

 <p>IITI</p>	<p>भारतीय प्रौद्योगिकी संस्थान इंदौर</p> <p>Indian Institute Of Technology Indore</p>	<p>Infrastructure Development Office</p>
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**Tender No. IITI/IDO/PR/AMC/MOW/2020-21/13**

On behalf of the Indian Institute of Technology Indore, Tenders are invited for

<p><b>A.</b></p>	<p><b>LAST DATE for Submission of Tender</b></p>	<p>: “Annual maintenance contract for civil maintenance and repairing work at IIT Indore “</p> <p><b>23-07-2020 before 11.00 AM</b></p>
<p><b>Date &amp; Time Of Opening Of Tender</b></p>	<p>: <b>24-07-2020 at 11.30 AM</b></p>	
<p><b>Submission of Tender</b></p>	<p>: Both Technical Bid &amp; Price/ financial Bid should be in uploaded by online mode only on web site <a href="http://iiti.ac.in/tender_estate">http://iiti.ac.in/tender_estate</a> and <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>.</p> <p>IITI Right is reserved to ignore any tender which fails to comply with the above instructions. <b>Tender should be submitted only by online mode before 11.00 AM on due date 22-07-2020.</b></p> <p><b>Tender submitted in other format or by hard copy and submitted late will be summarily rejected.</b></p>	

**Guidelines, terms and conditions of tender :**

1.	<b>Earnest Money Deposit (EMD)</b>	:	<ul style="list-style-type: none"> <li>➤ EMD of ₹ 1, 91,000 (₹ One Lakh Ninety One Thousand only) must be submitted on line mode only.</li> <li>➤ <b>EMD is to be paid only online mode through below mentioned link:</b> <a href="https://www.onlinesbi.com/sbicollect/icollecthome.htm">https://www.onlinesbi.com/sbicollect/icollecthome.htm</a></li> <li><b>Receipt of online payment of EMD is to be attached with the technical bid documents.</b></li> <li>➤ If the EMD not submitted else the bid will be rejected due to non-submission of EMD. The applications received along with the required EMD shall be evaluated for eligibility to take part in the tendering process by a two stage system.</li> <li>➤ Tender for this work shall remain open for acceptance for a period of 90 days from the date of opening of the Tender.</li> <li>➤ If lowest tenderer withdraws his tender or makes any modification in the terms and conditions of the tender which are not acceptable to the Institute, then IITI, shall without prejudice to any other right or remedy, be at liberty to forfeit 100 % of the said earnest money(EMD).</li> <li>➤ The Earnest Money of the successful Tenderer will be returned on receipt of performance bank guarantee (PBG, 5% of tender value with a validity of 2 years from date of work order/ date of commencement of work).</li> <li>➤ EMD and PBG will be forfeited, if the agency fails to start the work or fails to submit performance bank guarantee</li> <li>➤ EMD will carry no interest</li> </ul>
2.	<b>Technical Bid</b>	:	<ul style="list-style-type: none"> <li>➤ The Technical bid should be submitted ion line as per the proforma given as per <b>Annexure A</b></li> <li>➤ The technical bid/s of including relevant documents as mentioned below must be uploaded with financial Bid. <ol style="list-style-type: none"> <li>1. Letter of transmittal in the enclosed format.</li> <li>2. Details regarding experience, and financial standing.</li> </ol> <p>The following documents in support of experience and financial standing shall be submitted with the application for eligibility.</p> <ol style="list-style-type: none"> <li>a. Financial information as per format – ‘A’ enclosed</li> <li>b. Details of similar works carried out in the past in form – ‘B’ enclosed</li> <li>c. Performance report of works referred to in form ‘B’ as per Form – ‘C’ enclosed</li> </ol> </li> <li>➤ All technical documents must be uploaded including page-wise heading as <b>“Technical Bid”</b> and page no. in all pages with seal and signature of authorized signatory. The total no. of pages should be mentioned at the last page of the documents.</li> </ul>

3.	Price Bid	:	<ul style="list-style-type: none"> <li>➤ The details of Bill of Quantities/ financial bid is given in Annexure B</li> <li>➤ Price bid should be uploaded online in the prescribed proforma as per Annexure B.</li> <li>➤ The Price bid should add submitted page-wise heading as “Price Bid” and page no. in all pages with seal and signature of authorized signatory. The total no. of pages should be mentioned at the last page of the documents.</li> <li>➤ In the case of item Rate Tenders, only rates quoted shall be considered. Rates quoted by the tenderer in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved, be taken as correct. If the amount of an item is not worked out by the tenderer or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the tenderer in figures and in words tally but the amount is not worked out correctly, the rates quoted by the tenderer, will, unless otherwise proved, be taken as correct and not the amount. In event no rate has been quoted for any item(s), leaving space both in figure(s), words(s) and amount blank, it will be presumed that the tenderer has included the cost of this / these item(s) in other items and rate for such items(s) will be considered as zero and work will be required to be executed accordingly.</li> <li>➤ All rates shall be quoted on the tender form. The amount for each item should be worked out and the requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word ‘Rs’ should be written before the figure of ‘Rupees’ and the word ‘P’ after the decimal figures, e.g. ‘Rs 2.15P’ and in case of words the word, “Rupees” should precede and the word ‘Paise’ should be written at the end. Unless the rate is in whole. Rupees and followed by the word ‘only’, it should invariably be up to two decimal places. While quoting each rate in schedule of tender, the word ‘only’ should be written closely following the rate and it should not be written in the next line.</li> <li>➤ The price bid of only those tenderers who qualify as per the eligibility criteria will be opened on a date which will be intimated later.  Stage I – The applications will be evaluated for conformity to the eligibility criteria.  Stage II - All those applications found eligible in stage I will be qualified for opening of price bids.  Even though an applicant may satisfy the specified criteria, he would be liable to disqualification if he has: <ol style="list-style-type: none"> <li>a. Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the application for eligibility.</li> <li>b. Record of poor performance such as, slow progress of work, abandoning of work, not properly completing the contract, or financial failures/ weaknesses etc.</li> </ol> </li> </ul>
4.	Tender document fee	:	<ul style="list-style-type: none"> <li>➤ No separate tender documents will be issued by us. The same can be seen from our institute <a href="http://iiti.ac.in/tender_estate">http://iiti.ac.in/tender_estate</a> and <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>.</li> <li>➤ Corrigendum/Addendum/ Date extension, if any will be published only in the above mentioned website.  Bidders are requested to regularly visit our website to keep them updated.</li> </ul>

