17 Arbitration**

1. Except as otherwise provided anywhere in this Agreement, if any dispute, difference, the question of disagreement or matter, whatsoever, arises between the parties, as to the meaning, operation or effect of the Agreement or out of or relating to the Agreement or breach thereof, the same shall be referred to a Sole Arbitrator, to be appointed by the Director of the Institute at the time of the dispute.
2. If the Arbitrator, to whom the matter is originally referred, dies or refuses to act or resigns for any reasons from the position of arbitration, it shall be lawful for the Director of the Institute to appoint another person to act as Arbitrator in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by its predecessor, provided both the parties consent to this effect, failing which, the arbitrator shall be entitled to proceed on the matter de-novo.
3. It is a term of the Agreement that the party invoking the arbitration shall specify all disputes to be referred to arbitration at the time of invocation of arbitration under the clause.
4. It is a term of the contract that the cost of arbitration shall be borne by the parties themselves.
5. The place of the arbitration shall be Kanpur Nagar, Uttar Pradesh, India.
6. Subject as aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications, amendments or re-enactment thereof and rules made thereunder and for the time being in force, shall apply to the arbitration proceeding under this clause.
7. Except as otherwise provided anywhere in this Agreement, the Arbitration proceedings shall be conducted in English and the Agreement shall be construed, interpreted and governed by the law of India, for the time being in force.

### **8.18 Jurisdiction of Courts**

The court(s) at Kanpur Nagar, Uttar Pradesh, shall have the exclusive jurisdiction to try any and all the disputes(s) between the parties arising out of this Agreement.

## 9. Testing Charges



**Figure 1: Modified provisions in CPWD works manual 2019 regarding testing charges to be borne by contractor.**

Original Estimate					
N/W	Annual contract for minor civil maintenance works in residences South side of Main Drive ( Zone - 02).				
SLNo	Description	Qty	Unit	Rate	Amount
1	Carriage of Materials				
1.1	By Mechanical Transport including loading,unloading and stacking				
1.1.1	Lime, moorum, building rubbish Lead - 2	2	cum	196.66	393.00
1.1.2	Earth Lead - 2	2	cum	245.82	492.00
	Sub-Total				885.00
2	EARTH WORK				
2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lif upto 1.5 m, as directed by Engineer-in- Charge:				
2.1.1	All kinds of soil	50	sqm	129.85	6493.00
2.2	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, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
2.2.1	All kinds of soil.	10	cum	260.30	2603.00
2.3	Excavating trenches by mechanical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m:				
2.3.1	All kinds of soil				
2.3.1.1	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	10	metre	352.15	3522.00
2.4	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lif.	5	cum	196.00	980.00
2.5	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	2	cum	2123.75	4248.00
2.6	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.				
2.6.1	All kinds of soil	50	sqm	34.15	1708.00
2.7	Excavating holes more than 0.10 cum & upto 0.5 cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil, as directed within a lead of 50 m and lift upto 1.5 m.				
2.7.1	All kinds of soil	20	each	82.45	1649.00

2.8	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	50	sqm	17.60	880.00
2.9	Clearing grass and removal of the rubbish up to a distance of 50 m outside the periphery of the area cleared.	50	sqm	8.95	448.00
	Sub-Total				22531.00
3	CEMENT CONCRETE (CAST IN SITU)				
3.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
3.1.1	1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	2	cum	7878.50	15757.00
3.2	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., up to floor five level, excluding the cost of centering, shuttering and finishing:				
3.2.1	1:2:4 (1 Cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	2	cum	9895.20	19790.00
3.3	Centering and shuttering including strutting, propping etc. and removal of form work for:				
3.3.1	Foundations, footings, bases for columns	1	sqm	392.15	392.00
3.4	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 12.5 mm nominal size derived from natural sources)	2	sqm	410.85	822.00
3.5	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	0.5	per bag of 50kg cement used	18.15	9.00
3.6	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	1	sqm	146.15	146.00
3.7	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	40	sqm	749.30	29972.00
	Sub-Total				66888.00
4	REINFORCED CEMENT CONCRETE				
4.1	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				

4.1.1	1:1.5:3(1 cement: 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	1	cum	9045.75	9046.00
4.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement:				
4.2.1	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	1	cum	10852.95	10853.00
4.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15 degree landings, balconies, shelves, chajjas, lintels, bands, plain window sills, 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) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	3	cum	11505.50	34517.00
4.4	Centering and shuttering including strutting, propping etc. and removal of form for				
4.4.1	Foundations, footings, bases of columns, etc. for mass concrete	2	sqm	392.15	784.00
4.4.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	2	sqm	842.50	1685.00
4.4.3	Suspended floors, roofs, landings, balconies and access platform	10	sqm	927.25	9273.00
4.4.4	Shelves (Cast in situ)	50	sqm	927.25	46363.00
4.4.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	5	sqm	736.40	3682.00
4.4.6	Columns, Pillars, Piers, Abutments, Posts and Struts	5	sqm	961.30	4807.00
4.4.7	Stairs, (excluding landings) except spiral-staircases	5	sqm	764.95	3825.00
4.4.8	Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like	3	sqm	392.15	1176.00
4.4.9	Edges of slabs and breaks in floors and walls				
4.4.9.1	Under 20 cm wide	20	metre	208.55	4171.00
4.5	Providing, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering but excluding cost of reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	0.5	cum	10585.90	5293.00
4.6	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in small lintels not exceeding 1.5m clear span up to floor five level, including the cost of required centering, shuttering but , excluding the cost of reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	0.5	cum	14325.95	7163.00

4.7	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
4.7.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	250	kg	107.85	26963.00
4.8	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
4.8.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	500	kg	107.85	53925.00
4.9	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	40	metre	78.40	3136.00
4.1	Providing and fixing in position Stainless steel Grade 304 plate-1.0 mm thick as per design for expansion joints.				
4.10.1	200 mm wide.	10	metre	859.75	8598.00
	Sub-Total				235260.00
5	MASONRY WORK				
5.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
5.1.1	Cement mortar 1:6(1 cement :6 coarse sand)	4	cum	7132.25	28529.00
5.2	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
5.2.1	Cement mortar 1:6(1 cement : 6 coarse sand)	10	cum	9105.95	91060.00
5.3	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :				
5.3.1	cement mortar 1:4(1 cement :4 coarse sand)	20	sqm	905.05	18101.00
5.4	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.				
5.4.1	Cement mortar 1:4(1 cement :4 coarse sand)	20	sqm	1123.80	22476.00
5.5	Brick work with common burnt clay selected F.P.S. (non modular) bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement: 6 coarse sand)				
5.5.1	From ground level upto plinth level	1	cum	7361.35	7361.00
5.5.2	Above plinth level upto floor V level	1	cum	9439.75	9440.00
5.6	Brick work with common burnt clay modular bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand).				
5.6.1	Above plinth level upto floor V level	1	cum	8312.90	8313.00
5.7	Brick edging 7cm wide 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	50	metre	60.85	3043.00
	Sub-Total				188323.00
6	STONE WORK				

6.1	Providing and fixing horizontal chajja of stone 40 mm thick and upto 80 cm projection in cement mortar 1:4 (1 cement : 4 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 :				
6.1.1	White sand stone	2	sqm	1901.55	3803.00
	Sub-Total				3803.00
7	CLADDING WORK				
7.1	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, 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 of edges to give high gloss finish etc. complete at all levels.				
7.1.1	Raj Nagar Plain white marble/ Udaipur green marble/ Zebra black marble				
7.1.1.1	Area of slab upto 0.50 sqm	10	sqm	3414.80	34148.00
7.1.1.2	Area of slab over 0.50 sqm	20	sqm	3078.40	61568.00
7.1.2	Granite stone slab of colour black, Cherry/Ruby red				
7.1.2.1	Area of slab upto 0.50 sqm	10	sqm	5413.50	54135.00
7.1.2.2	Area of slab over 0.50 sqm	15	sqm	5136.30	77045.00
7.2	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.				
7.2.1	Marble work	20	metre	298.60	5972.00
7.2.2	Granite work	20	metre	510.95	10219.00
7.3	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.	5	each	978.70	4894.00
7.4	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	2	sqm	506.70	1013.00
7.5	Providing and fixing skirting with Pre-laminated (one side decorative and other side balancing lamination) flat pressed 3 layer or graded particle board (medium density) Grade I, Type II, IS :12823 marked, with necessary fixing arrangements and screws, including drilling necessary holes for rawl plugs etc. and priming coat on unexposed surface complete :				
7.5.1	18 mm thick	2	sqm	1976.45	3953.00

7.6	Providing and fixing 1st 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.	50	sqm	1267.95	63398.00
	Sub-Total				316345.00
8	WOOD AND P. V. C. WORK				
8.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
8.1.1	Second class teak wood	0.2	cum	142949.70	28590.00
8.1.2	Sal wood	1	cum	116520.30	116520.00
8.2	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, fixing with butt hinges of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge. (Note: Butt hinges and necessary screws shall be paid separately)				
8.2.1	Second class teak wood				
8.2.1.1	35 mm thick shutters	5	sqm	4111.95	20560.00
8.3	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes (weight not less than 10 kg per sqm) fixing with ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws.				
8.3.1	Second class teak wood				
8.3.1.1	35 mm thick	30	sqm	4940.20	148206.00
8.4	Extra for providing frosted glass panes 4 mm thick (weight not less than 10 kg per sqm) instead of ordinary float glass panes 4 mm thick (weight not less than 10 kg per sqm) in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	5	sqm	176.40	882.00
8.5	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
8.5.1	25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. Piano hinges IS : 3818 marked with necessary screws	5	sqm	2819.25	14096.00
8.6	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 and face veneers on both faces of shutters:				

