



सी.एस. आई. आर.-केन्द्रीय यांत्रिक अभियांत्रिकी अनुसंधान संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

महात्मा गांधी एवेन्यू, दुर्गापुर - 713 209

CSIR- CENTRAL MECHANICAL ENGINEERING RESEARCH INSTITUTE

(Council of Scientific & Industrial Research)

Mahatma Gandhi Avenue, Durgapur - 713 209

निविदा प्रपत्र /TENDER DOCUMENT

कार्य का नाम/Name of the work:- इलम्बाजार, बीरभूम और कनकसा, बर्द्धमान में जल संग्रहण टैंक, नलकूप मंच निर्माण और 2 नग आई आईआर पी की स्थापना |“ Construction Water Storage Tank, Tube well platform and installation of 2 nos IIRP at Illambazar, Birbhum and Kanksa, Burdwan.”

निविदा संख्या /NIT No. 3/76/537/18-19/ESD/CI/GAP 2219/Re

निविदा की बिक्री

Sale of Tender

: From 11.06.2019 to 17.06.2019 up to 16:00 hrs.

कार्य की अनुमानित मूल्य

Estimated cost of the work

: Rs. 1,90,210.00 (Excluding GST)

अग्रिम धन जमा

Earnest Money Deposit

: Rs. 3,810.00

निविदा जमा करने की अंतिम तिथि

Last date of submission of Tender

: 19.06.2019, 13:00 hrs.

निविदा खोलने की तारीख

Date of opening of Tender

: 19.06.2019, 15:00 hrs.

निविदा दस्तावेज की मूल्य

Cost of Tender Document- Rs. 500.00

प्रशासनिक नियंत्रक के कार्यालय पर टेंडर जमा करवाना

Tender submission at

Office of Controller of Administration

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Contents

Sl. No.	Description	No. of Pages
1.	Contract document for works (Including page 1 to 3 attached separately)	42
2.	Schedule of Quantity	02
3.	List of approve Make & Drawings	03
4.	NIT & Bank Details	02

Note: Tenderer should confirm that they have received all the above papers. All the documents issued are to be returned duly signed by the tenderer while submitting his offer.

Crossed Demand Draft No. _____ Dated _____ for Rs. _____ in favour of
Director, CMERI, Durgapur- 713 209 drawn on _____ (Name of
Bank) _____ towards tender

fee is enclosed.

Particulars of cash deposited with Director, CMERI, Durgapur- 713 209.

Receipt No. _____ Book No. _____ Dated _____

For Rs. _____

Tender Issued to:

M/s.....

.....

.....

Tel. No. (If any).....

Signature of the tenderer

Signature of the officer issuing tender.