5.	<b>Issue of material by IITI</b>	:	➤ No material shall be issued to the tenderer by IIT Indore.
6.	<b>Extra schedules for specific requirements / documents for the work, if any</b>	:	➤ No extra schedules for specific requirements / documents for the work, if any
7.	<b>Schedule of tools and plants proposed to be hired to the tenderer</b>	:	➤ No scaffolding, tools and plants shall be hired to the contractor by IIT Indore.
8.	<b>Price Escalation</b>	:	➤ No price escalation will be paid
9.	<b>Performance Bank Guarantee</b>	:	<ul style="list-style-type: none"> <li>➤ 5% of tender value of quoted cost with a validity up to completion of work</li> <li>➤ It shall be submitted within 07 days from the data of issue of Letter of Acceptance</li> <li>➤ Performance Bank Guarantee will be forfeited under following conditions <ul style="list-style-type: none"> <li>a. If the agency fails to complete the not attend the complaints/ non responsive and damaged the institute property.</li> <li>b. If the defective) damaged part is required to replace and if supply and installation is unsatisfactory and not as per specifications</li> <li>c. If service and maintenance is found to be unsatisfactory</li> <li>d. If violation of any other terms and conditions of the contract</li> </ul> </li> </ul>
10.	<b>Duration</b>	:	➤ The time duration to complete the work is 02 months
11.	<b>Comprehensive AMC &amp; Warranty period</b>	:	➤ One years of comprehensive AMC will start from the date of work order. . During the AMC period, Technicians should be available as specified in the BOQ for which nothing extra will be paid.
12.	<b>Levy of Compensation</b>	:	Compensation will be levied under following circumstances
13.	<b>Payment terms</b>	:	➤ Payments will be made on RA Bill basis
14.	<b>Specifications</b>		<ul style="list-style-type: none"> <li>➤ As per the relevant Indian Standards</li> <li>➤ As per the relevant International/ national Standards</li> <li>➤ As per the best practice followed in the industry</li> </ul>

15.	<p><b>Preparation of Tender:</b></p> <p>a) The offer/bids should be uploaded in two bid system i.e. Technical Bid and Price Bid in online mode only.</p> <p>b) The Technical bid will be first opened and evaluated. In the primary screening, technical bid of only those who satisfy the <b>Vendor Eligibility Criteria as stipulated in Annexure A</b> will be evaluated.</p> <p>c) The EMD &amp; Price bid of only those bidders whose technical bid is found to be technically adequate by the Committee will be opened.</p> <p>d) The successful bidder will be selected based on the lowest quoted amount(L1)</p>
16.	<p><b>Signing of Tender:</b></p> <p>The Tender is liable to be rejected if complete information is not given therein or if the particulars and date (if any) asked for in the schedule to the Tender are not fully filled in or not duly signed/authenticated. Specific attention is drawn to the special conditions enclosed herewith.</p>
17.	<p><b>Period for which the offer will remain open:</b></p> <p>(i) Firms tendering should note that their offers should remain open for acceptance is 90 days from date of opening technical bid of tender</p> <p>(ii) Quotations qualified by such vague and indefinite expressions such as 'subject to immediate acceptance', 'subject to prior sale' will not be considered.</p> <p>(iii) The Tender shall remain open for acceptance/validity till <b>90 days from the date of opening of the tender</b></p>
18.	<p><b>Opening of Tenders:</b></p> <p>Online mode.</p>
19.	<p><b>Prices &amp; GST:</b></p> <p>The prices quoted must be net per unit as per the Bill of Quantity mentioned in <b>Annexure B</b> and must include all packing, delivery and installation charges, insurances, lead, lift to all levels, floors, scaffolding and other statutory levies. <b>The prices quoted by the Tenderer should be inclusive of GST and other statutory levies</b> (and should be clearly stated to be so) which will be paid by the Purchaser/if legally livable at the rate ruling on the date of supply as specified in the Acceptance of Tender. If at the time of comparison of your offer without taxes etc. is happen to be lowest, you are bound to supply as per the offered rate, i.e. without taxes etc.</p> <p>The tenderer shall be careful while quoting for tender. No price revision, changes in the specification already given or changes in the terms and conditions etc. will be entertained after opening of the bids.</p>

20.	<p><b>Communication of Acceptance:</b></p> <p>Acceptance will be communicated by Post, and the Company's acceptance should be communicated to us formally in writing.</p>
21.	<p>In the event of the date of opening of tender being declared a closed holiday for the Indian Institute of Technology Indore the due date for opening will be following working day.</p>
22.	<p>Post/FAX/Email/Telegram quotations will not be accepted.</p>
23.	<p><b>Tender should be submitted in online mode only.</b> Quotes given by the tenderers in their own format/letter heads will not be considered at all. The tender document shall be uploaded without any corrections and modifications. If any corrections / modifications found at any stage and even after issue of work orders, the tender will be cancelled and EMD / Performance Bank Guarantee of the lowest bidder will be forfeited.</p>
24.	<p><b>Warranty: as per standards (for supplied material).</b></p>
25.	<p>In terms of Rule 173 (iv) of General Financial Rules, 2017 the bidder shall be at liberty to question the bidding conditions, bidding process and/or rejection of its bid.</p>
26.	<p><b>CONDITIONS OF CONTRACT:</b></p> <p>Printed or cyclostyled or such terms and conditions of the tenderer, not appearing in the body of the tender will not be considered as forming part of the tender. Tenderer should quote on the basis of the conditions referred to in the invitation to tender and tender papers.</p>
27.	<p><b>PRICE:</b></p> <p>i) Prices must be in Indian Rupees.</p> <p>ii) The unit prices should be for the same unit as indicated in the Annexure B of the tender document and not for any other unit.</p>
28.	<p><b>INSURANCE:</b> The rate quoted in the price bid shall include Workmen insurance. It should be valid till completion of AMC period.</p>