8.6.1	25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws	10	sqm	2093.70	20937.00
8.7	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	10	sqm	462.35	4624.00
8.8	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	10	sqm	106.70	1067.00
8.9	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete:				
8.9.1	2nd class teak wood				
8.9.1.1	50x12 mm	20	metre	221.10	4422.00
8.9.1.2	50 x 20 mm	20	metre	271.75	5435.00
8.1	Providing and fixing chromium plated brass curtain rod having wall thickness of 1.25 mm with two chromium plated brass brackets fixed with C.P. brass screws and PVC sleeves etc., wherever necessary complete:				
8.10.1	20 mm dia	10	metre	393.25	3933.00
8.11	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
8.11.1	Fixed to steel windows by welding	50	kg	219.10	10955.00
8.11.2	Fixed to openings /wooden frames with rawl plugs screws etc.	50	kg	238.35	11918.00
8.12	Providing and fixing hard drawn steel wire fabric 75x25 mm mesh of weight not less than 7.75 Kg per sqm to window frames etc. including 62x19 mm beading of second class teak wood and priming coat with approved steel primer all complete.	10	sqm	1641.15	16412.00
8.13	Providing and fixing fly proof galvanized M.S. wire gauge to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.63 mm all complete.				
8.13.1	With second class teak wood beading 62X19 mm	5	sqm	1308.35	6542.00
8.13.2	With 12 mm mild steel U beading	5	sqm	939.20	4696.00
8.14	Deduct for fixing 75x25 mm hard drawn steel wire fabric of weight not less than 7.75 Kg per sqm in panelled and glazed door and window shutter instead of glass sheet 4 mm thick (weight not less than 10 kg per sqm)	10	sqm	155.10	1551.00
8.15	Providing 40x5 mm flat iron hold fast 400 mm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 300x100x150 mm 1:3:6 mix (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	20	each	228.85	4577.00
8.16	Providing and fixing ISI marked IS:1341 M.S. pressed butt hinges bright finished with necessary screws etc. complete:				
8.16.1	125x65x2.12 mm	10	each	53.00	530.00
8.17	Providing and fixing ISI marked IS: 1341 oxidised M.S. pressed Parliamentary hinges with necessary screws etc. complete (Copper oxidised as per IS 1378)				
8.17.1	125x125x27x2.80 mm	2	each	86.00	172.00
8.18	Providing and fixing ISI marked IS: 453 oxidised M.S. double acting spring hinges with necessary screws etc. complete (Copper oxidised as per IS 1378)				

8.18.1	125 mm	6	each	291.35	1748.00
8.19	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete (Copper oxidised as per IS 1378)				
8.19.1	300x16 mm	4	each	216.55	866.00
8.19.2	250x16 mm	20	each	193.70	3874.00
8.2	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete (Copper oxidised as per IS 1378)				
8.20.1	250x10 mm	20	each	83.90	1678.00
8.20.2	200x10 mm	20	each	69.40	1388.00
8.20.3	150x10 mm	50	each	59.45	2973.00
8.20.4	100x10 mm	50	each	44.30	2215.00
8.21	Providing and fixing ISI marked oxidised M.S. handles conforming to IS:4992 with necessary screws etc. complete (Copper oxidised as per IS 1378)				
8.21.1	125 mm	40	each	39.95	1598.00
8.21.2	100 mm	30	each	32.55	977.00
8.22	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete (Copper oxidised as per IS 1378)				
8.22.1	150 mm	5	each	33.10	166.00
8.22.2	115 mm	4	each	29.70	119.00
8.23	Providing and fixing oxidised M.S. casement stays (straight peg type) with necessary screws etc. complete (Copper oxidised as per IS 1378)				
8.23.1	300 mm weighing not less than 330 grams	6	each	67.40	404.00
8.23.2	250 mm weighing not less than 280 grams	5	each	61.05	305.00
8.24	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				
8.24.1	250x10 mm	2	each	441.60	883.00
8.25	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	2	each	854.65	1709.00
8.26	Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt and a pair of lever handles of approved quality with necessary screws etc. complete.	2	each	726.60	1453.00
8.27	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc. complete.				
8.27.1	40 mm	2	each	311.20	622.00
8.28	Providing and fixing bright finished brass handles with screws etc. complete:				
8.28.1	125 mm	2	each	256.65	513.00
8.29	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	2	each	121.65	243.00
8.3	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	6	each	1124.85	6749.00

8.31	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :				
8.31.1	300x16 mm	5	each	303.25	1516.00
8.31.2	250x16 mm	25	each	260.60	6515.00
8.32	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
8.32.1	300x10 mm	5	each	130.10	651.00
8.32.2	250x10 mm	25	each	115.15	2879.00
8.32.3	200x10 mm	25	each	99.70	2493.00
8.32.4	150x10 mm	50	each	82.55	4128.00
8.32.5	100x10 mm	50	each	64.70	3235.00
8.33	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
8.33.1	125 mm	50	each	66.25	3313.00
8.33.2	100 mm	100	each	59.55	5955.00
8.34	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.				
8.34.1	Single rubber stopper	2	each	39.60	79.00
8.34.2	Twin rubber stopper	50	each	72.35	3618.00

8.35	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board, including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/sqm(both side inclusive), consisting of floor and ceiling channel 50 mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre, and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm), joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete.				
8.35.1	75 mm overall thickness partition with 12.5 mm thick double skin fire rated Glass Reinforced Gypsum (GRG) plaster board conforming to IS: 2095: part 3 (Board with BIS certification marks)	5	sqm	2131.10	10656.00
8.36	Providing and fixing 2nd class teak wood lipping/ moulded beading or taj beading of size 18X5 mm fixed with wooden adhesive of approved quality and screws/nails on the edges of the Pre-laminated particle board as per direction of Engineer-in charge.	2	metre	102.15	204.00
8.37	Providing and fixing magnetic catcher of approved quality in cupboard/ ward robe shutters, including fixing with necessary screws etc. complete.				
8.37.1	Triple strip vertical type	3	each	52.50	158.00
8.37.2	Double strip (horizontal type)	2	each	39.70	79.00
8.38	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance $\pm 1$ mm), with wall thickness 2.0 mm ( $\pm 0.2$ mm), corners of the door frame to be jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19 mm and 1 mm ( $\pm 0.1$ mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer- in-charge				
8.38.1	Extruded section profile size 48x40 mm	50	metre	270.20	13510.00
8.39	Providing and fixing to existing door frames.				

8.39.1	24 mm thick factory made PVC door shutters made of styles cleats. The shutter frame filled and rails of a uPVC hollow section of size 59x24 mm and wall thickness 2 mm ( $\pm$ 0.2 mm) with inbuilt edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm ( $\pm$ 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x24 mm and 2 mm ( $\pm$ 0.2 mm) wall thickness, fixed to the shutter styles by means of plastic/galvanised M.S. with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm ( $\pm$ 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer- in-charge. (For W.C. and bathroom door shutter).	20	sqm	2969.25	59385.00
8.4	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.				
8.40.1	1.0 mm thick	4	sqm	897.30	3589.00
8.41	Providing and fixing cup board shutters with 25 mm thick veneered particle board IS : 3097 marked, exterior grade (Grade I), of approved make, including IInd class teak wood lipping of 25 mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges, complete as per direction of Engineer-in-Charge.				
8.41.1	With decorative veneering on one side and commercial veneering on other side	3	sqm	1927.50	5783.00
8.42	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws:				
8.42.1	35 mm thick shutters				
8.42.1.	with ISI marked M.S. pressed butt hinges bright finished of required size				
8.42.1.	Second class teak wood	25	sqm	5024.15	125604.00
8.43	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete.				
8.43.1	With 2nd class teak wood beading 62X19 mm	20	sqm	1597.15	31943.00

8.44	Providing and fixing frame work for partitions/ wall lining etc. made of 50x50x1.6 mm hollow MS tube, placed along the walls, ceiling and floor in a grid pattern with spacing @ 60 cm centre to centre both ways (vertically & horizontally) or at required spacing near opening, with necessary welding at junctions and fixing the frame to wall/ ceiling/ floors with steel dash fasteners of 8 mm dia, 75 mm long bolt, including making provision for opening for doors, windows, electrical conduits, switch boards etc., including providing with two coats of approved steel primer etc. complete, all as per direction of Engineer-in-charge.	3	kg	166.80	500.00
8.45	Providing and fixing stainless steel sof closing spring hinges at 0 degree hinges (hydraulic type) of approved make/brand to cupboard shutters with full threaded steel screws including making necessary recess in board and finished etc. complete as per direction of Engineer-in-charge.	5	each	272.00	1360.00
8.46	Providing and fixing ready made 304 grade stainless steel Modular kitchen basket and accessories such as right angle basket (Plain Cup & Saucer, plant, Partition, Bottle rack, Thali, Cutlery) kitchen utensil basket, Dinner set basket, kitchen grain basket, Multipurpose basket as per site requirement including finishing (wherever required) and fittings. The same shall be fixed with necessary stainless steel nuts & bolts, Stainless Steel screws & telescopic channel etc. as per direction of Engineer-in-charge. (For payment purpose only weight of Stainless steel basket shall be considered excluding weight of all fixing accessories such as nuts, bolts, fasteners telescopic basket channels etc. Payment of providing and fixing telescopic channel shall be paid separately)	2	kg	533.25	1067.00
	Sub-Total				745328.00
9	STEEL WORK				
9.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	50	kg	117.35	5868.00
9.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	200	kg	133.70	26740.00
9.3	Providing and fixing 1 mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				
9.3.1	Using M.S. angels 40x40x6 mm for diagonal braces	20	sqm	5804.35	116087.00

9.4	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.				
9.4.1	80x1.20 mm M.S. laths with 1.20 mm thick top cover	2	sqm	3307.05	6614.00
9.5	Providing and fixing ball bearing for rolling shutters.	1	each	492.35	492.00
9.6	Extra for providing mechanical device chain and crank operation for operating rolling shutters.				
9.6.1	Exceeding 10.00 sqm and upto 16.80 sqm in the area	1	sqm	1281.35	1281.00
9.6.2	Exceeding 16.80 sqm in area	1	sqm	1181.80	1182.00
9.7	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of float glass panes with glazing clips and special metal- sash putty of approved make, or metal beading with screws, (only steel windows, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost).				
9.7.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	10	kg	82.45	825.00
9.8	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top /centre hung, with beading and all members such as F7D,F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, priming coat of approved steel primer, but excluding the cost of other fittings,glass panes complete all as per approved design, (sectional weight of only steel members shall be measured for payment).				
9.8.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	10	kg	131.05	1311.00
9.9	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.				
9.9.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size).	2	kg	141.70	283.00
9.1	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.				
9.10.1	Hot finished welded type tubes	100	kg	194.40	19440.00