CONTRACT DOCUMENT FOR WORKS

ENGINEERING SERVICES DIVISION
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH
NEW DELHI

JUNE, 1994

CONTENTS

S. NO.	PAGE NO.
I. NOTICE INVITING TENDER	1
II. ARTICLES OF AGREEMENT	5
III. GENERAL CONDITIONS OF CONTRACT	
CLAUSE : 1. INTERPRETATION	7
2. DRAWINGS SPECIFICATIONS	7
3. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY	7
4. AUTHORITIES, NOTICES AND PATENTS	8
5. RATES TO INCLUDE ALL TAXES	8
6. MATERIALS	9
7. TESTING OF MATERIALS	10
8. CONTRACTOR'S ENGINEERS / FOREMAN & WORKMEN	10
9. ACCESS	10
10. VARIATION AND PRICE FOR VARIATION	10
11. FAULTY MATERIALS, WORKMANSHIP AND DEFECTS AFTER COMPLETION	11
12. WORKS TO BE OPEN FOR INSPECTION	11
13. ASSIGNMENT FOR SUB-LETTING	12
14. INDEMNIFYING AGAINST DAMAGES TO PERSONS, PROPERTY STATUTES	12
15. LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS	13
16. WITHHOLDING LIEN IN RESPECT OF SUMS CLAIMED	13
17. INCASE OF DEATH OF CONTRACTOR	14
18. SUB-CONTRACTORS	14
19. COMPLIANCE TO LABOUR LAWS APRENTICE ACT	14
20. COMPENSATION FOR DELAY	14
21. DAMAGED TO WORKS IN CONSEQUENCE OF HOSTILITIES OR WAR LIKE OPERATIONS	15
22. EXTENSION OF TIME	15
23. SUSPENSION OF WORK BY CONTRACTOR	15
24. SECURED ADVANCE	16
25. CERTIFICATES PAYMENTS	16
26. SECURITY DEPOSIT	17
27. COMPLETION CERTIFICATE	18
28. ESCALATION	18
29. ARBITRATION	20
30. PERFORMANCE GUARANTEE	20
IV. SPECIAL CONDITIONS	21
V. ADDITIONAL CONDITIONS	22
VI. INDENTURE FOR SECURED ADVANCE	23
VII. ADDITIONAL CONDITIONS OF CEMENT AND STEEL	27
VIII. AMENDMENTS-CONDITIONS OF CONTRACT FOR WORKS	29
IX. AMENDMENT TO THE CLAUSE 28, PARA (ii) OF GENERAL CONDITIONS OF CONTRACT	34
X. CONTRACTOR'S SITE SUPERINTENDENCE	35
XI. INTEGRITY PACT	37
XII. SAFETY CODE	42

CENTRAL MECHANICAL ENGINEERING RESEARCH INSTITUTE
(Council of Scientific & Industrial Research)
DURGAPUR – 713209

NOTICE INVITING TENDER

Tenders are hereby invited for the work of “**Construction Water Storage Tank, Tube well platform and installation of 2 nos IIRP at Illambazar, Birbhum and Kanksa, Burdwan**” from contractors of appropriate class of CPWD, Railways, MES, Post & Telegraph Department and / or from those who have carried out similar works for CSIR, Semi-Govt. Organisations on a Single Contract amounting to **Rs.1,52,200.00 (Rupees One lakh Fifty two thousand two hundred only)**, **Two contract works amounting Rs.1,14,200.00 (Rupees One lakh Fourteen thousand two hundred only) & Three contract works amounting Rs. 76,100.00 (Rupees Seventy six thousand one hundred only)** and above. The tenderers are required to produce proof of fulfilling these conditions along with the latest **Income Tax Clearance Certificate, GST No., Valid Trade Licence Certificate** while making request for issue of Tender Documents.

- (1) Estimated cost is **excluding GST Rs. 1,90,210.00 (Rupees One lakh ninety thousand two hundred ten only)**
- (2) Time for carrying out the work will be **01 (One) Month** and the date of commencement shall be reckoned from the tenth day of issue of award letter.
- (3) Complete Contract documents to be complied with by the tenderer whose tender may be accepted can be seen at the office of **Administrative Officer, CMERI, Durgapur**.
- (4) Tenders should be on the specified form (non-transferable) which may be obtained from the office of **Administrative Officer, CMERI, Durgapur 713209** during office hours on payment of **Rs. 150.00 (Rupees One hundred fifty only) (non-refundable)**.
- (6) Tenders should be submitted in double sealed covers super scribed with the name of the work, date and time of opening written both on the inner and outer envelopes. This will be received up to. Tenders should be dropped in the tender box placed at **Works Cell** before the closing date and time indicated. In case these are sent by post these should be sent by Regd. post/Speed post addressed to **Administrative Officer, CMERI, Durgapur - 713209**. Tenderers are to ensure that they post the tender well in advance so as to reach before the closing time and date indicated.
- (7) The Earnest Money amounting to **Rs. 3,810.00 (Rupees Three thousand eight hundred ten only)** only as demand draft or pay order of a schedule bank and drawn in favour of **Director, CMERI** should accompany of tender. Tender received without earnest money will be invalid.
- (8) The Employer does not bind himself to accept the lowest or any tender and reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted.
- (9) Canvassing in connection with the tenders is prohibited and the tenders submitted by the contractor who resort to canvassing are liable for rejection.
- (10) The tenderer shall not be permitted to tender for works in the concerned unit of CSIR in which a relative is posted in the grade between Controller of Administration and Junior

Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or subsequently employed by him and who are relatives as mentioned above.

