Sr No …………

 Date ………….

Tender Document

For the

STRUCTURAL STRENGTHENING OF CLOCK TOWER with one year maintenance under

14th Finance commission.

Cost of the Tender Document Rs.2280.00

Cost of the work Rs. 50.00 Lacs



 NAGAR NIGAM DEHRADUN

¼dk0& 0135&2714074%QSDl&0135&2651060% bZ&esy&nagarnigam.ddn@gmail.com½

PARTICULARS OF THE TENDERS

1.Particular of the Work STRUCTURAL STRENGTHENING OF CLOCK TOWER with one year maintenance under 14th Finance commission.

2. Period of construction 6 months

3. Cost of Tender Form Rs. 2280.00

4. Earnest Money Rs 1.00 lac

 FDR/ CDR/ NSC/ BG (BANK GUARANTEE) WILL BE PLEDGED IN THE NAME OF A.O, NAGAR NIGAM, DEHRA DUN

5. Date& time for getting tender document

Till 02-01- 17

6. Date & time of Submission of tender

 03-01-17 (2.00 PM)

7. Date of Opening of Technical Bid

 To be informed later

8. Date of Opening of Financial Bid

 To be informed later

9. Place of Opening of Tender Executive Engineer,

Nagar Nigam, Dehradun.

10. Period of Validity of Tender 3 months

11. Name and Address of the firm to whom

 tender document is issued …………………………………………

 …………………………………………

 Executive Engineer

 Nagar Nigam, Dehra dun.

PRE QUALIFICATION, TECHNICAL BID AND FINANCIAL BID REQUIRMENTS

STRUCTURAL STRENGTHENING OF CLOCK TOWER with one year maintenance under 14th Finance commission.

The tenderer/bidder should give a detailed technical proposal and financial proposal for the above detailed work complete in all respect. The financial/commercial bid shall be opened only after approval of technical bid from the Nagar Nigam Dehradun.

All the bids shall be examined and evaluated first technically and as per the past experience of similar nature work, financial capability and others relevant factors related to similar type of project i.e. strengthening work, construction of retaining wall, RCC, drains, buildings, etc. Details to be provided with the technical bid:-

Tenders/RFP are invited from the reputed, capable, efficient and experience firms/ organization/ PSU’s/ contractors registered in Central/State Govt departments/ undertakings to construct the above work in a limited time of two months with one year of maintenance.

**Pre requisite/ Pre qualification for the tender**

1. Earnest Money of Rs. 1.00 lac in the form of NSC/ FDR/ Bank Guarantee for 12 months extendable as and when required in the name of S.F.O, Nagar Nigam, Dehradun.

2. If form is down loaded from the web site, cost of tender form of Rs. 2280.00 in the form of bank draft in the name of S.F.O, Nagar Nigam, Dehradun should be deposited with the tender form/bid.

3. Income tax registration with PAN card copy.

4. Sales/trade tax registration number

5. Labour department registration or any other statutory registration required.

6. Affidavit with the detail that the firm/ bidder have not been black listed from any government, semi government, organization due to default.

7. After the satisfaction of above conditions, further technical bid shall be considered.

**TECHNICAL BID**

Tenders are invited from the reputed, experience, well equipped construction Firm/Company/Individuals/Partnership firms/legal identity, registered in any Central Government/State Government/PSUs of State/Centre for the STRUCTURAL STRENGTHENING OF CLOCK TOWER with one year maintenance under 14th Finance commission.

The tenderer/bidder should give a detailed technical proposal to carry out the above job as per the technical bid. The financial/commercial bid shall be opened after the approval of technical bid from the Nagar Nigam, Dehradun.

All the bids shall be examined and evaluated first technically, as per the past construction experience and others relevant factors related to building construction works. Details to be provided with the technical bid :-