9.11	Welding by gas or electric plant including transportation of plant at site etc. complete.	2	cm	3.70	7.00
9.12	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.				
9.12.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	100	kg	172.60	17260.00
9.13	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.				
9.13.1	M.S. tube	50	kg	196.80	9840.00
9.14	Providing and fixing carbon steel galvanised ( minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm <sup>2</sup> ), counter sunk head, comprising of 10 mm dia polyamide PA 6 grade sleeve, including drilling of hole in frame , concrete/ masonry, etc. as per direction of Engineer-in-charge.				
9.14.1	10 x 60 mm	40	each	131.10	5244.00
9.14.2	10 x 80 mm	30	each	137.65	4130.00
9.14.3	10 x 120 mm	20	each	170.95	3419.00
9.14.4	10 x 140 mm	50	each	182.20	9110.00
9.14.5	10 x 160 mm	20	each	224.50	4490.00
9.15	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, bufing, 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-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	10	kg	772.40	7724.00
9.16	Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.				
9.16.1	Galvanised M.S. Wire gauze with 0.63 mm dia wire and 1.4 mm aperture on both sides	5	sqm	844.70	4224.00
9.16.2	Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides	5	sqm	1133.55	5668.00
9.17	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with:				
9.17.1	4.0 mm thick glass panes	40	sqm	1064.65	42586.00
9.17.2	5.5 mm thick glass panes	20	sqm	1390.15	27803.00
9.18	Providing and fixing angle iron frames for doors, windows and ventilators of mild steel Angle sections of size 35x35x5 mm, joints mitred and welded by angle iron 35x35x5 mm or 35x 5 mm flat pieces to the existing T-iron flat frame or to the wall with dash fastener, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer, all complete as per the direction of Engineer-In-charge.	50	kg	130.50	6525.00

	Sub-Total				328153.00
10	FLOORING				
10.1	Brick on edge flooring with bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks:				
10.1.1	1:6 (1cement :6 coarse sand)	10	sqm	965.55	9656.00
10.2	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
10.2.1	40 mm thick with 20 mm nominal size stone aggregate	70	sqm	614.20	42994.00
10.3	Cement plaster skirting up to 30 cm height, with cement mortar 1:3 (1 cement: 3 coarse sand), finished with a floating coat of neat cement.				
10.3.1	18 mm thick	4	sqm	662.05	2648.00
10.4	Cement concrete pavement with 1:2:4(1 cement: 2 coarse sand :4 graded stone aggregate 20 mm nominal size), including finishing complete.	2	cum	8595.15	17190.00
10.5	40 mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 34 mm thick cement concrete 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6 mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 1 mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement: 1 marble powder) by weight in proportion of 4:7(4 cement marble powder mix : 7 marble chips) by volume, including cement slurry etc. complete:				
10.5.1	Medium shade pigment with 50% white cement and 50% ordinary cement	1	sqm	1075.10	1075.00
10.6	40 mm thick marble chips flooring, rubbed and polished to granolithic finish, under layer 31 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) and top layer 9 mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 4 mm to 7 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder : 7 marble chips) by volume, including cement slurry etc. complete				
10.6.1	Medium shade pigment with 50% white cement and 50% ordinary cement	1	sqm	1085.45	1085.00
10.7	Providing and fixing glass strips in joints of terrazo/ cement concrete floors.				
10.7.1	40 mm wide and 4 mm thick	100	metre	91.75	9175.00
10.8	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) :				
10.8.1	25 mm thick	10	sqm	1948.25	19483.00
10.9	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.	2	sqm	2354.70	4709.00

10.1	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement :4 Coarse sand), Jointing with grey cement slurry @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc., complete.	20	sqm	1096.55	21931.00
10.11	Providing and fixing 1st quality ceramic glazed floor 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.	2	sqm	1112.70	2225.00
10.12	Providing and laying Vitrified tiles in floor in diferent sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.				
10.12.1	Double charge vitrified tile polished finish of size				
10.12.1	Size of Tile 600 x 600 mm	30	sqm	1453.65	43610.00
10.12.2	Glazed Vitrified tiles Matt/Antiskid finish of size				
10.12.2	Size of Tile 600 x 600 mm	10	sqm	1464.85	14649.00
10.13	Providing and laying Vitrified tiles in diferent 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, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.				
10.13.1	Size of Tile 600x600 mm	10	sqm	1623.05	16231.00
10.14	Providing and laying Vitrified tiles in floor with diferent sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).				
10.14.1	Size of Tile 600x600 mm	10	sqm	1725.35	17254.00
	Sub-Total				223915.00
11	ROOFING				

11.1	Providing corrugated G.S. sheet roofing including vertical/curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.				
11.1.1	0.63 mm thick with zinc coating not less than 275 gm/ m2	50	sqm	1087.65	54383.00
11.2	Extra for straight cutting in C.G.S. sheet roofing for making opening of area exceeding 40 sq. decimeter for chimney stacks, sky light etc.:				
11.2.1	0.80 mm thick	2	metre	92.95	186.00
11.3	Extra for providing and fixing wind ties of 40x 6 mm flat iron section.	40	metre	195.60	7824.00
11.4	10 cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25 mm thick mud mortar mixed with bhusa @35 kg per cum of earth and gobri leaping with mix 1:1 (1 clay: 1 cow dung) and covered with flat tile bricks, grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finished neat:				
11.4.1	With common burnt clay F.P.S.(non modular) brick tile of class designation 10	5	sqm	1050.20	5251.00
11.5	Providing and laying brick tiles over mumty roofs, grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement, over 12 mm layer of cement mortar 1:3 (1 cement: 3 fine sand) and finished neat:				
11.5.1	With common burnt clay F.P.S. (non modular) brick tiles of class designation 10	2	sqm	607.40	1215.00
11.6	Providing gola 75x75 mm in cement concrete 1:2:4(1 cement :2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement: 3 fine sand) as per standard design :				
11.6.1	In 75x75 mm deep chase	50	metre	305.15	15258.00
11.7	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 P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	10	each	298.25	2983.00
11.8	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
11.8.1	75 mm diameter	10	metre	248.80	2488.00
11.8.2	110 mm diameter	100	metre	377.40	37740.00

11.9	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS :5382, leaving 10 mm gap for thermal expansion.				
11.9.1	Coupler				
11.9.1.	75 mm	2	each	91.70	183.00
11.9.1.	110 mm	5	each	136.15	681.00
11.9.2	Single pushfit Coupler				
11.9.2.	75 mm	2	each	93.10	186.00
11.9.2.	110 mm	5	each	127.60	638.00
11.9.3	Single tee with door				
11.9.3.	75x75x75 mm	2	each	164.20	328.00
11.9.3.	110x110x110 mm	10	each	234.15	2342.00
11.9.4	Single tee without door				
11.9.4.	75x75x75 mm	2	each	144.30	289.00
11.9.4.	110x110x110 mm	4	each	221.35	885.00
11.9.5	Bend 87.5°				
11.9.5.	75 mm bend	3	each	105.90	318.00
11.9.5.	110 mm bend	10	each	150.35	1504.00
11.9.6	Shoe (Plain)				
11.9.6.	75 mm Shoe	2	each	93.10	186.00
11.9.6.	110 mm Shoe	10	each	131.85	1319.00
11.1	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. 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.				
11.10.1	75 mm	6	each	369.85	2219.00
11.10.2	110 mm	20	each	371.30	7426.00
11.11	Providing and fixing pre-coated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-Charge) of total coated thickness 0.50 mm (base metal of minimum 0.45 mm thickness with total coating thickness of 0.05mm) with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	50	sqm	738.65	36933.00
11.12	Providing and fixing pre-coated galvanised steel sheet roofing accessories of total coated thickness 0.50 mm (base metal of minimum 0.45 mm thickness with total coating thickness of 0.05 mm) with Zinc coating 120 gram per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :				

11.12.1	Ridges plain (500- 600mm)	10	metre	532.35	5324.00
11.12.2	Gutter (600 mm over all girth)	1	metre	1313.70	1314.00
11.13	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections ( galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like difusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.				
11.13.1	12.5 mm thick square edge PVC Laminated Gypsum Tile of size 595x595 mm, made of Gypsum plasterboard, manufactured from natural gypsum as per IS 2095 part I and laminated with white 0.16 mm thick fire retardant PVC film on the face side and 12 micron metalized polyester on the back side with all edges sealed with the face side PVC film which goes around and wraps the edges and is bonded to the edges and the back side metalized polyester film so as to make the tile a completely sealed unit.	20	sqm	2215.15	44303.00
11.13.2	12.5 mm thick fully Perforated Gypsum Board tile made from plasterboard having glass fibre conforming to IS: 2095 part I, of size 595x595 mm, having perforation of 9.7x9.7 mm at 19.4 mm c/c with center borders of 48 mm and the side borders of 30 mm, backed with non woven tissue on the back side, having an NRC (Noise Reduction Coefficient) of 0.79	20	sqm	1528.00	30560.00
	Sub-Total				264266.00
12	FINISHING				
12.1	12 mm cement plaster of mix:				
12.1.1	1:6(1 cement: 6 fine sand)	10	sqm	333.35	3334.00
12.2	15 mm cement plaster on the rough side of single or half brick wall of mix:				
12.2.1	1:6 (1 cement: 6 fine sand)	10	sqm	383.00	3830.00
12.3	12 mm cement plaster of mix:				
12.3.1	1:6 (1 cement: 6 coarse sand)	50	sqm	343.65	17183.00
12.4	15 mm cement plaster on rough side of single or half brick wall of mix:				