NOTE : A person shall be deemed to be relative of another if, and only of, (a) they are members of Hindu undivided family; or (b) they are husband and wife ; or (c) the one is related to the other in the following manner: Father, Mother (including step mother), Son (including step son), Son's wife, daughter (including step daughter), Father's father, Son's son, Son's son's wife, Son's daughter, Son's daughter's husband, Daughter's husband, Daughter's son, Daughter's son's wife, Daughter's daughter, Daughter's daughter's husband, Brother (including step brother), Brother's wife, Sister (including step sister), Sister's husband.

- (11) Tender submitted shall remain valid for 90 days from the date of opening for the purpose of acceptance and award of work; validity beyond 90 days from the date of opening shall be by mutual consent.
- (12) The tenderer shall quote rates both in figures and words. He shall also workout the amount for each item of work and write in both figures and words. On check if there are differences between the rates quoted by the tenderer in words and in figures or in the amount worked out by him, the following procedure shall be followed:
 - (i) When there is a difference between the rates in figures and in words, the rates, which correspond to the amounts worked out by the tenderer, shall be taken as correct.
 - (ii) When the amount of an item is not worked out by the tenderer or it does not correspond with the rate written either in figures or in words, the rate quoted by the tenderer in words shall be taken as correct.
 - (iii) When the rate quoted by the tenderer in figures and in words tallies but the amount is not worked out correctly the rate quoted by the tenderer shall be taken as correct and not the amount.
- (13) The tenderer should see drawings and in case of doubt obtain required particulars, which may in any way influence his tender from the Engineer as no claim whatsoever will be entertained for any alleged ignorance thereof.
- (14) Before tendering, the tenderer shall inspect the sites to fully acquaint himself about the condition in regard to accessibility of site, nature and extent of ground, working condition of site and locally including stacking of materials, installation of tools and plants (T & P) etc., conditions affecting accommodations and movement of labour etc. required for the satisfactory execution of the work contract. No claim whatsoever on such account shall be entertained by the Employer in any circumstances.
- (15) Earnest Money will be forfeited if the contractor fails to commence the work as per letter of award.
- (16) Except writing rates and amount, the tenderer should not write any conditions or make any changes, additions, alterations and modifications in the printed form of tenders. Tenderers who are desirous to offer rebate the same should be brought out separately in the covering letter and submitted along with the tender.
- (17) Some of the provisions of General Conditions of Contract are given below. Interpretation however shall be as given in the General Condition of contract.
 - (a) **DEFECT LIABILITY PERIOD:** 12 (twelve) months from the date of completion of the specific job as certified by the employer.

- (b) **MINIMUM VALUE OF WORK FOR THE INTERMEDIATE CERTIFICATE :**
Whereas the completion time of the work is less than one month, hence full and final payment shall be done.
- (c) **SECURITY DEPOSIT:** A sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. In addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as Performance Security within the period prescribed for commencement of work in the letter of award issued to him.
- (d) **COMPENSATION:** Contractor shall pay as compensation an amount equal to one per cent or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the cost of the whole work as shown in the agreement, for every week that the work remains un-commenced or unfinished or due quantity of work remains incomplete after the proper dates. Compensation to be paid shall not exceed ten per cent of the estimated cost of the work as shown in the agreement.

Particulars of Materials	Rates at which the material will be charged to the contractor			Place of delivery
	Unit	Rs. (Figures)	Rupees (Words)	

18. Schedule showing approximate quantity of materials to be supplied by the Employer under clause: 6 of the General Conditions of contract for works contracted to be executed and the rates of which they are to be charged for

NOTE : The Tenderer shall ensure that particulars in the above form are filled in by the Engineer he submits the tender. Notwithstanding anything stated elsewhere, the quoted rates should be exclusive of service tax.