**TECHNICAL BID REQUIREMENTS**

1. Completion of the construction of similar types of construction projects, already completed by tenderer or ongoing projects ;
	1. List of the departments and similar types of projects already completed or in progress.
	2. At least completion of similar construction projects piling of similar nature of Rs. 30.00 lacs or more during last financial year or completion of projects of cost Rs 100.00 lacs (equal to project cost) during last 3 years
	3. Nett worth of the tenderer should be ½ of the project cost, in support of this CA certified/bank certificate, copy should be attached Performance Certificate copies and order copies issued by Competent Authority.
	4. Preference will be given to the firms those who are having ISO 9001-2000 certification or similar certificate.
	5. Copy of letters showing letters of satisfactions and any other relevant information.
	6. Income tax return copy of last 5 years.
2. Detail of the staff (skilled or unskilled) with their technical qualifications and construction machineries;

|  |  |
| --- | --- |
| 2.1 | Detail of staff and their qualifications to be deputed for the project, at least one Graduate and/or one diploma holder engineer is must for the project. The consent letter of the engineers.   |
| 2.2 | Detail of machinery in possession/owner/lease i.e piling work batch mixing plant, mixture machine, different types of vibrators, lift arrangement for concrete, testing equipment etc.   |
| 2.3 | No. of permanent staff for construction i.e supervisor, mistry/meson, labour/beldar, black smith, bar binder etc.  |
| 2.4 | Place and location of existing testing lab and equipments with present address.   |
| 2.5 | Copy of registration with the Trade Tax, Income Tax, Service Tax and the labour department.   |
| 2.6 | Copy of Registration Certificate with the class A/B/C category of registration in PWD/CPWD/MES/Central and/ for State Government Undertaking/ULB’s   |

 ENVELOPS TO BE USED FOR “PRE QUALIFICATION”, “TECHNICAL-BID” AND “FINANCIAL/ COMMERCIAL-BID” AND MODE OF SUBMISSION

 Separate four sealed envelopes should be used one for Pre requistite/Prequalification for the tender, Envelop-A, one for ***“Technical Bid” Envelop-B*** and one for ***“Financial/ Commercial Bid”, Envelop-C***, and all the three envelopes A, B and C are to be kept in a bigger envelope-D, which is to be sealed at the time of submission. Open envelopes are liable to be canceled. Envelops must be addressed to Executive Engineer, Nagar Nigam, Dehradun.

Tender can be submitted to the Nagar Nigam , Dehradun or Public Works Department office before the stipulated date and time. Tender can be submitted by Registered Post or Speed Post or Courier Services or by hand to the Tender box/ PublicWorks Department, Nagar Nigam, Dehradun before the stipulated date and time. After the stipulated date and time ---------- upto 2PM ,the tender will not be considered. Delay due to postal services will be the liability of the bidder/ tenderer.

Only the rates or “Financial Bid” of such supplier/ bidder shall be opened or considered, those who will qualify in the “Technical Bid”.

**TIME FRAME FOR**

STRUCTURAL STRENGTHENING OF CLOCK TOWER with one year maintenance under 14th Finance commission.

1. After getting the intimation from Nagar Nigam to the lowest bidder, required stamp paper and other formalities for signing contract are to be completed in all respect within two days.
2. The total time given for the contract work which includes all the activities related to tendered work should be completed. In ordinary condition it is not extendable, but due to some unforeseen reasons and natural calamity the extension may be granted after receiving a request letter. The above period includes the rainy and all seasons.
3. After completion of work, the officers/ engineers of the Nagar Nigam/ or the prescribed committee will check all the constructed installed and fixed items executed by you and after that completion certificate may be issued.

4. For time over run, per day penalty may be imposed, which may be Rs. 2280.00 per day after expiry of stipulated time for execution of work. Time over run may be exempted for the genuine reason, which are to be forwarded by engineers/ or prescribed authorized committee and that may/ may not be considered/ accepted by Nagar Ayukt, Nagar Nigam, Dehradun.

PAYMENT SCHEDULE

1. After receiving the required material for the tendered work, 80% payment may be released of the total material cost, after inspection recommendation of the technical report of the engineers/ committee prescribed for that work or as per The Procurement Policy 2008 provisions).
2. After proper completion of particular work a detailed bill shall be submitted by the bidder, accordingly payment shall be released after adjusting the amount paid in above para 1.
3. Details given in Schedule B are as per the requirement, but the payment shall be made as per the actual work done/ executed.
4. 90% payment shall be released after completion of work and 10% shall be released after one years of completion of guarantee period, after deducting the penalty due to delay in execution of work, fault in work if any, duly intimated time to time by both the parties.
5. If bank guaranty/ FDR/ CDR/ NSC pledged in the name of S.F.O, Nagar Nigam , Dehradun of 10% of the amount, as described in above para 4, is submitted in the office, the above 10% may be released after getting the proper report from the engineers/ EnC/ committee meant for this purpose.
6. Total number of running bill should not be more than three in number i.e. one bill amount shall not be less than the 35% of the tendered amount.
7. Final bill payment and security release shall be done after approval of structural consultant/Competant Authority.