12.4.1	1:6(1 cement: 6 coarse sand)	50	sqm	395.35	19768.00
12.5	12 mm cement plaster finished with a floating coat of neat cement of mix:				
12.5.1	1:4(1 cement: 4 fine sand)	50	sqm	425.55	21278.00
12.6	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix:				
12.6.1	1:4(1 cement: 4 fine sand)	40	sqm	477.90	19116.00
12.7	6 mm cement plaster of mix:				
12.7.1	1:3(1 cement :3 fine sand)	20	sqm	300.45	6009.00
12.8	6 mm cement plaster 1:3 (1 cement: 3 fine sand) finished with a floating coat of neat cement and thick coat of Lime wash on top of walls when dry for bearing of R.C.C. slabs and beams.	5	sqm	396.65	1983.00
12.9	Neat cement punning.	10	sqm	79.95	800.00
12.1	Rough cast plaster upto 10 m 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) and top layer 10 mm cement plaster 1:3 (1 cement: 3 fine sand) mixed with 10% finely grounded hydrated lime by volume of cement.				
12.10.1	Ordinary cement finish using ordinary cement	2	sqm	886.60	1773.00
12.11	Extra for plastering:				
12.11.1	Flewing soffits	2	sqm	117.65	235.00
12.12	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	1	sqm	262.70	263.00
12.13	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine sand):				
12.13.1	Flush / Ruled/ Struck or weathered pointing	50	sqm	257.35	12868.00
12.14	Pointing on tile brick work with cement mortar 1:3 (1 cement: 3 fine sand):				
12.14.1	Flush/ Ruled/ Struck or weathered pointing	20	sqm	350.20	7004.00
12.15	Extra for pointing on walls on the outside at height more than 10 m from ground level for every additional height of 3 m or part there of.	2	sqm	8.65	17.00
12.16	White washing with lime to give an even shade:				
12.16.1	New work (three or more coats)	120	sqm	39.05	4686.00
12.17	Distemping with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and of required shade and colour all complete to achieve even shade and colour:				
12.17.1	New work (two or more coats) over and including water thinnable priming coat with cement primer having VOC content less than 50 gram/litre	20	sqm	185.65	3713.00
12.18	Finishing walls with water proofing cement paint of required shade:				
12.18.1	New work (Two or more coats applied @ 3.84 kg/10 sqm)	20	sqm	116.90	2338.00
12.19	Finishing walls with Acrylic Smooth exterior paint of required shade:				
12.19.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm)	100	sqm	160.60	16060.00
12.2	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				

12.20.1	New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm)	500	sqm	171.10	85550.00
12.21	Applying priming coat:				
12.21.1	With ready mixed aluminium primer of approved brand and manufacture on resinous wood and plywood	20	sqm	74.65	1493.00
12.21.2	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works	10	sqm	67.40	674.00
12.22	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.				
12.22.1	On steel work	2	sqm	241.75	484.00
12.22.2	On concrete work	2	sqm	235.15	470.00
12.23	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
12.23.1	Two or more coats on new work	50	sqm	155.90	7795.00
12.24	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:				
12.24.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	100	sqm	226.25	22625.00
12.25	Varnishing with varnish of approved brand and manufacture:				
12.25.1	Two or more coats of glue sizing with copal varnish over an under coat of flattening varnish	10	sqm	236.10	2361.00
12.26	French spirit polishing :				
12.26.1	Two or more coats on new works including a coat of wood filler	2	sqm	446.25	893.00
12.27	Lettering with black Japan paint of approved brand and manufacture	50	per letter per cm height	6.15	308.00
12.28	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer, including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications and direction of the Engineer-in-charge :				
12.28.1	15 mm wide and 15 mm deep groove	10	metre	75.15	752.00
12.29	Forming groove of uniform size from 12x12 mm and upto 25x15 mm in the top layer of washed stone grit plastered surface as per approved pattern, including providing and fixing aluminum channels of appropriate size and thickness (not less than 2 mm), nailed to the under layer with rust proof screws and nails and finishing the groove complete as per specifications and direction of the Engineer-in-Charge.	10	metre	100.60	1006.00
12.3	Providing and applying 12 mm thick (average) premixed formulated one coat gypsum lightweight plaster having additives and light weight aggregates as vermiculite/ perlite respectively conforming to IS: 2547 (Part - 1 & II) 1976, applied on hacked / uneven background such as bare brick/ block/ RCC work on walls & ceiling at all floors and locations, finished in smooth line and level etc. complete.	1	sqm	468.90	469.00

12.31	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	2000	sqm	156.05	312100.00
12.32	Distemping with 1st quality acrylic distemper (ready mixed) having VOC (Volatile Organic Compound ) content less than 50 gram/ litre, of approved brand and manufacturer including applying additional coats wherever required to achieve even shade and colour				
12.32.1	Old work (one or more coats)	4000	sqm	62.70	250800.00
12.33	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound ) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.				
12.33.1	Two coats	200	sqm	142.80	28560.00
12.34	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound ) content.				
12.34.1	With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre	100	sqm	70.35	7035.00
12.35	White washing with lime to give an even shade:				
12.35.1	Old work (two or more coats)	1000	sqm	22.85	22850.00
12.35.2	Old work (one or more coats)	800	sqm	13.90	11120.00
12.36	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	1000	sqm	19.75	19750.00
12.37	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	1500	sqm	25.15	37725.00
12.38	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:		0 0	0.00	
12.38.1	Old work (one or more coats)	2	sqm	93.30	187.00
12.39	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:				
12.39.1	One or more coats on old work	1200	sqm	102.80	123360.00
12.4	French spirit polishing :				
12.40.1	One or more coats on old work	20	sqm	224.80	4496.00
12.41	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade				
12.41.1	Old work (Two or more coats applied @ 1.43 V/ 10 sqm) over existing cement paint surface	500	sqm	131.30	65650.00
12.41.2	Old work (one or more coats applied @ 0.83 ltr/10 sqm).	300	sqm	88.55	26565.00
12.42	Melamine polishing on wood work (one or more coat).	2	sqm	138.10	276.00
	Sub-Total				1177612.00
13	REPAIRS TO BUILDING				
13.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
13.1.1	With cement mortar 1:4 (1cement: 4 coarse sand)	100	sqm	560.50	56050.00

13.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts, embedding hold fasts in cement concrete blocks of size 15 x 10 x 10 cm with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size), painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
13.2.1	Door chowkhats	10	each	1782.55	17826.00
13.2.2	Window chowkhats	10	each	1125.15	11252.00
13.3	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface including disposal of mulba/ rubbish to the nearest municipal dumping ground, all complete as per direction of Engineer-in-Charge.				
13.3.1	For door/ window/ clerestory window	5	sqm	1264.35	6322.00
13.4	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:				
13.4.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	20	sqm	1090.65	21813.00
13.5	Renewing glass panes, with wooden fillets wherever necessary:				
13.5.1	Float glass panes of nominal thickness 4 mm (weight not less than 10kg/sqm)	20	sqm	1580.90	31618.00
13.6	Renewal of old putty of glass panes (length)	10	metre	56.15	562.00
13.7	Refixing old glass panes with putty and nails	2	sqm	729.85	1460.00
13.8	Raking out joints in lime or cement mortar and preparing the surface for re-pointing or replastering, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.	50	sqm	72.45	3623.00
13.9	Flush pointing with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska :				
13.9.1	With F.P.S. brick tiles	2	sqm	137.70	275.00
13.1	Renewing Wrought iron or M.S. Wheel or roller of steel door or gate and fitting and fixing the same with necessary clamps, nuts and bolts/welding and erection etc. complete.				
13.10.1	Wheel 50 mm dia and below	2	per wheel	123.70	247.00
13.11	Providing and fixing bright finished brass double acting spring hinges with necessary brass screws etc. complete :				
13.11.1	125 mm	2	each	726.65	1453.00

13.12	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 chollies, 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. Note: - This item to be used for maintenance work judicially, necessary deduction for scaffolding in the existing item to be done.	100	sqm	338.25	33825.00
13.13	Cleaning of terrace/loft water storage tank (inside surface area) upto 2000 litre capacity at all heights with coconut brushes, duster etc., removal of silt, rubbish from the tank and cleaning the tank with fresh water disinfecting with bleaching powder @ 0.5gm per litre capacity of tank including marking the date of cleaning on the side of tank body with the help of stencil and paint and disposing of malba all complete as per direction of Engineer- in-Charge. (The old date already written on tank should be removed with paint remover or black paint and if date is not written with the stencil or old date is not removed deduction will be made @ Rs. 0.10 per litre) (if during cleaning any GI fittings or ball cock is damaged that is to be repaired by contractor at his own cost and nothing extra will be paid on this account)	750	litre	0.50	375.00
13.14	Cleaning and desilting of gully trap chamber, including removal of rubbish mixed with earth etc. and disposal of same, all as per the direction of Engineer-in-charge.	2	each	108.30	217.00
13.15	Cleaning of choked sewer line by diesel running vehicle mounting hydraulic operated high pressure suction cum jetting sewer cleaning machine fitted with pump having 4000 litres suction capacity and 6000 litres water jetting tank capacity including skilled operator, supervising engineer etc. for cleaning and partial desilting of manholes and dechocking of sewer lines. Dechocking and flushing of sewer line from one manhole to another by high pressure jetting system of 2200 PSI for sewer line from 150 mm dia upto 300 mm	1	metre	340.75	341.00