29	<p><b>REPORTS &amp; REGISTERS TO BE MAINTAINED</b></p> <ul style="list-style-type: none"> <li>➤ Necessary registers and reports like water quality test reports, Inventory of equipment / consumables, complaint register, attendance register for technicians, preventive maintenance register, check lists, Daily / weekly /, material issue / stock register, invoices and labour records shall be maintained by the contractor during the AMC period.</li> <li>➤ A minimum of 10 samples shall be collected and tested on monthly basis in conformity to relevant BIS.</li> <li>➤ A copy of the above registers / reports shall be furnished to IIT Indore on daily / weekly / monthly basis.</li> </ul>
30.	<p><b>TENDERER SHALL SUBMIT ALONG WITH HIS / HER TENDER:</b></p> <ol style="list-style-type: none"> <li>I. Name and full address of the Banker and their swift code and PAN No.</li> <li>II. Proof of registration with GSTIN etc. in clear terms.</li> </ol>
31.	<p><b>SAFETY CODE &amp; CONTRACT LABOUR REGULATION:</b></p> <ul style="list-style-type: none"> <li>➤ CPWD Safety Code &amp; Contract Labour Regulation shall be followed strictly.</li> </ul>
32.	<p><b>GUARANTEE:</b></p> <p>The tenderer has to declare that the goods sold to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications. Tenderer shall provide minimum guarantee as stipulated in the tender conditions.</p>
33.	<p><b>JURISDICTION:</b></p> <p>For any dispute arising out of this agreement, the legal jurisdiction will be at Indore, Madhya Pradesh only.</p>
34.	<p><b><u>Instructions for filling up the forms A,B,C,D,E &amp; E1 of Annexure A</u></b></p> <ol style="list-style-type: none"> <li>1. Financial Information The applicant should furnish the Annual financial statement for the last 5 years in form – A</li> <li>2. Information about works       <ol style="list-style-type: none"> <li>1. List of all works of similar class successfully completed during the last 7 years in Form –B</li> <li>2. Particulars of completed works and performance of applicant shall be duly authenticated / certified by an officer not below the rank of Executive Engineer in case of Government works or the Project Manager or an equivalent officer in case of non-governmental works separately for each work in Form -C</li> </ol> </li> <li>3. Letter of Transmittal The applicant should submit the letter of transmittal as per the format attached.</li> </ol>

## SALIENT/MANDATORY REQUIREMENTS FOR THE TENDER

- 1 The tenderer is advised to read and examine the tender documents for the work and the set of drawings available with Engineer-in-charge. He should inspect and examine the site and its surroundings by himself before submitting his tender.
- 2 Separate schedule of quantity is included in this tender for civil and electrical items of work. If the tenderer wants to offer any unconditional rebates on their rates, the same should also be offered in the respective components of civil and electrical schedule separately. The contractor shall quote the percentage rates in figures and words accurately so that there is no discrepancy in rates written in figures and words.
- 3 Time allowed for the execution of work is 02 Months.
- 4 The contractor(s) shall submit a detailed program of execution in accordance with the master programme/milestone within ten days from the date of issue of award letter.
- 5 Contractor has to arrange and install field laboratory during the currency of work and nothing extra will be paid on this account.
- 6 Quality of the project is of utmost importance. This shall be adhered to in accordance with the provisions of CPWD specifications and guidelines given in the relevant paras.
- 7 Contractor has to deploy required Plant and machinery on the project. In case the contractor fails to deploy the plant and machinery whenever required and as per the direction of the Engineer-in-charge, he (Engineer-in-charge) shall be at a liberty to get the same deployed at the risk and cost of the contractor.

- 8 The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Acting Project-In-Charge (Civil)/Executive Engineer may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.
- 9 Temporary Electric connection shall be issued as per request and charges shall be recovered as per actual consumption of units.
- 10 Water will be arrange by contractor at his own sources and not reimbursed by the Institute.
- 11 EPF and ESI, if applicable, will be reimbursed on actual basis after due verification.
- 12 Any item which is not available in the BOQ shall be paid as per CPWD DSR 2018 rates. If it is not available in BOQ and DSR then extra items shall be worked out as actual cost of material and actual cost of labour plus 15% as overhead and profit. The decision of Engineer-In-Charge will be conclusive and final binding on the contractor.
- 13 If BOCW (MP Building & Other Construction Workers Welfare Board), Labour Registration & License, EPF & ESIC Registration not submitted, and then 1st RA Bill will not be payed & cleared till the submission of these documents.
- 14 Certifications like BOCW (MP Building & Other Construction Workers Welfare Board), Labour Registration & License, EPF & ESIC Registration are to be submitted after the issue of Work Order, then only the site will be handed over to you and permission to start the work will be given.

#### QUALITY ASSURANCE OF THE WORK

1. 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.
2. 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.
3. Other Laboratories:
  1. 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.
    - i) 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
    - ii) By the department, if the results confirm to relevant CPWD Specifications / BIS code or specification mentioned elsewhere in the documents.
  2. If the tests, which were to be conducted in the site laboratory are conducted in other laboratories for whatever the reasons, the cost of such tests shall be borne by the contractor.
- C) Sampling of Materials:
  1. 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.
  2. 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.
  3. 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.
  4. The contractor shall procure all the materials at least in advance so that there is sufficient time to testing and approving of the



- materials and clearance of the same before use in work.
5. 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.
  6. 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.

## ADDITIONAL TERMS AND CONDITIONS

- 1 Unless otherwise provided in the Schedule of Quantities/Specifications, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the work and nothing extra shall be payable to him on account of the same. Extra payment for centering/shuttering, if required to be done for heights greater than 3.5 m shall however be admissible at the rates arrived at in accordance with clause 12 of the agreement, if not already specified.
- 2 Other agencies doing works related with this project may also simultaneously execute their works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc. for laying/burying in the work, pipes cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for the other agencies. Nothing extra over the Agreement rates shall be paid for doing these.
- 3 Some restrictions may be imposed by the security staff etc. on the working and for movement of labor, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on account of the same.
- 5.1 The contractor shall fully comply with all legal orders and directions of the Public or local authorities or municipality and abide by their rules and regulations and pay all fees and charges for which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same.
- 5.2 The building work shall be carried out in the manner complying in all respects with the requirements of the relevant bylaws and regulations of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-charge and nothing extra shall be paid on this account.
- 6 If as per local Municipal regulations, huts for labor are not to be erected at the site of work, the contractor shall be required to provide such accommodation at a place as is acceptable to the local body and nothing extra shall be paid on this account.
- 7 The structural and architectural drawings shall at all times be properly co-related before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and Architectural drawings relating to the relevant item, the former shall prevail unless otherwise given in writing by the Engineer-in-charge.
- 8.1 For the purpose of recording measurements and preparing running account bills, the abbreviated nomenclature indicated in the publications Abbreviated Nomenclature of Items of DSR 2016 shall be accepted. The abbreviated nomenclature shall be taken to cover all the materials and operations as per the complete nomenclature of the relevant items in the agreement and relevant specifications.
- 8.2 In case of items for which abbreviated nomenclature is not available in the aforesaid publication and also in case of extra and substituted items for which abbreviated nomenclature are not provided for in the agreement, full nomenclature of item shall be reproduced in the measurement books and bill forms for running account bills.
- 8.3 For the final bill, however, full nomenclature of all the items shall be adopted in preparing abstract in the measurement books and in the bill forms.
- 9 The contractor shall take instructions from the Engineer-in-charge for stacking of materials. No excavated earth or building materials etc. shall be stacked/ collected in areas where other buildings, roads, services, compound walls etc. are to be constructed.
- 10 Any trenching and digging for laying sewer lines/water lines/cables etc. shall be commenced by the contractor only when all men, machinery's and materials have been arranged and closing of the trench(s) thereafter shall be ensured within the least possible time.
- 11 It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
- 12 In case the supply of timber/steel frames/shutters for doors, windows etc. is made by some other agency, the contractor shall make necessary arrangements for their safe custody on the direction of the Engineer-in-charge till the same are fixed in position by him & nothing extra shall be paid on this account.
- 13 The contractor shall maintain in perfect condition, all portions executed till completion of the entire work allotted to him. Where however phased delivery of work is contemplated these provisions shall apply separately to each phase.
- 14 The entire royalty at the prevalent rates shall have to be paid by the contractor on all the boulders, metals, shingle sand etc. collected by him for execution of the work, directly to the Revenue authority or authorized agents of the State Government concerned or the Central Government, as the case may be.
- 15.1 The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by the departments and shall construct suitable godowns, yards at the site of work for storing all materials as to be safe against damage by sun, rain, dampness, fire, theft etc. at his own cost and also employ necessary watch and ward establishment for the purpose, at his own cost. Materials to be charged directly to work and stipulated for issue free of cost shall also be issued to the contractor as soon as those are received at site or at the stipulated place of issue. The provision of this para shall apply equally and fully to those as well.
- 15.2 All materials obtained from the Infrastructure Development Office store or otherwise on receipt shall be checked by the Engineer-in-charge of the work or his representations before use.