## **Time frame for the maintenance FOR FIRST YEARS**

1. There must be 1 year comprehensive maintenance warranty from the date of completion of work/ handing over to Nagar Nigam, Dehradun.

2- For the first year during the warranty period, after written report from Nagar Nigam about manufacturing defect to your authorized person, for every day delay in correcting it will cost Rs. 200.00 per day. Under the definition of warranty the manufacturing defect/faults liability shall be there with all the items in the executed work. Including all parts of construction.

3- During the first year all machines, materials and labours are to be arranged by the tenderer.

4- Due to some accident if there is some damage to the structure made, the repair work shall be executed by the tender immediately. Payment shall be made as per the rate decided by the Uttarakhand Procurement Policy 2008.

OTHER CONDITIONS

1- Nagar Nigam, Dehradun has a right to reduce or increase the requirement of the above work, numbers of items and even can cancel the tender at any time without assigning and reason.

2- Nagar Nigam, Dehradun has a right to change, substitute, and delete any item, their specification, and quantity in the interest of the development works.

3- The proposed construction shall be as per the detailed given by Nagar Nigam, Dehradun and if any details are further required then Uttaranchal PWD/ CPWD/ relevant codes/ DSR will be referred.

4- Regular test or required tests are to be performed, from PWD Labs, Dehradun/ Regional I I T Roorkee/ any Govt Approved Lab.

5- Before execution of work the tenderer should examine the approach road and location of the site and the difficulties which are to be encountered during the construction. For material supply if any no entry permission is to to be sought from district administration, Nagar Nigam administration shall write a letter for the same.

6- During the execution the bidder shall be responsible for safety and insurance of their staff, contracted workers, daily wages if engaged. Any labour law, insurance, safety related laws, all applicable law of land are to be followed by the bidder. For any violation the bidder shall be held responsible in all respect.

7- The decision of Nagar Ayukt, Nagar Nigam, Dehradun shall be final and binding on all. For any type of dispute the arbitrator shall be Mayor, Nagar Nigam, Dehradun.

8- An affidavit should be submitted with the tender, related to authorized signatary/ lead member, for single window interface between Nagar Nigam and bidder.

From : ………..………

 ………………..

 ………………..

 ………………..

To,

 Executive Engineer,

 Nagar Nigam, Dehradun

SUB:- STRUCTURAL STRENGTHENING OF CLOCK TOWER with one year maintenance under 14th Finance commission.

Sir,

 We hereby submit our offer for the above mentioned tender, we have examined the nature, details and specifications of all and have carefully noted and instructions and conditions mentioned in the tender document. The complete tender document is being submitted in original issued by Nagar Nigam, Dehradun to us/ down loaded from web site. Tender document are enclosed in sealed envelopes “A”, “B” and “C”, as instructed in the tender document. I hereby say with the oath that I shall follow all the terms and conditions in the above tender document, provisions of Uttarakhand Procurement Rules 2008.

Place:-

Date:- ( Signature of the tenderer)

 Name:- …………………

 Address:- ………………. ………………………….

 City:-……………………

 M. No:-………………...

 e-mail:- …………………

INSTRUCTIONS TO THE TENDERER AND TERMS AND CONDITIONS

(A)- EARNEST MONEY AND VALIDITY OF TENDER

1. Each tender shall be accompanied by the requisite Earnest money (Rs 1.00 Lacs) in the form of FDR or NSC/BG in favour of S.F.O., Nagar Nigam, Dehradun.

2. Without requisite earnest money tender is liable to be disqualified.

3. Earnest money shall be retained up to expiry of the contract period.

 (B)- CASTING AND OPENING OF TENDER

1. The tender should be neatly written, preferably typed. Every page of the tender document should be signed with seal. The rated must be quoted in words also.
2. Nagar Nigam, Dehradun reserves the right to reject any or all the tenders or accept any tender, after analyzing pre qualification, technical bid and financial bid, in total or in parts of work may be decided among various tenderer, without assigning and reason. Nagar Nigam has a right to change the date of opening of technical and/or financial bid at any time.
3. All information must be in English and figures must in MKS system.