13.16	Cleaning of under ground sump, Over Head R.C.C. Tank (independent staging) including disposal of slit and rubbish, all as per direction of Engineer-in-Charge. The cleaning shall consist following operations:- (i) Tank shall be emptied of water by pumping & bottom shall be cleaned of silt and other deposits. (ii) Entire surface area of the sump shall then scrubbed thoroughly with wire brush etc. and pressure washed with water. (iii) Chlorination of RCC internal surface by liquid chlorine. (iv) The treated surface shall be dried using air jetting and all loose particles shall be removal from the surface. (v) Finally the surface shall be treated with ultraviolet radiation etc. as per direction of Engineer-in-Charge.	1	sqm	84.85	85.00
13.17	Disconnecting damaged overhead/terrace PVC water storage tank of any size from water supply line and removing from the terrace including shifting at ground level as per direction of Engineer-in-charge.	10	each	433.75	4338.00
13.18	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 including malba, all complete as per the direction of Engineer-in charge.				
13.18.1	Orissa pattern W.C Pan of size 580x440 mm	2	each	4478.75	8958.00
13.19	Cutting holes of required size in brick masonry wall for fixing of exhaust fan including providing and fixing 300 mm dia PVC pipe conforming BIS-12818 and making good the same etc. complete as per direction of Engineer-in- charge.	4	each	288.10	1152.00
13.2	Dismantling W.C. Pan of all sizes including disposal of dismantled materials including malba all complete as per directions of Engineer-in-Charge.	4	each	134.10	536.00
13.21	Hacking of CC flooring including cleaning for surface etc. complete as per direction of the Engineer-in-Charge.	200	sqm	3.45	690.00
13.22	Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineer-in-Charge. (a) Internal Work- Exposed on wall	20	metre	3.25	65.00
13.23	Taking out existing wooden door shutter, repair by cutting, painting etc. and refixing of repaired door shutters to existing door frames, including replacement of hinges with screws, etc. as required, all complete as per the direction of the Engineer-in charge.	40	each	429.10	17164.00
	Sub-Total				220247.00
14	Dismantling and Demolishing				
14.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
14.1.1	Nominal concrete 1:3:6 or richer mix (including equivalent design mix)	2	cum	2434.25	4869.00
14.1.2	Nominal concrete 1:4:8 or leaner mix (including equivalent design mix)	3	cum	1503.60	4511.00
14.2	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in - charge.	1	cum	3551.25	3551.00

14.3	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer-in-charge.	5	sqm	1147.20	5736.00
14.4	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
14.4.1	In cement mortar	2.5	cum	2060.20	5151.00
14.5	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured):				
14.5.1	From brick work in lime mortar	1	1000 Nos	5355.30	5355.00
14.6	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
14.6.1	Of area 3 sq. metres and below	20	each	367.20	7344.00
14.7	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead :				
14.7.1	Of area 3 sq. metres and below	30	each	143.50	4305.00
14.8	Dismantling steel work in single sections including dismembering and stacking within 50 metres lead in:				
14.8.1	Channels, angles, tees and flats	10	kg	2.30	23.00
14.9	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.	10	kg	5.65	57.00
14.1	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	10	kg	3.85	39.00
14.11	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.				
14.11.1	For thickness of tiles above 25 mm and up to 40 mm	25	sqm	113.35	2834.00
14.12	Demolishing dry brick pitching in floors, drains etc. including stacking of serviceable material and disposal of unserviceable material within 50 metres lead :	2	cum	1317.65	2635.00
14.13	Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	50	sqm	105.35	5268.00
14.14	Demolishing mud phaska in terracing and disposal of material within 50 metres lead.	2	cum	914.30	1829.00
14.15	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of:				
14.15.1	G.S. Sheet	40	sqm	164.95	6598.00
14.15.2	Asbestos Cement sheet	20	sqm	77.30	1546.00
14.16	Dismantling and stacking within 50 metres lead, fencing posts or struts including all earth work and dismantling of concrete etc. in base of:				
14.16.1	T' or 'L' iron or pipe	20	each	230.90	4618.00
14.17	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50 metres lead.	50	kg	36.80	1840.00

14.18	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead :				
14.18.1	75 to 80 mm dia pipe	10	metre	75.70	757.00
14.18.2	100 mm dia pipe	20	metre	78.00	1560.00
14.19	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 metres lead as per direction of Engineer-in-charge :				
14.19.1	15 mm to 40 mm nominal bore	50	metre	149.80	7490.00
14.2	Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 metre lead as per direction of Engineer-in-charge:				
14.20.1	Up to 150 mm diameter	1	metre	332.40	332.00
14.21	Taking out C.I. cover with frame from R.C.C. top slab of manholes of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge.	1	each	697.40	697.00
14.22	Taking out C.I. cover with frame from R.C.C. top slab of inspection chambers of various sizes including demolishing of R.C.C. work manually/ by mechanical means and stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead as per direction of Engineer-in-charge.	1	each	406.75	407.00
14.23	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.	1	each	958.75	959.00
14.24	Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	1	each	112.05	112.00
14.25	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	100	sqm	54.65	5465.00
14.26	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer- in-charge.	2	sqm	56.35	113.00
14.27	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	100	cum	263.95	26395.00
	Sub-Total				112396.00
15	ROAD WORK				

15.1	Fencing with angle iron post placed at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 kg per 100 m (minimum), between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately). Payment to be made per metre cost of total length of barbed wire used.				
15.1.1	With G.I. barbed wire	1000	metre	22.10	22100.00
15.2	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.	100	kg	125.75	12575.00
15.3	Welded steel wire fabric fencing with posts of specified material and of standard design placed and embedded in cement concrete blocks 45x45x 60 cm of mix 1:5:10 (1 cement:5 fine sand : 10 graded stone aggregate 40 mm nominal size), every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and struts embedded in cement concrete blocks 70x45x50 cm of the same mix, provided with welded steel wire fabric fixed between the posts fitted and fixed with G.I. staples on wooden plugs or tied to 6 mm bar nibs with G.I. binding wire (cost of posts, welded steel wire fabric, painting, earth work in excavation and concrete to be paid for separately).	20	sqm	66.15	1323.00
15.4	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size) in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping complete.	4	cum	7993.80	31975.00
15.5	Providing and fixing pre-moulded joint filler in expansion joints of RCC roads / CC pavements after making the joints dust free with high pressure air jet cleaners, all complete as per direction of the Engineer-in-Charge. (Pre-moulded joint fillers shall be made of bitumen hot sealing compound impregnated fibre board having impregnation more than 35%, conforming to IS:1838 for fibre board and IS: 1834 for hot sealing bitumen compound grade A.)	1	per cm depth per cm width per metre length	5.30	5.00
15.6	Providing and filling in position rubberized bitumen hot sealing compound for sealing of expansion joints in roads / pavements all complete as per direction of the Engineer-in-Charge.				
15.6.1	Providing and filling in position rubberized bitumen hot sealing compound for sealing of expansion joints in roads / pavements all complete as per direction of the Engineer-in-Charge.	1	per cm depth per cm width per metre length	8.65	9.00

15.7	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length ( total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5 mm thick) wire of high tensile strength of 165 kg/ sq. mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)	10	metre	375.80	3758.00
15.8	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	25	sqm	972.00	24300.00
15.9	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.				
15.9.1	Made of G.I. wire of dia 4 mm	5	sqm	1017.80	5089.00
15.1	Providing and erecting 2.00 metre high temporary barricading at site; each panel of size 2.50 m x2.00 m made of 40x40x6 mm angle iron or 50x50x3 mm hollow MS tube posts/horizontal members/bracings covered with 1.63 mm thick MS sheet. The sheet shall be fixed with 30x5 mm MS flat by suitable welding/riveting. The panels shall be made so that gap of 50cm above the ground is available making overall height as 2.5 m. MS channel ISLC 75 @ 5.70 kg/m, 50 cm long shall be provided at the bottom having oval shaped holes of size 50x25 mm at both ends with 50 cm long MS angle 40x40x6 mm bracing. Suitable arrangement shall be made to fix the barricading to avoid from overturning by providing 250 mm long expansion fasteners at both ends. The work shall be executed 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 including 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 completion of work including shifting. The barricading provided shall remain to be the property of the contractor on completion of the work).	2	metre	3439.50	6879.00

15.11	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	20	sqm	131.75	2635.00
15.12	Laying old cement concrete interlocking paver blocks of any design/ shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge. (Old CC paver blocks shall be supplied by the department free of cost).	25	sqm	402.95	10074.00
15.13	Providing and laying matt finished vitrified tile of size 300x300x9.8 mm having with water absorption less than 0.5% and conforming to IS: 15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20 mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	10	sqm	1455.65	14557.00
15.14	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x9.8 mm having with water absorption less than 0.5% and conforming to IS:15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20 mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	5	sqm	2017.60	10088.00
	Sub-Total				145367.00
16	<b>SANITARY INSTALLATIONS</b>				
16.1	Providing and fixing water closet squatting pan (Indian type W.C. pan ) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:				
16.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	4	each	6767.40	27070.00
16.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :				
16.2.1	W.C. pan with ISI marked white solid plastic seat and lid	10	each	6515.55	65156.00

16.3	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
16.3.1	One urinal basin with 5 litre white P.V.C. automatic flushing cistern	2	each	6258.75	12518.00
16.4	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC 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 couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required :				
16.4.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern	2	each	12071.75	24144.00
16.5	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:				
16.5.1	White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps	2	each	2301.75	4604.00
16.5.2	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	5	each	1879.20	9396.00
16.6	Providing and fixing wash basin with C.I. brackets, 15 mm dia CP Brass single hole basin mixer of approved quality and make, including painting of fittings and brackets, cutting and making good the walls wherever required:- (a) White Vitreous China Wash basin size 550x400 mm with a 15 mm CP Brass single hole basin mixer	2	each	3960.55	7921.00
16.7	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink 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 :				
16.7.1	Kitchen sink with drain board				
16.7.1.	510x1040 mm bowl depth 250 mm	2	each	6945.60	13891.00
16.8	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P. brass waste and 40 mm 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 :				
16.8.1	Size 600x450x200 mm	1	each	6585.80	6586.00
16.9	Providing and fixing white vitreous china water closet squatting pan (Indian type) :				
16.9.1	Orissa pattern W.C. pan of size 580x440 mm	2	each	3169.05	6338.00
16.1	Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan.	2	each	2784.95	5570.00