ARTICLES OF AGREEMENT

ARTICLES OF AGREEMENT MADE AT _____ this _____ day of _____
BETWEEN the Council of Scientific and Industrial Research, New Delhi, Society registered under the Societies registration Act. 1860 (Hereinafter referred to as the Employer, which expression shall include its successors and assignees and authorised officers of the Society) of the one part and _____ trading in the name and style of _____ (hereinafter referred to as the contractor(s) which expression shall include his/their respective heirs, executors, administrators and permitted assignees) of the other part.

WHEREAS the Employer is desirous of getting the work of _____ done and has caused drawings, schedule of quantities and specifications describing the work to be prepared.

AND Whereas the said specifications and the schedule of quantities and other documents have been signed by on behalf of the parties.

NOW IT IS HEREBY AGREED AND DECLARED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS :

In consideration of the payments to be made to them as hereinafter provided the contractor shall upon and subject to the conditions hereinafter contained execute and complete, the work at the rates specified in the attached schedule of quantities and with such materials as are provided for and in accordance with in all respect with specifications, designs, drawings and instructions in writing. Time for carrying out the work will be and the date of commencement shall be reckoned from the tenth day of issue of award letter.

The Employer shall pay to the contractors such sums as shall become payable hereunder at the times and in the manner specified in the said conditions.

This agreement contains the following documents in addition to pages of Articles of Agreement.

- (i) General Conditions of Contract page no. ____ to ____
- (ii) Special Conditions page no. _____
- (iii) Additional Conditions page no. _____
- (iv) Indenture for Secured Advance page no. ____ to ____
- (v) Original tender document along with the covering Letter of the firm dated _____ page no. :1 to ____
- (vi) _____
- (vii) _____
- (viii) _____

In witness whereof the parties hereto have set their respective hands the day and year hereinabove written.

Signed by, for and on behalf of Employer _____
In the presence of

(1) _____

(2) _____

Signed by the said Contractor
In the presence of

(1) _____

(2) _____

GENERAL CONDITIONS OF CONTRACT

1. INTERPRETATION

- (a) In construing these conditions, the specifications, the schedule of quantities, tender, special conditions and agreement, the following words shall have the meanings herein assigned to them except where the subject or context otherwise requires.
- (b) This contract shall comprise of the Articles of Agreement, General Conditions of Contract, Special Conditions, Additional Special Conditions, the Schedule of Quantities, Specifications, Letter of Acceptance of Tender and other documents mentioned in the contents sheet attached hereto and including those to which only reference is made herein.

WORK OR WORKS : shall mean all work or works define in schedule of quantities, specifications and such other work or works as the contractor may be entrusted with for carrying out under this contract.

EMPLOYER : shall mean Director General, CSIR or any Officer authorised by Director General for the purpose.

ENGINEER : shall mean the Engineer designated by the Employer to superintend and perform other duties as indicated in the contract.

CONTRACTOR : shall mean the individual or Firm or Company, whether incorporated or not undertaking the work and shall include the legal personal representative or such individual or the persons composing such Firm or Company or the Successor of such Firm or Company and the permitted assignees of such individual or Firm or Firms or Company.

SITE : shall mean the site of contract works including any buildings and erections thereon and any other land adjoining thereto (inclusive) as aforesaid allotted by the Employer or the Engineer for the contractors use.

COMPENSATION : shall mean all sums payable by way of compensation under any of the conditions shall be considered as reasonable compensation without reference to the actual loss or damage sustained and whether or not any damage sustained, and whether or not any damage shall have been sustained.

Words inputting persons include Firms and Corporations; words imputing the singular only also include the plural and vice versa where the context so required. The headings are given to the clauses for convenience and they will not limit the meaning or scope of the clauses in any way.

2. DRAWINGS AND SPECIFICATIONS :

The contractor shall execute whole and every part of the work in the most substantial and workmanlike manner both as regards material and otherwise in every respect in accordance with the specifications. The contractor shall also conform exactly and faithfully to the design, drawings and instructions given in the respect of the work by the Engineer. The contractor shall be furnished free of charge one copy of such specification and all such designs, drawings and instructions as are not included in the printed publications.

3. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY :

- (a) The contractor shall provide at his own cost all materials (except such materials, if any as may in accordance with the contract be supplied by the Employer), plants, tools, appliances, implements, ladders, scaffolding, temporary works etc. requisite or proper for the execution of the work whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or which may be necessary for the purpose of satisfying or complying to the requirements of Engineer as to any manner as to which under these conditions he is entitled to be satisfied together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work of materials. Failing his so doing, the Engineer at the expense of the contractor may provide the same and the expenses may be deducted from any money due to the contractor under the contract and/or from his Security Deposit.

- (b) The contractor shall provide himself with requisite quantity and quality of water for carrying out the works at his own cost. If, however, piped water is supplied by the Employer, the contractor shall pay for the water at one percent of the total cost of the work done except on electrical work, air-conditioning work and furniture work. The contractor shall make his own arrangement for water connection and laying of further pipelines from the source of supply of the Employer. It should be clearly understood that the Employer does not guarantee to maintain un-interrupted supply of water and it will be incumbent on the part of the contractor to make alternative arrangement for water at his own cost in the event of any temporary break down in the water mains so that the progress of work is not held up for want of water. No claim as damages or refund of water charges will be entertained on account of such break-downs. However, if the contractor is permitted to make his own arrangement to draw water from a well, hand pump, or natural river or pond of the Employer, no charges will be made for the water drawn from the same, but the contractor will make good any damage done to the installations and ensure that the quality of water used in the work is conforming to BIS codes and provide for any treatment at his own cost.
- (c) The contractor shall be allowed to construct temporary wells in Employers' land for taking water for constructions purpose only after he has permission of the Employer in writing. No charges shall be recovered from the contractor on this account but the contractor shall be required to provide necessary safety arrangement to avoid any accident or damage to adjacent buildings, roads and service lines. He shall be responsible for any accident or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.
- (d) The Employer on no account shall be responsible for the expenses incurred by the contractor for hired ground or water obtained from elsewhere.
- (e) Subject to availability the Employer may supply power at only one point from where the contractor shall make his own arrangement for distribution including provision of electric meters, switches, fuses etc. at his own cost. These shall be in the custody of the Employer. If there is any hindrance caused to other works the contractor shall reroute or remove such temporary lines without any extra cost. Such temporary lines shall be removed after the completion of work. The cost of power consumed by the contractor shall be payable to the Employer at rates fixed by the Employer, which would be deducted from the running account bills. However the Employer does not guarantee the supply of power and no compensation for any failure or short supply of power shall be entertained.

4. AUTHORITIES, NOTICES AND PATENTS :

- (a) The contractor shall conform to any regulations and bye-laws of any corporations and of any electricity supply company and authorities with whose systems the structure is proposed to be connected, and shall before making any variations from the drawing and specifications that may be necessitated for so conforming by giving written notice to the Engineer specifying the variations proposed to be made, the reasons for making it and apply for instructions thereon. If the compliance with this clause involves any extra work not included in this contract, he shall specify these items of work and the allowance of extra payment required on their account.
- b) The contractor shall give all notices required by the said regulations or bye-laws to be given to any Authority and pay to such Authority or to any public office all fees that may be chargeable in respect of the works and lodge the receipts with the bill to the Engineer for reimbursement.

5. RATES TO INCLUDE ALL TAXES :

- (a) Rates quoted by the contractor shall include sales tax, duties, octroi, toll tax, royalties and all other taxes in respect of this contract and the Employer shall not entertain any claim whatsoever in this respect. Tendered rates are inclusive of all taxes and levies payable under the respective statutes. However pursuant to the Constitution (Forty Sixth Amendment) Act, 1982 if any further tax or levy is imposed by statutes, after the date of receipt of tenders and the contractor thereupon necessarily and properly pays such taxes or levies the contractor shall be reimbursed the amount as per the rules on producing proof of payment so made provided such payments. If any is not in the opinion of the Employer (whose decision shall be final and binding) attributable to delay in executing of work within the control of the contractor.