The tender must give

The Name,

Detailed address of office with pin code

Phone numbers land and Mobile Numbers

E- mail, Web-site

1. The representative should bring the authorization letter from the tenderer having representative’s attested signature (This details is compulsory to ensure the maintenance within the stipulated time)
2. The details of the Lead member/ head of the institution responsible for execution.
3. Any approach/ undue pressure by any firm shall render the tender liable to be rejected.
4. Any tender if deviates from terms and conditions and technical specifications specified in the tender document shall be liable to be rejected.
5. On acceptance of the tender, the tenderer will be required to execute an agreement which will be treated as contract for the tendered work on non judicial stamp paper of required value, as per GO’s provisions.
6. For above a non judicial stamp paper of Rs. 100.00 should be attached with the tender document.
7. If tenderer fails to sign the agreement within the stipulated specified period of 3 days from date of confirmation of the lowest bidder, its Earnest Money shall be forfeited by the Nagar Nigam, Dehradun.
8. The tendering firm/ company should be registered under the relevant statues by the relevant competent authority. The firm must attach attested copies of the Registration Certificate and partnership deed/ Memorandum of Association as the case may be.
9. The tender price will be inclusive of all taxes and duties, i.e. central, state and local taxes and should be quoted in schedule B format.
10. Specifications are given in Schedule B.
11. Conditional tender will not be accepted and shall be summarily rejected.

FINANCIAL STATUS

1. Solvency Certificate/ bank guarantee duly signed and stamped by the scheduled bank/ registered bank authorized by GoI/RBI.
2. Income tax returns certificates of last 3 years.
3. Liquid fund availability along with certificate signed by C.A., Balance sheet for last one year.

CREDEBILITY

The bidder must give an affidavit that he has not been or is not black listed from any Government or Semi Government Department. If at any stage it is found that the credentials given by the bidder are not correct or manipulative or false, it may lead to disqualification and black listing.