16.11	Providing and fixing 8 mm dia C.P. / S.S. Jet with flexible tube upto 1 metre long with S.S. triangular plate to European type W.C. of quality and make as approved by Engineer - in - charge.	10	each	349.15	3492.00
16.12	Providing and fixing a pair of white vitreous china foot rests of standard pattern for squatting pan water closet :				
16.12.1	250x130x30 mm	2	pair	244.85	490.00
16.13	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete.				
16.13.1	10 litre capacity - White	2	each	1190.65	2381.00
16.14	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete :				
16.14.1	White solid plastic seat with lid	10	each	684.85	6849.00
16.15	Providing and fixing G.I. inlet connection for flush pipe connecting with W.C. pan.	5	each	142.85	714.00
16.16	Providing and fixing CP Brass 32 mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	4	each	1034.80	4139.00
16.17	Providing and fixing CP Brass Single lever telephonic wall mixer of quality & make as approved by Engineer in charge. (a) 15 mm nominal dia	5	each	6940.75	34704.00
16.18	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm or 340x410x265 mm sizes respectively.	1	each	1648.95	1649.00
16.19	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :				
16.19.1	Flat back wash basin of size 550x400 mm	1	each	992.60	993.00
16.2	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
16.20.1	Semi rigid pipe				
16.20.1	32 mm dia	20	each	103.90	2078.00
16.20.1	40 mm dia	20	each	116.70	2334.00
16.20.2	Flexible pipe				
16.20.2	32 mm dia	20	each	119.55	2391.00
16.20.2	40 mm dia	20	each	119.55	2391.00
16.21	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	20	each	1607.95	32159.00
16.22	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
16.22.1	Rectangular shape 1500x450 mm	5	each	2093.00	10465.00
16.23	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	2	each	1083.50	2167.00
16.24	Providing and fixing toilet paper holder :				
16.24.1	C.P. brass	2	each	803.70	1607.00
16.25	Providing and fixing soil, waste and vent pipes :				
16.25.1	100 mm dia				
16.25.1	Sand cast iron S&S pipe as per IS: 1729	2	metre	1151.90	2304.00

16.25.1	Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989	20	metre	1180.75	23615.00
16.25.2	75 mm diameter :				
16.25.2	Sand cast iron S&S pipe as per IS: 1729	2	metre	1044.75	2090.00
16.25.2	Centrifugally cast (spun) iron socketed pipe as per IS: 3989	10	metre	1186.00	11860.00
16.26	Providing and filling the joints with spun yarn, cement slurry and cement mortar 1:2 ( 1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :				
16.26.1	75 mm dia pipe	2	each	168.20	336.00
16.26.2	100 mm dia pipe	2	each	198.15	396.00
16.27	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 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. :				
16.27.1	For 100 mm dia pipe	2	each	362.85	726.00
16.27.2	For 75 mm dia pipe	2	each	360.00	720.00
16.28	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
16.28.1	100 mm dia				
16.28.1	Sand cast iron S&S as per IS - 1729	1	each	598.50	599.00
16.28.1	Sand cast iron S&S as per IS - 3989	6	each	705.20	4231.00
16.28.2	75 mm dia				
16.28.2	Sand cast iron S&S as per IS - 1729	1	each	501.45	501.00
16.28.2	Sand cast iron S&S as per IS- 3989	2	each	522.80	1046.00
16.29	Providing and fixing plain bend of required degree.				
16.29.1	100 mm dia				
16.29.1	Sand cast iron S&S as per IS - 1729	1	each	470.45	470.00
16.29.1	Sand cast iron S&S as per IS : 3989	5	each	570.05	2850.00
16.29.2	75 mm dia				
16.29.2	Sand cast iron S&S as per IS -1729	1	each	376.25	376.00
16.29.2	Sand cast iron S&S as per IS - 3989	1	each	390.50	391.00
16.3	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
16.30.1	100x100x100 mm				
16.30.1	Sand cast iron S&S as per IS - 1729	1	each	726.55	727.00
16.30.1	Sand cast iron S&S as per IS - 3989	2	each	925.70	1851.00
16.30.2	75x75x75 mm				
16.30.2	Sand cast iron S&S as per IS - 1729	1	each	629.50	630.00
16.30.2	Sand cast iron S&S as per IS - 3989	1	each	665.05	665.00
16.31	Providing and fixing single equal plain junction of required degree :				
16.31.1	100x100x100 mm				
16.31.1	Sand cast iron S&S as per IS - 1729	1	each	626.95	627.00
16.31.1	Sand cast iron S&S as per IS - 3989	1	each	811.90	812.00
16.31.2	75x75x75 mm				
16.31.2	Sand cast iron S&S as per IS - 1729	1	each	504.30	504.00
16.31.2	Sand cast iron S&S as per IS - 3989	1	each	561.20	561.00
16.32	Providing and fixing terminal guard :				
16.32.1	100 mm				

16.32.1	Sand cast iron S&S as per IS - 1729	1	each	442.00	442.00
16.32.1	Sand cast iron S&S as per IS - 3989	2	each	506.00	1012.00
16.32.2	75 mm				
16.32.2	Sand cast iron S&S as per IS - 1729	1	each	340.70	341.00
16.32.2	Sand cast iron S&S as per IS - 3989	2	each	404.75	810.00
16.33	Providing and fixing collar :				
16.33.1	100 mm				
16.33.1	Sand cast iron S&S as per IS - 1729	2	each	463.35	927.00
16.33.1	Sand cast iron S&S as per IS - 3989	6	each	513.15	3079.00
16.33.2	75 mm				
16.33.2	Sand cast iron S&S as per IS - 1729	2	each	305.15	610.00
16.33.2	Sand cast iron S&S as per IS - 3989	6	each	362.05	2172.00
16.34	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter :				
16.34.1	100 mm	40	each	622.50	24900.00
16.34.2	75 mm	30	each	526.25	15788.00
16.35	Providing and fixing M.S. stays and clamps for sand cast iron/centrifugally cast (spun) iron pipes of diameter :				
16.35.1	100 mm	6	each	139.70	838.00
16.35.2	75 mm	6	each	90.30	542.00
16.36	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 :				
16.36.1	100 mm inlet and 100 mm outlet				
16.36.1	Sand cast iron S&S as per IS: 3989	6	each	1996.50	11979.00
16.36.1	Sand Cast Iron S&S as per IS: 1729	1	each	1683.55	1684.00
16.36.2	100 mm inlet and 75 mm outlet				
16.36.2	Sand cast iron S&S as per IS - 3989	5	each	1975.15	9876.00
16.36.2	Sand Cast Iron S&S as per IS- 1729	1	each	1558.35	1558.00
16.37	Cutting chases in brick masonry walls for following diameter sand cast iron/ centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 ( 1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size), including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand) :				
16.37.1	100 mm dia	2	metre	713.20	1426.00
16.37.2	75 mm dia	2	metre	513.25	1027.00
16.38	Providing and fixing vitreous china dual purpose closet suitable for use as squatting pan or European type water closet (Anglo Indian W.C pan) with seat & lid fixed with C.P. brass hinges and rubber buffers, 10 litre low level flushing cistern with fitting and brackets, 40 mm flush bend, 20 mm over flow pipe, with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required:				
16.38.1	White vitreous china dual purpose WC pan with white solid plastic seat and lid with white vitreous china flushing cistern and C.P. flush bend.	1	each	11847.65	11848.00
16.39	Providing and fixing PTMT shelf 440 mm long, 124 mm width and 36 mm height of approved quality and colour, weighing not less than 300 gms.	1	each	713.20	713.00

16.4	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.	1	each	14999.15	14999.00
	Sub-Total				459656.00
17	WATER SUPPLY				
17.1	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply and all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall				
17.1.1	20 mm nominal dia Pipes	5	metre	335.00	1675.00
17.1.2	25 mm nominal dia Pipes	15	metre	401.55	6023.00
17.1.3	32 mm nominal dia Pipes	20	metre	518.75	10375.00
17.1.4	40 mm nominal dia Pipes	25	metre	702.95	17574.00
17.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings and fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.				
17.2.1	15 mm nominal dia Pipes	5	metre	497.80	2489.00
17.2.2	20 mm nominal dia Pipes	15	metre	537.60	8064.00
17.2.3	25 mm nominal dia Pipes	20	metre	627.25	12545.00
17.2.4	32 mm nominal dia Pipes	25	metre	739.30	18483.00
17.3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. External work				
17.3.1	20 mm nominal dia Pipes	5	metre	274.30	1372.00
17.3.2	25 mm nominal dia Pipes	20	metre	355.40	7108.00
17.3.3	32 mm nominal dia Pipes	20	metre	438.60	8772.00
17.3.4	40 mm nominal dia Pipes	20	metre	563.05	11261.00
17.4	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, including cutting and making good the walls etc. Internal work - Exposed on wall				
17.4.1	15 mm dia nominal bore	20	metre	366.40	7328.00
17.4.2	20 mm dia nominal bore	40	metre	437.30	17492.00
17.4.3	25 mm dia nominal bore	20	metre	551.70	11034.00
17.4.4	32 mm dia nominal bore	20	metre	667.00	13340.00
17.4.5	40 mm dia nominal bore	15	metre	811.90	12179.00
17.4.6	50 mm dia nominal bore	10	metre	1048.35	10484.00

17.5	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, including making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall :				
17.5.1	15 mm dia nominal bore	15	metre	580.45	8707.00
17.5.2	20 mm dia nominal bore	10	metre	635.20	6352.00
17.6	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work				
17.6.1	15 mm dia nominal bore	5	metre	322.15	1611.00
17.6.2	20 mm dia nominal bore	10	metre	368.60	3686.00
17.6.3	25 mm dia nominal bore	15	metre	467.75	7016.00
17.6.4	32 mm dia nominal bore	5	metre	540.30	2702.00
17.6.5	40 mm dia nominal bore	10	metre	617.05	6171.00
17.6.6	50 mm dia nominal bore	5	metre	762.15	3811.00
17.7	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :				
17.7.1	25 to 40 mm nominal bore	2	each	911.90	1824.00
17.8	Providing and fixing brass bib cock of approved quality :				
17.8.1	15 mm nominal bore	2	each	353.25	707.00
17.9	Providing and fixing brass stop cock of approved quality :				
17.9.1	15 mm nominal bore	2	each	353.25	707.00
17.1	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
17.10.1	25 mm nominal bore	4	each	622.40	2490.00
17.10.2	20 mm nominal bore	5	each	539.95	2700.00
17.10.3	32 mm nominal bore.	2	each	689.60	1379.00
17.10.4	40 mm nominal bore	1	each	826.10	826.00
17.10.5	50 mm nominal bore	1	each	1026.65	1027.00
17.11	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
17.11.1	15 mm nominal bore	1	each	406.85	407.00
17.11.2	20 mm nominal bore	10	each	462.50	4625.00
17.11.3	25 mm nominal bore	1	each	464.05	464.00
17.12	Providing and fixing gun metal non- return valve of approved quality (screwed end) :				
17.12.1	25 mm nominal bore				
17.12.1	Horizontal	2	each	591.40	1183.00
17.12.1	Vertical	2	each	624.10	1248.00
17.13	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :				
17.13.1	15 mm nominal bore	1	each	329.30	329.00
17.13.2	20 mm nominal bore	1	each	380.00	380.00
17.14	Providing and fixing uplasticised PVC connection pipe with brass unions :				
17.14.1	45 cm length				
17.14.1	15 mm nominal bore	20	each	97.75	1955.00
17.15	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet :				
17.15.1	100 mm diameter	1	each	193.95	194.00