- 15.3 Registers for the materials to be issued by the department shall be maintained as required by the Engineer-in-charge and these shall be signed by the contractor or his authorized agent and representative of Engineer-in-charge on each day of transactions.

## SPECIAL CONDITION FOR MATERIAL

1. The contractor shall at his own expense procure and provide all materials excluding cement required for the work.
2. The contractor shall procure all the materials in advance so that there is sufficient time to testing and approving of the materials and clearance of the same before use in work.
3. 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.
4. The contractor shall also employ necessary watch and ward establishment for the safe custody of materials at his own cost.

## ADDITIONAL CONDITIONS FOR CIVIL WORKS

1. a) The contractor (s) shall inspect the site of work before tendering and acquaint himself with the site conditions and no claim on this account shall be entertained by the department.
- b) The contractor (s) shall get him acquainted with nature and extent of the work and satisfy him about the availability of materials from kiln or approved quarries for collection and conveyance of materials required for construction.
2. The contractor (s) shall study the soil investigation report for the site, available in the office of the Engineer-in-Charge and satisfy him about complete characteristics of soil and other parameters of site. However, no claim on the alleged inadequacy or incorrectness of the soil data supplied by the department shall be entertained.
3. The tenderer shall see the approaches to the site. In case any approach from main road is required by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost. No payment shall be made on this account.
4. The contractor (s) shall give to the Municipality, Police and other authorities all necessary notices etc. that may be required by law and obtain all requisite Licenses for temporary obstructions, enclosures etc. and pay all fee, taxes and charges which may be leviable on account of these operations in executing the contract. He shall make good any damage to the adjoining property whether public or private and shall supply and maintain light and other illumination on for cautioning the public at night.
5. The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night speed limit board 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.
6. 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 equipment shall be got calibrated in advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.
7. Contractor shall provide permanent bench marks and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings
8. On completion of work, the contractor shall submit at his own cost four prints of "as built" drawings to the Engineer-in-Charge within 30 days of completion of work. These drawings shall have the following information:
  - a) Run of all piping and their diameters including soil waste pipes & vertical stacks.
  - b) Ground and invert levels of all drainage pipes together with locations of all manholes and connections up to outfall.
  - c) Run of all water supply lines with diameters, location of control valves, access panels etc.If above said drawings are not submitted by the contractor with in the above specified time then final bill will not be paid and Security Deposit shall not be released.
9. Any cement slurry added over base surface for continuation of concreting for better bond is deemed to have been built in the items and nothing extra shall be payable for extra cement considered in consumption on this account.
10. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by department.
11. The works shall be carried out in accordance with the Architectural drawings and structural drawings, to be issued from time to time by the Engineer-in-Charge. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work and satisfy himself that the information available thereof is complete and unambiguous. The discrepancy, if any shall be brought to the notice of the Engineer-in-Charge before execution of the work. The contractor alone shall be responsible for any loss or damage executing by the commencement of work on the basis of any erroneous and or incomplete information.
12. The contractor shall take all precautions to avoid accidents by, exhibiting caution boards day and night, speed limit boards, red flags, red light and providing necessary barriers and other measures required from time to time. The contractor shall be responsible for all damages and accidents due to negligence on his part.

13. Other agencies will also simultaneously execute and install the works of electrification, air conditioning, lifts, fire-fighting etc. for this work and the contractor shall provide necessary facilities for the same. The contractor shall leave such recesses, holes openings etc. as may be required for the electric, air-conditioning and other related works (for which inserts, sleeves, brackets, conduits base pinion, clamps etc. shall be supplied free of cost by the department unless otherwise specifically mentioned) and the contractor shall fix the same at time of casting of concrete, stone work & brick work, if required and nothing extra shall be payable on this account.
14. All materials obtained from Govt. stores or otherwise shall be get checked by the Engineer-in-Charge or his any authorized supervisor staff on receipt of the same at site before use.
15. 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.
16. All Architectural drawings given in the tender other than those indicated in nomenclature of items are only indicative of the nature of the work and materials/fixings involved unless and otherwise specifically mentioned. However, the work shall be executed in accordance with the drawings duly approved by the Engineer-in-Charge.
17. If the work is carried out in more than one shift or during night no claim on these accounts shall be entertained.
18. Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services encountered in the course of the execution of work shall be protected against the damage by the contractor at his own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.
19. 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.
20. The day to day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the standard proforma by the Jr. Engineer-in-Charge of work and which shall be duly signed by the contractor or his authorized representative.
21. The contractor shall render all help and assistance in documenting the total sequence of this project by way of photography, slides, audio-video recording etc. Nothing extra shall be payable to the contractor on this account. However cost of photographs, slides, audio/videography etc. shall be borne by the department.
22. The contractor shall be fully responsible for the safe custody of materials brought by him issued to him even though the materials are under double lock key system.
23. The rate of items of flooring is inclusive of providing sunken flooring at bathrooms, kitchen etc. and nothing extra on this accounts is admissible.
24. No payment shall be made to the contractor for any damage caused by rain, snowfall; floods, earthquake or any other natural causes whatsoever during execution of work. The damages of the work will be made good by the contractor at his own cost and no claim on this account shall be entertained.
25. For construction 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 premises.
26. The Plinth Level of Building is to be kept as per Architectural drawings. All the items of works such as PCC, RCC, Brickwork and shuttering etc. in foundation upto this plinth level will be measured and paid as the work done upto plinth level. Nothing extra due to higher plinth will be paid and contractor's rates quoted for all these items shall, therefore, be deemed to cater for extra height of plinth.
27. 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.
28. Being an individual work contract no other tax is payable other than GST. The GST shall be paid extra as per applicable.