The Nagar Ayukt, Nagar Nigam, Dehradun/ Executive Engineer, NND may ask to the tenderer/ tenderers to show the samples of items proposed to be used for the execution of the work.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **DESCRIPTION OF ITEMS** | **QTY.** | **UNIT** | **Per** | **Rate** | **Amount** |
| **1** | **MASS EXCAVATION**  |  |  |   |   |   |
|   | Soft soil( Including black cotton soil, gravely clay, silty clay), sand and Murrum |   |   |   |   |   |
| 1.1 | From existing ground level to a depth of 6.0m with 0.45 m diameter for 6 numbers of piles | **5.73** | **Cum** | Per | ₹ 3,600.00 | ₹ 20,628.00 |
| 1.2 | Earthwork in excavation for structures For Cut Wall in between of Clock Tower and Tree. 10977 8 8-4-1 | **60.8** | **Cum** | Per | ₹ 244.40 | ₹ 14,859.52 |
| 1.3 | Hire and running charges of hydraulic piling rig with power unit etc. includingcomplete accessories and shifting at site | **2** | **day** | Per | ₹ 34,000.00 | ₹ 68,000.00 |
|   |  |  |  |   |   |   |
| **2** | **PLAIN CEMENT CONCRETE**  |  |  |   |   |   |
|   | Note: For all plain & reinforced concrete : |   |   |   |   |   |
|   | Concrete shall be mixed by mechanical means such as approved weigh batch mixer at site of works. |   |   |   |   |   |
|   | Weigh batching shall be done as per approved Design Mix. |   |   |   |   |   |
|   | Rates quoted shall be inclusive of all leads, lifts at all levels. |   |   |   |   |   |
|   | Concrete of specified grade and approved Design Mix only shall be used, the design mix analysis shall be submitted and got approved prior to use in the works. |   |   |   |   |   |
|   | Rates quoted shall be inclusive of testing of all materials at the site or an approved Laboratory including the costs of samples, equipment, etc incurred for conducting such tests. |   |   |   |   |   |
|   | Contractor shall set-up equipped laboratory at the site of works for regular and/or periodic testing of material such as cube testing machine, sieve apparatus, etc. |   |   |   |   |   |
|   | All rate quoted are applicable for items anywhere in site premises |   |   |   |   |   |
|   | Curing to be done as specified by Indian Standards. All de-shuttering shall be carried out as laid in the technical specifications. |   |   |   |   |   |
|   | The cement used shall be 43/53 Grade OPC with fly ash or PPC without flyash |   |   |   |   |   |
|   | Providing and laying plain cement concrete of specified grade including centering, vibrating, shuttering, compacting, curing, dewatering, etc. complete. |   |   |   |   |   |
| 2.1 | 100mm PCC of M15 under 6 piles |   |   |   |   |   |
| 2.2 | PCC below raft grade M15 |   |   |   |   |   |
| 2.3 | 100mm PCC of M15 below the 6 Ring beam of length 5.44m and .5 m width |   |   |   |   |   |
| 2.4 | 100mm PCC of M15 below the 6 Ring beam of length 4.64m and .3 m width |   |   |   |   |   |
|   |  | **9.130** | **Cum** | Per | ₹ 5,872.90 | ₹ 53,619.58 |
| 3 | **REINFORCED CEMENT CONCRETE** |   |   |   |   |   |
|   | Note: The vapour barrier sheet of 0.25mm thick (heavy duty) polythene sheet or equivalent thermoplastic material, laid over a compacted 150mm thick layer of hardcore blinded with sand to prevent grout loss by seepage into the ground shall be provided on all soil surfaces below raft as specified and approved by project in charge |   |   |   |   |   |
|   | providing , laying and finishing cast in place RMC ( Ready mixed concrete) of specified grade using batching plant, Transit mixer, Pumps/cranes etc, including cost of making shear keys provision of construction/ contraction /expansion/crumple/ control joint in various location laid, consolidated. vibrated and cured as per the specifications using 43/53 Grade O.P.C with fly ash and crush sand or PPC without flyash and with crush sand, and hacking the exposed surface wherever required to receive plaster or floated steel troweled surface wherever specified. The rate shall inclusive of admixture required if any and for providing recesses to piles, beams, rafts; to the required shape, size and slope as shown in drawings. Item to include, all structural item like base raft,wall, piling, equipment/machine foundations, fins, mullions, beam, drain and sump etc. of any shape and size for all lead and lift. |   |   |   |   |   |
|   | The rate shall be also inclusive of all system formworks to achieve the concrete finishes as described in the technical specifications and approved by the Engineer in Charge and should conform to relevant IS specifications. |   |   |   |   |   |
|   | The rate shall include placement of foundation bolts, insert plates, anchor bolts, studs, coupler sleeves, steel brackets, runners, edge angles or channels, rail sections, rims, dowels for future continuation of work, keys, projections etc as per requirement shown in the drawings or as per instructions of the Project Manager. |   |   |   |   |   |
|   | Grouting cement required for P.T. Works shall be provided at floor level |   |   |   |   |   |