17.16	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in reinforced cement concrete slab 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size), including necessary excavation, foundation concrete 1:5:10 ( 1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size ) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :				
17.16.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	2	each	1992.60	3985.00
17.17	Painting G.I. pipes and fittings with synthetic enamel white paint with two coats over a ready mixed priming coat, both of approved quality for new work :				
17.17.1	15 mm diameter pipe	5	metre	19.40	97.00
17.17.2	20 mm diameter pipe	10	metre	23.25	233.00
17.17.3	25 mm diameter pipe	15	metre	30.25	454.00
17.17.4	32 mm diameter pipe	5	metre	36.35	182.00
17.17.5	40 mm diameter pipe	10	metre	42.65	427.00
17.18	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :				
17.18.1	15 mm diameter pipe	5	metre	12.05	60.00
17.18.2	20 mm diameter pipe	10	metre	14.45	145.00
17.18.3	25 mm diameter pipe	15	metre	18.35	275.00
17.18.4	32 mm diameter pipe	5	metre	22.20	111.00
17.18.5	40 mm diameter pipe	10	metre	25.25	253.00
17.19	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :				
17.19.1	15 mm nominal bore	2	each	318.35	637.00
17.19.2	20 mm nominal bore	5	each	346.80	1734.00
17.19.3	25 mm nominal bore	2	each	439.25	879.00
17.19.4	32 mm nominal bore	2	each	489.05	978.00
17.19.5	40 mm nominal bore	1	each	631.30	631.00
17.2	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
17.20.1	15 mm nominal bore	1	each	829.45	829.00
17.20.2	20 mm nominal bore	1	each	857.85	858.00
17.20.3	25 mm nominal bore	1	each	950.35	950.00
17.20.4	32 mm nominal bore	1	each	1000.15	1000.00
17.21	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	3000	per litre	11.00	33000.00
17.22	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :				
17.22.1	15 mm nominal bore	6	each	506.80	3041.00

17.23	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.				
17.23.1	15 mm nominal bore	8	each	820.70	6566.00
17.24	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
17.24.1	15 mm nominal bore	10	each	798.95	7990.00
17.25	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.				
17.25.1	15 mm nominal bore	6	each	670.45	4023.00
17.26	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931				
17.26.1	15 mm nominal bore	20	each	574.30	11486.00
17.27	Providing and fixing C.P. Brass extension nipple (size 15 mm x 50 mm) of approved make and quality as per direction of Engineer-in-charge.	20	each	74.80	1496.00
17.28	Cutting holes up to 30x30 cm in walls including making good the same:				
17.28.1	With common burnt clay F.P.S. (non modular) bricks	4	each	416.80	1667.00
17.29	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	2	each	452.00	904.00
17.3	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	10	metre	202.90	2029.00
17.31	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 coarse sand: 6 graded stone aggregate 20 mm nominal size) including disposal of malba.	10	metre	209.20	2092.00
	Sub-Total				329111.00
18	DRAINAGE				
18.1	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 :				
18.1.1	100 mm diameter	5	metre	443.60	2218.00
18.1.2	150 mm diameter	5	metre	695.80	3479.00
18.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :				
18.2.1	100 mm diameter S.W. pipe	5	metre	964.75	4824.00
18.2.2	150 mm diameter S.W. pipe	5	metre	1179.85	5899.00
18.3	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 x 300 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:				
18.3.1	100x100 mm size P type				

18.3.1.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	each	2707.65	2708.00
18.3.2	150 x 100 mm size P type				
18.3.2.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	each	2734.20	2734.00
18.4	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps :				
18.4.1	100 mm diameter	2	metre	89.00	178.00
18.4.2	150 mm diameter	2	metre	98.45	197.00
18.5	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :				
18.5.1	100 mm dia. R.C.C. pipe	2	metre	507.05	1014.00
18.5.2	150 mm dia. R.C.C. pipe	2	metre	556.45	1113.00
18.5.3	300 mm dia. R.C.C. pipe	2	metre	994.30	1989.00
18.6	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 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 :				
18.6.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 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) :				
18.6.1.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	each	12770.55	25541.00
18.7	Extra for depth for manholes :				
18.7.1	Size 90x80 cm				
18.7.1.	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	metre	8825.40	17651.00
18.8	Supplying and fixing C.I. cover without frame for manholes :				
18.8.1	455x610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg	1	each	1358.00	1358.00
18.8.2	500 mm diameter C.I. cover (medium duty) the weight of the cover to be not less than 58 kg	1	each	3441.20	3441.00
18.9	Supplying and fixing C.I. cover 300x300 mm without frame for gully trap (standard pattern) the weight of cover to be not less than 4.5 kg	1	each	787.00	787.00

18.1	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm 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 :				
18.10.1	For pipes 100 to 250 mm diameter	1	each	810.45	810.00
18.10.2	For pipes 250 to 300 mm diameter	1	each	922.40	922.00
18.11	Extra for depth of manholes dismantled :				
18.11.1	Rectangular manhole 90x80 cm and beyond 45 cm depth	1	metre	2045.50	2046.00
18.12	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damage as required (Raising depth of manhole to be paid separately) :				
18.12.1	Rectangular manhole 90x80 cm with rectangular cover 600 x 450 mm of grade LD - 2.5	1	each	2625.50	2626.00
18.13	Constructing brick masonry road gully chamber 110x50x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm precast R.C.C. horizontal grating with frame and vertical grating complete as per standard design :				
18.13.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	each	11520.55	11521.00
	Sub-Total				93056.00
19	ALUMINIUM WORK				
19.1	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, fixing with 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 cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
19.1.1	For fixed portion				
19.1.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	10	kg	495.05	4951.00
19.1.1.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	10	kg	530.90	5309.00
19.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
19.1.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	10	kg	598.60	5986.00
19.1.2.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	10	kg	634.45	6345.00

19.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.				
19.2.1	Pre-laminated particle board with decorative lamination on both sides	2	sqm	1115.40	2231.00
19.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
19.3.1	With float glass panes of 4.0 mm thickness (weight not less than 10kg/sqm)	2	sqm	1176.80	2354.00
19.3.2	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	2	sqm	1505.25	3011.00
19.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer- in-charge.				
19.4.1	With stainless steel cover plate minimum 1.25 mm thickness	2	each	2823.85	5648.00
19.5	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.				
19.5.1	Upto 5 mm depth and 5 mm width	20	metre	96.75	1935.00
19.6	Extra for applying additional anodic coating AC 25 instead of AC 15 to aluminium extruded sections.				
19.6.1	For fixed portion	5	kg	12.80	64.00
19.6.2	For shutters of doors, windows & ventilators	5	kg	12.80	64.00
19.7	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in-charge complete.				
19.7.1	205 X 19 mm	10	each	344.30	3443.00
19.7.2	255 X 19 mm	10	each	387.00	3870.00
19.8	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of Engineer-in-Charge.				
19.8.1	Anodized (AC 15 ) aluminium tubular handle bar	2	each	575.75	1152.00
19.9	Providing and fixing Brass 100 mm mortice latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	2	each	528.85	1058.00

19.1	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.				
19.10.1	Anodized (AC 15) aluminium	2	each	89.40	179.00
19.11	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge				
19.11.1	Anodized (AC 15) aluminium	2	each	107.90	216.00
19.12	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	2	kg	638.35	1277.00
19.13	Filling the gap in between aluminium/ stone/ wood frame and adjacent RCC/Brick/ Stone/ wood/ Ceramic/ Gypsum work by providing weather/ structural non sag elastomeric PU sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete, complying to ASTM C920, DIN 18540-F & ISO 11600				
19.13.1	Upto 5 mm depth and 5 mm width	2	metre	148.10	296.00
19.13.2	Upto 10 mm depth and 10 mm width	2	metre	200.95	402.00
	Sub-Total				49791.00
20	<b>WATER PROOFING</b>				
20.1	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 : (a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. (b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with 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.	10	sqm	617.05	6171.00

20.2	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: (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 entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. (d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured.	5	sqm	688.90	3445.00
20.3	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 with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. (d) Finishing the surface with 20 mm thick 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 pattern of 300x300 mm square 3 mm deep. (e) 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				
20.3.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	80	sqm	1684.60	134768.00
20.4	Grading roof for water proofing treatment with				
20.4.1	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	2	cum	8042.30	16085.00

20.5	Providing and mixing integral crystalline admixture for water proofing treatment to RCC structures like basement raft, retaining walls, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc. at the time of transporting of concrete into the drum of the ready-mix truck, using integral crystalline admixture @0.80% (minimum) to the weight of cement content per cubic meter of concrete) or higher as recommended by the manufacturer's specification in reinforced cement concrete at site of work. The material shall meet the requirements as specified in ACI- 212-3R-2010 i.e. by reducing permeability of concrete by more than 90%, compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure. The crystalline admixture shall be capable of self- healing of cracks up to a width of 0.50 mm. The work shall be carried out all complete as per specification and the direction of the Engineer- in-charge. The product performance shall carry guarantee for 10 years against any leakage.	2	kg	388.00	776.00
20.6	Providing and applying fibre reinforced elastomeric liquid water proofing membrane with resilient acrylic polymers having Sun Reflectivity Index (SRI) of 105 on top of concrete roof in three coats @10.76 litre/ 10 sqm. One coat of self-priming of elastomeric waterproofing liquid (dilution with water in the ratio of 3:1) and two coats of undiluted elastomeric waterproofing liquid (dry film thickness of complete application/system not less than 500 microns). The operation shall be carried out after scrapping and properly cleaning the surface to remove loose particles with wire brushes, complete in all respect as per the direction of Engineer- in-Charge.	500	sqm	563.10	281550.00
	Sub-Total				442795.00
21	CONSERVATION OF HERITAGE BUILDINGS				
21.1	Providing and applying antifungal wash treatment using 3% solution of sodium pentachlorophenate, of reputed brand and manufacturer, on cleaned sand stone surface at desired locations as per direction of Engineer-in-charge (The rate is inclusive of all materials & labours involved except scaffolding).	20	sqm	77.90	1558.00
	Sub-Total				1558.00
22	NEW TECHNOLOGIES AND MATERIALS				
22.1	Chipping of unsound/weak concrete material from slabs, beams, columns etc. with manual Chisel and/ or by standard power driven percussion type or of approved make including tapering of all edges, making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts all complete as per direction of Engineer-In-Charge				
22.1.1	50 mm average thickness	2	sqm	256.35	513.00
22.1.2	25 mm average thickness	2	sqm	126.75	254.00