## GENERAL SPECIFICATION FOR CIVIL WORKS

1. Except for the items, for which particular specifications are given or where it is specifically mentioned otherwise in the description of items in the schedule of quantities the work shall generally be carried out in accordance with the "CPWD specifications 2009 Vol. 1 and Vol. 2 (with upto date corrections slips). (Hereinafter to be referred to as CPWD specifications) and instructions of Engineer-in-Charge. Wherever CPWD specifications are silent the latest IS codes/specification shall be followed.
2. The order of preference in case of any discrepancy as indicated in condition No. 8.1 under "Conditions of Contract" give in standard CPWD contract form may be read as the following:
  - i) Nomenclature of items as per schedule of quantities.
  - ii) Particular specification and special condition, if any.

- iii) CPWD specifications.
- iv) Architectural Drawings
- v) Indian standard specifications of B.I.S.
- vi) Sound Engineering Practice

A reference made to any Indian Standard specification in these documents, shall imply to the latest version of that standard, including such revision/amendments as issued by the bureau of Indian standard up to last date of receipt of tenders. The contractor shall keep at his own cost all such publications of relevant Indian standard applicable to the work at site.

- 3. The proposed building is a prestigious project 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. Many items like stone masonry & stone cladding works, stone flooring, and structural glazing, PVDF coating aluminum composite panel and other specialized flooring work, Wood work will specially require engagement of skilled workers having experience particularly in execution of such items.
- 4. Samples of all materials and fittings to be used in the work in respect of brand manufacturer and quality shall be got approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work. Articles bearing BIS certifications mark shall only be used unless no manufacturer has got BIS 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.
- 5. The rates for all items of work shall unless clearly specialized otherwise include cost of all labour, material tools and plants and other inputs involved in the execution of the item.
- 6. The contractor (s) shall quote all-inclusive rates against the items in the schedule of quantities and nothing extra shall be payable for any of the conditions and specifications mentioned. In the tender documents unless specifically specified otherwise.
- 7. Unless otherwise specified in the schedule of quantities the rates for all items shall be considered as inclusive of pumping/baling out water, if necessary, for which no extra payment shall be made. Those conditions shall be considered to include water from any source such as inflow of flood, surface and sub-soil water etc. and shall apply to the execution in any season.
- 8. The rate for all items in which the use of cement is involved is inclusive of charges for curing.
- 9. The foundation trenches shall be kept free from water while works below ground level are in progress.
- 10. The work shall be executed and measured as per metric dimensions given in the schedule of quantities, drawings etc. (FPS units wherever indicated are for guidelines only).

## **ACKNOWLEDGEMENT**

It is hereby acknowledged that we have gone through all the points listed under “Special Conditions” outlined above, and those in the accompanying note on “**Guidelines, terms and conditions of tender**” and we agree to abide by them under the penalty of permanent disqualification for Tender participation and for related penal actions for non-abidance of the conditions.

**SIGNATURE OF TENDERER ALONG WITH SEAL  
OF THE COMPANY WITH DATE**

**Annexure A**  
**ELIGIBILITYDOCUMENT**  
**TECHNICALBID**

**ELIGIBILITYCRITERIA**

1. The applicant should have successfully completed works as follows during the last 5 years ending 31-3-2020.

a. Three similar works each costing not less than Rs. 38.12 Lakhs

Or

b. Two similar completed works each costing not less than Rs. 57.18 Lakhs

Or

c. One similar completed work costing not less than Rs. 76.24 Lakhs

**“Cost of work”** for this clause shall mean completed cost of work as mentioned in the final bill under single contract including cost of materials, if any, supplied by clients. However the cost of materials issued free of cost shall not be considered for calculating the cost of work. **“Similar work”** for this clause means **“Annual maintenance contract for civil maintenance and repairing work”** The following documentary proof shall be uploaded along with technical bid.

1. Completion certificates in case of works carried out for Government department

The certificate should have been issued by an officer not below the rank of Executive Engineer

**LETTER OF TRANSMITTAL**

**(To be duly filled, signed and submitted in the Technical Bid by the tenderer)**

To

THE Acting PIC,(Civil)

INDIAN INSTITUTE OF TECHNOLOGY Indore

Simrol, Indore Khandwa road,

Teh - Mhow, Dist. - Indore.(MP).

**Sub:** Annual maintenance contract for civil maintenance and repairing work at IIT Indore – Reg.

Sir,

Having examined the details given in notice inviting qualification application and tender and the qualification documents for the above work, I/ We hereby submit the application for eligibility and the tender (financial bid) for the work duly filled in.

1. I / We here by certify that all the statement made and information supplied in the enclosed forms and accompanying statements are true and correct.
2. I / We have furnished all information and details necessary for deciding our eligibility to be qualified for taking part in the tendering process for the work. We have no further information to supply.
3. I / We submit the following certificates in support of our suitability, technical knowhow and capability for having successfully completed following works.

Name of work Certificate from

4. I/We certify that that the tender documents submitted is the exact replica of the document published by the IIT and no alterations and additions have been made by me / us in the e-tender document.
5. I am / we are aware that the financial bid submitted by me/us will not be opened if I / We do not become eligible after evaluation of my/our application for eligibility.
6. 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 IIT Indore contracts in future forever. Also, if such a violation comes to the notice of Department, IIT Indore shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

Seal of the Applicant

Date of submission

Signature(s) of the applicants

**FINANCIAL INFORMATION**

**(To be duly filled, signed and submitted/ uploaded along with technical bid by the tenderer)**

**I Financial Analysis –**

Details to be furnished duly supported by figures in Balance Sheet / Profit and Loss Account for the last Five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income-Tax Department (Copies to be uploaded separately).