|   | Scaffolding as required to be provided |   |   |   |   |   |
|   | Rate quoted will hold good for all shape and at all elevations |   |   |   |   |   |
|   | Rate quoted will hold good for all heights and elevations, all shapes in plan and elevations . |   |   |   |   |   |
|   | Note: The vapour barrier sheet of 0.25mm thick (heavy duty) polythene sheet or equivalent thermoplastic material, laid over a compacted 150mm thick layer of hardcore blinded with sand to prevent grout loss by seepage into the ground shall be provided on all soil surfaces below raft as specified and approved by project in charge |   |   |   |   |   |
|   | Providing, driving and installing driven cast-in-situ reinforced cement concrete piles of grade M-25 of specified diameter and length below the pile cap, to carry safe working load not less than specified, excluding the cost of steel reinforcement but including the cost of shoe and the length of pile to be embedded in the pile cap etc. all complete. (Length of pile for payment shall be measured from top of shoe to the bottom of pile cap) : 6 numbers | 36.00 | m | Per | ₹ 1,926.55 | ₹ 69,355.80 |
| 3.2 | 6 Ring beams of 0.4m x 0.6m above the pile and outside the clocktower |   |   |   |   |   |
| 3.3 | 6 Ring beams of 0.23m x 0.35m inside the clocktower at level of outside ring beam |   |   |   |   |   |
| 3.4 | Raft of 150mm thick inside the clock tower |   |   |   |   |   |
|   |  | **37.37** | **Cum** | Per | ₹ 8,634.05 | ₹ 322,654.45 |
| **4** | **STEEL REINFORCEMENT** |  |  |   |   |   |
|   | Providing and fixing steel reinforcement for RCC including transporting, de-coiling, straightening, cutting, bending and placing in position at all levels and binding with approved quality G.I. annealed coated binding wire(18G). The quantity for chairs, spacers and pins included shall be masured for records but not to be paid extra. Quantity of steel as per drawing and with overlaps as per standard drawing of the structural consultant only shall be measured and paid. for unauthorised laps shall not be paid. The rate also includes protecting the reinforcing bars – in their virgin form or in the fabricated form, or when placed and tied up in position or as dowels left for future continuation of work or at construction joint – against corrosion due to exposure to weather if left exposed and un-encased for more than three weeks from the date of delivery to the site. Adequate & proper cover blocks either cement or PVC as specified in the drawings. |   |   |   |   |   |
|   | High yield strength deformed bars conforming to IS:1786 with Fy = 500 N/sq.mm |   |   |   |   |   |
|   | Steel reinforcement for R.C.C. work including straightening, cutting,bending, placing in position and binding all complete upto plinth level. |   |   |   |   |   |
| 4.1 | **Piling** |  |   |   |   |   |
| 4.11 | 8mm diameter bar |   |   |   |   |   |
| 4.12 | 16mm diameter bar |   |   |   |   |   |
| 4.2 | **Ring beam (outside & Inside)** |  |   |   |   |   |
| 4.21 | 20 mm diameter bar |   |   |   |   |   |
| 4.22 | 8 mm diameter bar |   |   |   |   |   |
| 4.3 | **Raft** |  |   |   |   |   |
| 4.31 | 10 mm diameter bar |   |   |   |   |   |
|   | R.C.C M-25=14.57cum @2.02% |   |   |   |   |   |
|   |  | **5,925.76** | **kg** | Per | ₹ 68.10 | ₹ 403,544.32 |
| 5 | **BACKFILLING** |   |   |   |   |   |
|   | Filling in plinth or trenches, ducts, pits, foundations or around plinth with approved earth of non-swelling type, free from organic materials, complete as specified and as directed (Net consolidated volume shall be measured for payment) including watering & compacting with mechanical compaction machines in layers of 150/200 mm to obtain 97% modified proctor density complete. |   |   |   |   |   |
|   | 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 |  |  |   |   |   |
|   | with available earth from site |   |   |   |   |   |
| 5.1 | Around the pile inside the trench |   |   |   |   |   |
|   |  | **40.90** | **Cum** | Per | ₹ 112.40 | ₹ 4,597.16 |
| **6** | **GROUTING**  |   |   |   |   |   |
|   | Grout Shall be mixed according to the Design Mix. |   |   |   |   |   |
|   | The water should be put into the container first and then the non-shrink additive. Then the cement is slowly added and mixed thoroughly with water. |   |   |   |   |   |
|   | Grout shall be mixed for at least two minutes until a colloidal consistency is produced. |   |   |   |   |   |
|   | The grout shall be pumped inside the borehole through the primary hose provided upto the bottom of the hole. The grout shall be filled from the bottom of the hole replacing the water entrapped inside the hole. |   |   |   |   |   |
|   | The grout shall be allowed to overflow until the same consistency of grout overflows from the borehole. |   |   |   |   |   |
|   | Six numbers of grout cube shall be casted by the contractor and the same can be tested by Main contractor for checking the strength achieved by the grout. |   |   |   |   |   |