22.2	Cleaning of reinforcement from rust from the reinforcing bars to give it a total rust free steel surface by using alkaline chemical rust remover of approved make with paint brush and removing loose particles after 24 hours of its application with wire brush and thoroughly washing with water and allowing it to dry, all complete as per direction of Engineer-In-Charge.				
22.2.1	Bars upto 12 mm diameter	6	metre	8.25	50.00
22.3	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer- In-charge complete in all respect.				
22.3.1	SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer	6	sqm	141.20	847.00
22.3.2	Epoxy bonding adhesive having coverage 2.20 sqm/kg of approved make	4	sqm	285.20	1141.00
22.4	Providing, mixing and applying SBR polymer (of approved make) modified Cement mortar in proportion of 1:4 (1 cement: 4 graded coarse sand with polymer minimum 2% by wt. of cement used) as per specifications and directions of Engineer-in-charge. Note: Measurement and payment: The pre-measurement of thickness shall be done just after the surface preparation is completed and Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument and/or the 75 mm size cube crushing strength at the end of 28 days to be not less than 30 N/Sqmm2).				
22.4.1	12 mm average thickness.	5	sqm	388.65	1943.00
22.4.2	25 mm average thickness in 2 layers.	6	sqm	587.35	3524.00
22.5	Providing and injecting approved grout in proportion recommended by the manufacturer into cracks/honey-comb area of concrete/masonry by suitable gun/pump at required pressure including cutting of nipples after curing etc. complete as per directions of Engineer-in-Charge. (The payment shall be made on the basis of actual weight of approved grout injected.)				
22.5.1	Stirrer mixed Acrylic Polymer of approved make @ 2% of weight of cement used) modified Cement slurry made with non shrink compound in concrete/RCC work	4	kg	119.30	477.00
22.5.2	Stirrer mixed SBR Polymer (of approved make) modified Cement slurry made with Shrinkage Compensating Cement in concrete/RCC work.	2	kg	124.00	248.00
22.5.3	Epoxy injection grout in concrete/RCC work of approved make	2	kg	553.40	1107.00
22.6	Providing, erecting, maintaining and removing temporary protective screens made out of specified fabric with all necessary fixing arrangement to ensure that it remains in position for the work duration as required by the Engineer-in-charge.				
22.6.1	Wooven PVC cloth	2	sqm	54.25	109.00

22.7	Providing and inserting 12 mm dia galvanised steel injection nipple in honey comb area and along crack line including drilling of holes of required diametre (20 mm to 30 mm) up to depth from 30 mm to 80 mm at required spacing and making the hole & crack dust free by blowing compressed air, sealing the distance between injection nipple with adhesive chemical of approved make and allow it to cure complete as per direction of Engineer- In-Charge.	2	each	236.90	474.00
22.8	Providing and fixing hard drawn steel wire fabric of size 75 x25 mm mesh or other suitable size wire mesh to be fixed & firmly anchored to the concrete surface by means of "L" shaped mild steel shear key welded with existing reinforcement including the cost of materials, labour, tool & plants as approved by Engineer-in-charge.	1	sqm	902.55	903.00
	Sub-Total				11590.00
23	Minor Civil Maintenance Work				
23.1	"Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :& 1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources: 10 graded brick aggregate 40 mm nominal size derived from natural sources)	7	Cum	6279.25	43955.00
23.2	"P/F C.P brass towel rod complete with two C.P.brass brackets fixed to wooden cleats with C.P. brass screws of approved quality size of 600 x 20 mm.	10	Each	739.77	7398.00
23.3	"Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : (a) 15mm nominal bore.	5	Each	697.09	3485.00
23.4	"Providing and fixing C.P. grating with or without hole for waste pipe for floor/ nahani trap 125 mm dia. weight not less than 40 grams.	20	Each	92.47	1849.00
23.5	"Cutting rubbing and polishing of old mosaic flooring of dado for rubbing and removal of rubbish i/c one coat of cement slurry for final rubbing and polishing.	25	Sqm	100.00	2500.00
23.6	"Providing and fixing C.P flange for C.P bib cock/C.P angle stop cock.	30	Each	18.02	541.00
23.7	"Providing and fixing C.P Brass shower rose 15 mm or 20 mm inlet with shower arm (a) 75 mm dia fancy type.	10	Each	782.45	7825.00
23.8	"Providing and fixing C.P. waste 32 mm dia of make L&K for wash basin / sink.	15	Each	327.21	4908.00
23.9	"Providing and fixing ISI marked flush door shutter non decorative type, core of block board construction with frame of first class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 35 mm thick including ISI marked M.S butt hinges with necessary screw complete."	36	Sqm	3086.95	111130.00

23.1	"Providing and fixing white vitreous china oval type wash basin of size 550 x 480 with 15mm C.P brass pillar tap, 32mm C.P brass waste of standard pattern.	1	Each	5389.50	5390.00
23.11	"Providing and Fixing M.S handle for steel window.	10	Each	188.46	1885.00
23.12	Providing and fixing fly proof stainless steel grade 304 wire gauge, to Aluminum windows and Aluminum clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm, with all necessary complete.	5	SQM	841.00	4205.00
23.13	"Providing and fixing C.P soap dish etc. complete.	2	Each	625.87	1252.00
23.14	Providing & fixing C.P Coat Pin hanger of approved make with necessary screws etc. complete	1	Each	327.21	327.00
23.15	"Providing and fixing C.P connection for gyser (15 x 450) mm with nut and washer.	10	Each	462.36	4624.00
23.16	"Providing and fixing C.P waste 40 mm nominal bore for china sink or wash basin (L&K) make.	8	Each	654.41	5235.00
23.17	Providing and fixing C.P basin mixer of 15 mm nominal bore (L&K) make etc. complete	12	Each	3343.19	40118.00
23.18	"Providing and fixing C.P. hand spray (heath faucet) jaquar make or equivalent with push button control and flexible hose connection with C.P hook complete in all respects. "	30	Each	889.15	26675.00
23.19	Providing and fixing 15 mm nominal bore C.P brass two way bib cock of L&K or approved equivalent make etc. complete	5	Each	1813.86	9069.00
23.2	Providing and fixing 15 mm nominal bore C.P. swan neck pillar cock of L&K or approved equivalent make.	5	Each	1806.75	9034.00
23.21	"Providing and fixing 15 mm nominal bore two way angle valve of make L&K or approved equivalent make. "	5	Each	1714.28	8571.00
23.22	""Providing and fixing aluminum door seal in door i/c necessary screw etc complete. "" "	20	Metre	213.40	4268.00
23.23	Supply and fixing of hand shower in mixture unit.	20	Each	1195.00	23900.00
23.24	Providing and fixing CPVC ball valve 32 mm dia i/c all fittings complete of Approved make. For one piece only	10	Each	853.60	8536.00
23.25	Providing and fixing CPVC ball valve 25 mm dia i/c all fittings complete of Approved make. For one piece only	8	Each	426.80	3414.00

23.26	Brick work with available common burnt clay FPS (non modular) bricks of class designation 7.5 in foundation and plinth in: (with available bricks) Cement mortar 1:6 (1 cement :6 coarse sand)	4	Cum	4148.55	16594.00
23.27	"Providing and fixing C.P. pillar cock 15 mm nominal bore (L&K make) for wash basin.	4	Each	1052.75	4211.00
23.28	"Providing and Fixing white vitreous china flat back half stall urinal of size 580x 380 x 350 mm with fittings standard size, C.P. Brass domical waste 32 mm , C.P. Brass spreaders 15 mm , C.P. Connection pipe with Brass union & clamp and C.P Brass Push Cock 15 mm including cutting & making good the wall.	1	Each	10332.30	10332.00
23.29	Brick on edge flooring with old available bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks: 1:6 (1cement : 6 coarse sand)	24	Sqm	634.40	15226.00
23.3	Half brick masonry with old available common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level. Cement mortar 1:4 (1 cement :4 coarse sand)	3.5	Sqm	802.15	2808.00
23.31	"Providing and fixing C.P waste 50 mm nominal bore for china sink or wash basin (L&K) make.	4	Each	853.59	3414.00
23.32	"P/F 1.50mm thick homogeneous polyvinyl chloride sheet/tile in flooring and skirting in approved pattern on a smooth and damp proof base using rubber base adhesive of approved quality and manufacturer like Dualpo S-758 , Fevicol SR 998 or equivalent including rolling with light wooden roller weight about 5 kg. All complete as directed by Engineer -in -charge in approved colour and shade.	5	Sqm	754.00	3770.00
23.33	Providing and fixing anti-cocroach grating 125 mm dia of approved equivalent make.	10	Each	433.91	4339.00
23.34	"Providing and fixing vertical venetian blinds vista make dust guard (Classic/Select) or equivalent. 100 mm wide on windows. "	4	Sqm	2710.00	10840.00
23.35	Distemping with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification. Two or more coats on new work	2000	sqm	125.85	251700.00
23.36	Supply of coarse sand.	15	Cum	2631.88	39478.00
	Sub-Total				702806.00
	Total				6141682.00
	Modified Estimated Cost after using correction factor on DSR 2023 on account of GST @ 0.973 * 6141682 = 5975857				5975857.00
	Say				5975857.00