SI No	Details	Year ending 31 <sup>st</sup> March of				
1	Gross annual turnover in supply and installation of water purifiers including its sales & service					
2	Profit (+) / Loss (-)					

II. Financial arrangement for carrying out the proposed work.  
(to be enclosed separately)

III. Income Tax PAN, GST details (to be enclosed separately)

SIGNATURE OF APPLICANT (S)

**SIGNATURE OF CHARTERED ACCOUNTANT WITH SEAL**



**FORM B**

**To be duly filled, signed and uploaded along with Annexure A by the**

**DETAILS OF ALL WORKS OF SIMILAR NATURE COMPLETED DURING THE LAST FIVE YEARS  
ENDING BY 31<sup>st</sup> MARCH 2020.**

SL NO	Name of work/project & location	Owner or sponsoring organizations	Agreement No	Scope of work *	Cost of work in Lakhs	Date of commencement as per contract	Stipulated Date of completion	Actual date of completion	Litigation/ Arbitration pending / In progress with details **	Name and address/ Tel No of Officer to whom reference	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

\* indicate Number, Type and Capacity of drinking water purifiers.

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

Signature of Applicant(s)

**In case of works carried out for private persons / Organizations copies TDS certificate along with copy of performance order and work order / Agreement should be enclosed. Private works without TDS certificates shall not be considered for valuation.**

**(To be duly filled, signed and submitted along with Annexure A by the tenderer)**

**PERFORMANCE REPORT FOR WORKS REFERRED TO IN FORM 'B'**

Name of the work / Project & Location.

1. Scope of work.
2. Value of work done
3. Date of start
4. Date of completion
5. Performance report based on  
Quality of Work, Time Management,  
And Resource fullness : Very good / Good / Fair /Poor

DATE

**EXECUTIVEENGINEER/**

**PROJECT MANAGEROR**

**EQUIVALENT**

(\*Signature and seal of the client / owner to  
Whom the work executed)

\* Certified by self will not be accepted

S. No.	Material	List of Preferred Makes
1	(i) Ordinary Portland Cement / Portland Pozzolona Cement / Sulphate Resisting Portland cement (ii) White Cement	ACC, Ultratech, Ambuja Cement, J.K.Cement, Century Cement, Shree Cement, Jaypee Cement, Vikram Cement. Birla White, J.K.White
2	Reinforcement Steel TMT bars Fe-500D	SAIL, Tata Steel, Rastriya Ispat Nigam Ltd (RINL), JSW Steel Ltd., Jindal Steel & Power Ltd.
3	Water Proofing Compounds, Admixtures, Plasticizer, Super Plasticizer, Curing Compounds.	Fosroc, ROFF/Dr.Fixit (Pidilite Industries), CICO, Sika, BASF, Ardex Endura (Bal Endura)
4	Integral Water Proofing compound with cement (For Plaster & Mortar)	Fosroc :Conplast 421 Dr.Fixit : L.W+ Sika :Sikacin Asian Paints : Smart Case Vitalia& equivalent product of BASF, CICO, Ardex Endura
5	Water Proofing for bathroom / toilet / balcony & other wet areas	Fosroc : Brush Bond Dr.Fixit : Pidifine 2K Sika :Nito Bond Asian Paints : Damp Block 2 K & equivalent product of BASF, CICO, Ardex Endura
6	Crystalline water proofing compound	Fosroc :Fosroc Crystalline Dr.Fixit : Dr.Fixit Crystalline Sika : Sika Crystalline Asian Paints : Crystalline Quarty& equivalent product of BASF, CICO, Ardex Endura, Pentron
7	Grouts, Tile Adhesive	Latecrete, Kerokoal, BASF, Ardex Endura, Ferrous Crete.
8	Structural Steel	SAIL, Tata Steel, Rastriya Ispat Nigam Ltd (RINL), and JSW Steel Ltd., Jindal Steel & Power Ltd.
9	Polycarbonate Sheet	GE Plastic, LEXAN
10	Profile steel sheet (Precoated)	Ezydeck of TATA, Lloyd Superdeck, JSW / Jindal
11	Particle Board	Kitply, Action TESA, Greenlam, Merino.
12	Laminated Particle Board / Laminates	Kitply, Action TESA, Greenlam, Century Ply, Merino, Sunmica.

13	Flush Door shutters	Duro, Kitply Industries (Swastik), Century, Durian, Green Ply, Jayna
14	Fire Rated Doors	Signum Fire Protection, Shakti Metdoor, NAVAIR, Adhunik Technology, Sukri, Promat International.

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15	False Ceiling System	Armstrong, Hunter Douglas, USG Boral, Saint Gobain, Aerolite, Durlum, Interarch.
16	Plywood / Veneer	Green ply, Century Merino, Kitply, Duro Durian.
17	Melamine Polish	Asian Paints Melamine Gold, Wudfine of Pidilite, Timbertone of ICI Dulux.
18	Floor Spring & Door Closure	Godrej, Dorma, Dorset, Kich
19	(a) Aluminium Section	Hindalco, Jindal, Indian Aluminium Co.
	(b) Anodised Aluminium Hardware (Heavy Duty)	Kilong, Alualpha, Classic, Ebco
20	Clear/Float/Frosted/Refractive/Coated Glass/Toughned	Saint Gobain, AIS, Modiguard, Asahi
21	Stainless Steel Railing, Accessories etc.	JINDAL, Dorma, Kich, GEZE, Godrej, Hardwyn
22	S.S.Door & Window & fittings	Jindal, Dorma, Kich, Doorset, Godrej, Ozone
23	Silicon based water repellent / Weather sealant	G.E. Plastics, Dow Corning, (Wacker), BASF, Pidilite (Dr.Fixit/Roff)
24	Poly-Sulphide Sealant	Fosroc, Pidilite (Dr.Fixit/Roff), Sika, BASF
25	Mosaic Tiles / Chequerred Tiles	Ultra Tiles, NITCO, Hyper(Mayur), Pavcon
26	Ceramic Tiles	Somany, Kajaria, RAK, NITCO
27	Vitrified Tiles (Antiskid/Matt/Glazed)	Somany, Kajaria, RAK, NITCO
28	Paver Block & Kerb Stone	Pavcon, Hyper Tiles / Dynamic Industries/Mayur, KK, Power, Sharda, Navya
29	Dash / Anchoring Fasteners	HILTI, Fischer, Bosch, Wurth.
30	Cement Based Wall putty	Birla wall care, JK White, Berger, Asian Paints.
31	Oil Bound Washable Distemper / Dry Distemper	Asian Paints (Professional Acrylic Distemper), Nerolac : Beauty Acrylic Distemper, Berger: Bison Acrylic Distemper, DuluxICI:Maxilite
32	1st Quality Acrylic Distemper (washable / Ready Mix / Low VOC)	Asian Paints (Tractor Aqua Lock Paint) Berger : Commando Or equivalent paints of Nerolac or ICI Dulax.
33	Acrylic Emulsion Paints	Asian Paints : (Professional Premium Interior Emulsion Paint) Nerolac : Beauty Gold Berger : Rangoli total care