|   | Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge. |   |   |   |   |   |
| 6.1 | Grouting the surface area of the clock tower |   |   |   |   |   |
|   |  | **1,919.98** | **sq.m** | Per | ₹ 223.45 | ₹ 429,019.54 |
|  |  |  |  |  |  |  |
| **7** | **CEMENTITIOUS CONCRETE PANEL FLOORING**  |   |   |   |   |   |
|   | Providing & laying in position and compaction as specified Design mix concrete of grade M25 using maximum 20 mm down graded coarse aggregate of 150mm thick cementitious concrete panel flooring of specified size |   |   |   |   |   |
|   | a. Steel form work with steel channel sections as approved by Architects/Consultants, mechanical vibration using needle and screed vibrators. |   |   |   |   |   |
|   | b. Filling the grooves for joints with approved primer and approved joint sealing compound of approved make. The joint sealant will be filed flush with PCC surface. |   |   |   |   |   |
|   | c. The joints will be kept filled with thermocol immediately after cutting and before filling, the same shall be removed & joints cleaned thoroughly with compressed air etc as directed. |   |   |   |   |   |
|   | d. The level in difference of PCC shall be only maximum 20 (Twenty millimeters) mm at entire length. Any undulations shall be corrected by IPS at no extra cost |   |   |   |   |   |
| 7.1 | Provide and lay machine cut, mirror polished, Italian Marble stone flooring laid in required pattern in linear portion of the building, abve raft and above all complete as per architectural drawings, with 18 mm thick stone slab laid over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with white cement slurry @ 4.4 kg/sqm including pointing with white cement slurry admixed with pigment to match the marble shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. a. 18 mm thick Italian Marble stone slab,Perlato, Rosso verona, Fire Red or Dark Emperadore |   |   |   |   |   |
|   |  | 56.00 | Sqm | Per | ₹ 5,766.80 | ₹ 322,940.80 |
| **8** | **PLASTERING**  |   |   |   |   |   |
|   | Removing wash by scrapping and sand papering |   |   |   |   |   |
|   | Cleaning the sand stone/brick surface and removing dirt, dust, bird dropping, grease, oil, algae, fungus, monkey beats, vegetable growth etc., including providing, applying and washing the surface with liquid Ammonia Chemical of 5% solution and other chemical cleaning agent as approved by Archaeological Survey of India/ Engineer-incharge, of approved brand and manufacturer, with the help of required scrubbers and also cleaning with machine operated water jet mixed with desired quantity of fine silica where ever required, without causing any scratching/ damage to the stone surface and finally washing the surface with clean water with the help of pressure jet machine, complete in all respect, including taking all precautions to safeguard ventilators, windows, doors etc. by suitable covering so as to avoid any damage to the building/ structure, all as per direction of Engineer-in-charge |   |   |   |   |   |
| 8.1 | Deplastering of outside surface, inside surface, side surface, window surface, door surface, roof surface etc. of clock tower |   |   |   |   |   |
|   | **Total** | **1,919.98** | **sq.m** | Per | ₹ 7.60 | ₹ 14,591.85 |
| 8.2 | water proofing compound ISI mark | **20.00** | **kg** | Per | ₹ 36.60 | ₹ 732.00 |
| 8.3 | Provide plastering reinforced with 1.6 mm dia mild steel wire, including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:4(1 cement: 4 fine sand) etc. complete, excluding plastering of the jwalls, sills and soffits. |   |   |   |   |   |
|   |  | **1,919.98** | **sq.m** | Per | ₹ 729.95 | ₹ 1,401,489.41 |
| **9** | **SHUTTERING** |  |  |   |   |   |
|   | cementing and shuttering including struting, propping etc.and removal of form work for: |   |   |   |   |   |
| 9.1 | piles, beams | **165.24** | Sqm | Per | ₹ 453.35 | ₹ 74,911.56 |
| 9.2 | walls | **1,919.98** | Sqm |   | ₹ 360.80 | ₹ 692,728.79 |
| 9.3 | bases | **56.00** | **sqm** | Per | ₹ 196.45 | ₹ 11,001.20 |
| **10** | **MASONS**  | **1** | **Job** | Per |   | ₹ 655,000.00 |
| **11** | 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 priming coat with cement primer 82018 1-13-41-1 | **1919.98** | Sqm | Per | ₹ 93.00 | ₹ 178,558.14 |
| **12** | Colour washing such as green, blue or buff to give an even shade-82016 1-13-39-2 New work (two or more coats) with a base coat of whiting | **4258.96** | Sqm | Per | ₹ 16.40 | ₹ 69,846.95 |
|   |   |   |   |   | **Total** | **₹ 4,808,079.07** |

**SCHEDULE – “B”/TENDER FORM**

STRUCTURAL STRENGTHENING OF CLOCK TOWER with one year maintenance under 14th Finance commission.

 (Detailed DPR/approved estimate should be attached here, with all quatity, rate, and amount)

 I/We hereby agree to execute all the tendered work at ………………………….. % below/ ………………………………….. % above rate (in words also)

Signature of the bidder/Authorized Signatory ……………………………….

Name ……………………………….

Address ……………………………….

Mob. No. ……………………………….