		ICI-Dulux : Super Cover
34	Plastic Emulsion Paint	Asian Paints : (Apolite Heavy Duty Premium Emulsion Paint) Nerolac : Impression Berger : Easy Clean ICI-Dulux : 3 in 1
35	Premium Acrylic Emulsion Paints (Interior)	Asian Paints (Royale Luxury Emulsion) Nerolac : Impression Berger : Silk

36	Textured Exterior Paint	ICI Dulux : Velvet Touch Asian paints, Nerolac, Berger Paints, Ultratech Paints Luxture.
37	Acrylic Smooth Exterior Paint	Asian Paints : (Apex / Professional Premium Exterior Emulsion) Nerolac : XL Berger : Weather Coat ICI-Dulux : Weather Shield
38	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
39	Synthetic Enamel Paint	Asian (Apolite Premium gloss enamel), Nerolac : Synthetic Hi gloss Berger :Luxol Hi gloss ICI-Dulux : Gloss Synthetic enamel
40	Cement Primer	Nerolac, Berger, BP White (Berger), Decoprime WT(Asian), White Primer(ICI)
41	Steel Primer (Red Oxide Zinc Chromate Primer)	Asian Paints, Nerolac, Berger, ICI
42	Wood Primer	Asian Paints (Wood Primer – White / Pink), Berger, ICI, Nerolac.
43	Epoxy Paint	Asian, Nerolac, Berger, ICI, Kansai Akzo Nobel.
44	Fire Paint	Asian Paints, Akzo Nobel Coatings India Ltd., PROMAT, Jotun.
45	G.I. / M.S. Pipe	Tata, Jindal (Hisar)
46	G.I. Fittings	Unik, AVR, Zoloto
47	HDPE Pipes	Reliance, Jain Pipes, ORIPLAST, Supreme
48	DI Pipes	Electrosteel, Jindal, TATA DUCTURA, Kapilangle, Kesoram.
49	DI Fittings	Electrosteel, Jindal, TATA DUCTURA, Kapilangle, Kesoram.
50	UPVC pipe and Fittings	Astral, Supreme, Ashirwad
51	Centrifugally Cast (Spun) Iron Pipes & Fittings	NECO, Kapilansh, Electrosteel, SKF.
52	C.I. Manhole covers, frames & GI Gratings	NECO, RAJ Iron Foundary Agra, BIC, SKF, Kapilansh
53	SFRC Manhole covers & gratings	KK, JAIN, PARGATI
54	CP Brass Fittings (Superior Range)	Jaquar, Grohe, Roca, PRIMA

55	CP Brass Fittings (Normal Range)	Hindware, Jaguar, ESSCO, Parryware, PRIMA
56	Sanitary ware, Fittings & accessories (Superior Range)	Kohler, Roca, Hindware, Parryware
	Sanitary ware, Fittings & accessories (Normal Range)	Hindware, CERA, Parryware, Jaguar
57	Mirror Glass	Atul, Modi Guard, Golden Fish
58	CPVC Pipe & fitting	Astral, Supreme, Ashirwad
59	Stainless Steel Sink	Neelkanth, Nirali, Jyna
60	RCC Pipes(NP-2)	Lakshmi, Sood&Sood, Jain Pipe Co. (Newai), Mahaveer Enterprises (Newai), work well spun pipes (pali)
61	UPVC Doors & Windows (PROFILE makers & their authorized Fabricators only.)	Fenesta, VEKA, KOMERLING, RHEAU, Aluplast, Wintech, Duroplast.
62	Extruded Polystyrene Insulation Board	Dowcorning, Supreme, Texas, Analco
63	Heat Resistant Tiles	Swastik, Thermatek
64	Gypsum Plaster	Ferrous Crete, Gyproc Saint Gobain, Ultratech
65	Floor hardener	Ironite, Ferrok, Hardonate
66	Modular Expansion Joint	Herculus, Sanfield India Ltd. Vexcolt
67	Glass Wool	Dow Corning, U.P. Twiga, Isover
68	UPVC doors and window hardware's	Rotto, Dorset, Kinlong
69	AAC Block Adhesive	Ultratech, Ardex Endura, Ferrous Crete.
70	Ready Mix Concrete	Ultratech Concrete, ACC Ready mix, Lafarge RMC India or as approved by Engineer – in- Charge.
71	Tile Fixer/Adhesive	As approved by Engineer – in- Charge.
72	PVC Rain water pipe & fittings As per IS :13592	Finolax, Supreme, Plasto.
73	PVC Shutter	Rajshri, Sintex, M/s Jain Wood Industries



## PREFERRED MAKES OF MATERIALS FOR CIVIL WORKS

**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.**

### Part – 2 – Price Bid —

S no	Items	Qty	Unit
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 lift upto 1.5 m, as directed by Engineer-in- Charge: 2.1.1 All kinds of soil	2400	Sqm
2	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge. 2.6.1 All kinds of soil	1440	Cum
3	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 m and lift upto 1.5 m.	1440	Cum

4	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, 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 All kinds of soil Pipes, cables etc, not exceeding 80 mm dia Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia Excavating, supplying and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. Complete	1440	Cum
5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:3:6 (1 Cement : 3 coarse sand (zone-III) : 6 graded stone aggregate 20 mm nominal size)	240	Cum
6	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 : 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size)	43.2	Cum
7	Centering and shuttering including strutting, propping etc. and removal of form for : Foundations, footings, bases of columns, etc. for mass concrete	38.16	Sqm
8	Lintels, beams, plinth beams, girders, bressumers and cantilevers	50.88	Sqm
9	Columns, Pillars, Piers, Abutments, Posts and Struts	64	Sqm
10	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	3456	Kg

11	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in: 6.2.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	14.4	Cum
12	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 to edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade Area of slab over 0.50 sqm	11.52	Sqm
13	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 30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	11.34	Sqm
14	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete : 9.74.1 250x10 mm	20	Each
15	Providing and fixing bright finished brass door latch with necessary screws etc. complete : 9.75.1 300x16x5 mm	20	Each
16	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	10	Each
17	Providing and fixing bright finished brass handles with screws etc. complete: 9.81.1 125 mm	20	Each

18	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	10	Each
19	<p>GYPSUM BOARD PARTITIONS</p> <p>9.105 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 50mm 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</p> <p>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, Galvanised M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each with zinc coating of 120 gms/sqm(both side inclusive)) 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. 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) : 1996 (Board with BIS certification marks)</p>	132	Sqm
20	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	752.76	Kg
21	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. In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	400	Kg

22	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	400	Kg
23	Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete. Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides	21.6	Sqm
24	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 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.	224	Kg
25	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) : 11.26.1 25 mm thick	9.36	Sqm
26	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm 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., complete. 11.41.2 Size of Tile 600x600 mm	36	Sqm
27	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, 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. 11.46.2 Size of Tile 600x600 mm	60.48	Sqm
28	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. 0.80 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	45.36	Sqm

29	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.including fittings such as collar, bend, tee, clips and shoe etc. 75 mm diameter metre	30	Mts
30	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.including fittings such as collar, bend, tee, clips and shoe etc. 110 mm diameter	30	Mts
31	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.including fittings such as collar, bend, tee, clips and shoe etc. 160 mm diameter	30	Mts
32	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably	135	Sqm

	fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with : 12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I) : 2011 (Board with BIS certification marks)		
33	12.5 mm thick tapered edge Glass Reinforced Gypsum (GRG) board conforming to IS: 2095- (Part 3) : 1996 (Board with BIS certification marks)	135	Sqm
34	CEMENT PLASTER (IN COARSE SAND) 13.4 12 mm cement plaster of mix : 1:4 (1 cement: 4 coarse sand)	86.4	Sqm
35	15 mm cement plaster on rough side of single or half brick wall of mix: 1:4 (1 cement: 4 coarse sand)	86.4	Sqm
36	Finishing walls with water proofing cement paint of required shade : New work (Two or more coats applied @ 3.84 kg/10 sqm	576	Sqm
37	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.	576	Sqm
38	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade : New work (two or more coats) over and including water thinnable priming coat with cement primer	576	Sqm
39	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work	144	Sqm

40	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earthwith lead upto 50 metres.	360	Sqm
41	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road/vibratory roller 8-10 tonne capacity in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density . including supplying of metal and screaning material, moorum etc complete	54	Sqm
42	Dry stone pitching 22.5 cm thick including supply of stones and preparing surface complete.	432	sqm
43	Construction of dry lean cement concrete sub base over a prepared sub-grade with coarse and fine aggregate conforming to IS:383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per specifications, cement content not to be less than 150 Kg/cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, for all leads & lifts, laid with a mechanical paver, compacting with 8-10 tonne vibratory roller, finishing and curing etc. complete as per direction of Engineerin- charge.	360	sqm
44	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/ expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately). Note:- Cement content considered in M-30 is @ 340 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately. Cement concrete prepared with batch mixing	72	Cum



	machine		
45	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge. 16.91.1 60mm thick cement concrete paver block of M-35 grade with approved colour, design & pattern.	432	Cum
46	Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan.	8	Each
47	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge.	4	Each
48	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. 10 litre capacity - White	8	Each
49	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete : 17.20.1 White solid plastic seat with lid	8	Each
50	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	8	Each

51	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.	8	Each
52	Providing and fixing toilet paper holder : C.P. Brass	8	Each
53	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including 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. 25 mm nominal outer dia Pipes	120	Mts
54	32 mm nominal outer dia Pipes metre 480.55	30	Mts
55	40 mm nominal outer dia Pipes metre 648.60	60	Mts
56	50 mm nominal outer dia Pipes	60	Mts
57	Providing and fixing brass bib cock of approved quality : 15 mm nominal bore	8	Each
58	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 25 mm nominal outer dia Pipes	8	Each
59	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 32 mm nominal bore. each 581.25	8	Each

60	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 40 mm nominal bore each 678.40	8	Each
61	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 50 mm nominal bore	8	Each
62	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 : 15 mm nominal bore each 618.80	8	Each
63	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. 15 mm nominal bore each 552.35	8	Each
64	18.52 Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931. 15 mm nominal bore	8	Each
65	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 15mm nominal bore each 532.00	8	Each
66	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.	20000	Litre

67	<p>Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:  100x100 mm size P type  With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p>	4	Each
68	<p>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 : 150 mm dia. R.C.C. pipe metre</p>	120	Mts
69	<p>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 : 250 mm dia. R.C.C. pipe metre</p>	80	Mts
70	<p>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 : 300 mm dia. R.C.C. pipe metre</p>	150	Mts
71	<p>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 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p>	4	Each
72	<p>Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :  With common burnt clay F.P.S. (non modular) bricks of class designation 7.5</p>	4	Each
73	<p>Extra for depth for manholes : Size 90x80 cm</p>	2	

74	Extra for depth for manholes : Size 120x90 cm	2	
75	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand), inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design : 0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg., fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) : 19.9.1.1 With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	4	Each
76	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	4	Each
77	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 / paneling, 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) : Powder coated aluminium (minimum thickness of powder coating 50 micron)	600	kg
78	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	120	kg

	paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)		
79	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. 21.2.1 Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side	60	Sqm
80	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): With float glass panes of 5 mm thickness (weight not less than 12.50 kg/ sqm)	120	Sqm
81	With float glass panes of 8 mm thickness (weight not less than 20 kg/ sqm)	40	Sqm
82	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. 21.4.1 With stainless steel cover plate minimum 1.25 mm thickness	10	Each
83	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. 21.8.1 Upto 5mm depth and 5 mm width	200	Metre
84	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. Powder coated minimum thickness 50 micron aluminium tubular handle bar	12	Each

85	Providing and fixing Brass 100mm 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	12	Each
86	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).	60	Kg
87	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double action hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-incharge (Door handle, lock and stopper etc.to be paid separately).	17.28	Sqm
88	Higher Charge of JCB including deasel and driver	1	Hrs
89	Higher Charge of Hydra Crane including deasel and driver 1st hrs including transporting at site	1	1st Hrs
90	Higher Charge of Hydra Crane including deasel and driver next after 1 hrs	1	per hrs
91	Higher charge of tractor including trolley/ cultivator driver and desel	1	day
92	Higher charge of Hayva more than 15 cum capacity including driver and desel	1	Hrs
93	Supply of Man power for various work beldar	1	day
94	Mason (brick layer) 1st class	1	day
95	Supply of Man power for various work Fitter/Carpenter	1	day

96	Supply of Man power for various work Painter	1	day
97	Supply of Man power for various work plumber	1	day