- (b) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorised representative of the Employer and further shall furnish such other information and documents as the Employer may require.
- (c) The contractor shall within a period of thirty days of imposition of any further tax or levy pursuant to the Constitution (Forty Sixth Amendment) Act, 1982 give a written notice thereof to the Employer that the same is given pursuant to this condition together with all necessary information relating thereto.

6. MATERIALS :

- (a) If the specification of schedule of items provide for the use of any material to be supplied by the Employer's stores or if it is required that the contractor shall use certain stores to be provided by the Employer as shown in the schedule of materials hereto annexed the contractor shall be bound to procure and shall be supplied such materials and stores as are from time to time required to be used by him for the purpose of the contract only and value of the materials so supplied at the rates specified in the said schedule of materials and of the quantities incorporated in the work may be set off or deducted from any sums then due, or thereafter to become due to the contractor under the contract or otherwise or against or from the Security deposit. All materials so supplied to the contractor by the Employer shall remain the absolute property of the Employer and the contractor shall be trustee of the materials so supplied/procured and the said materials shall not be removed/disposed of from the site of the work on any account and shall be at all times open for inspection by the Engineer or Employer. The contractor shall bear all incidental charges for cartage, storage and safe custody of all materials and against damage due to dampness, rain, sun, fire and theft and be fully responsible for their storage and maintenance. Any such material unused and in perfectly good condition in the opinion of the Employer at the time of the completion of work or termination of the contract or earlier shall be returned to the Employer at a place directed by the Engineer at contractor's cost and at rates stipulated in the said schedule but in case the Employer decides not to take back materials the contractor shall have no claim for compensation on account of any such materials supplied to him as aforesaid being unused by him or for any wastage or damage to any such materials.
- (b) If for any reason there is delay of non-supply of material as shown in the schedule, the contractor shall procure the same and complete the work in time after due intimation and approval of the Employer. The difference in price (between his procurement price and price shown in the schedule) shall be paid to the contractor. However in case approval of the Employer is not given, only suitable extension of time would be considered and no other claim of compensation/damages shall be payable by the Employer.
- (c) After completion of the work or on determination/ termination of the contract, the theoretical quantity of cement to be used in work shall be calculated on the basis of statement showing quantity of cement to be used in different items of work provided in current Schedule for the purpose printed by CPWD. In case any item is executed for which the standard constants for the consumption of cement are not available in the above mentioned statement or cannot be derived from this statement the same shall be calculated on the basis of standard formula to be laid down by the Engineer. Over this theoretical quantity of cement, shall be allowed a variation upto 3% plus/minus for works estimated cost of which as put to tender is not more than Rs. 10 lakhs and upto 2% plus/minus for works estimated cost of which as put to tender is more than Rs. 10 lakhs. The difference in the quantity actually issued to the contractor and the theoretical quantity including authorised variation, if not returned by the contractor, shall be recovered at twice the issue rate, without prejudice to the provision of other conditions regarding return of materials governing the contract. In the event of its being discovered that the quantity of cement which is less than the quantity ascertained as herein before provided (allowing variation on minus side as stipulated above) the cost of quantity of cement not so used, shall be recovered from the contractor on the basis of stipulated issue rates and cartage to site.
- (d) The provision of foregoing sub-clause shall apply Mutatis-Mutandis in the case of steel reinforcement or structural steel sections (each diameter/section or category shall be considered separately) except that the theoretical quantity of the steel shall be taken as the quantity required as per design or as authorized by the Engineer, including lappages, plus 3% wastage due in cutting into pieces. Over this theoretical quantity 2% plus/minus shall be allowed as variation due to wastage.
- (e) The provision of foregoing sub-clause shall apply Mutatis-Mutandis in the case of cables (other than under-ground cables), wires, conduits/GI pipes, GI/MS sheets used in the various items of work shall be

calculated on the basis of measurements recorded in the measurement books for the purpose of table and for assessing the consumption of materials used in the works. Over this quantity a variation of 5% plus shall be allowed for wastage of materials during execution in case of cables (other than under-ground cables), wires, conduits/GI pipes, and 10% plus in case of GI/MS sheets.

- (f) The provisions made above are without prejudice to the right of the Employer to take action against the contractor under the conditions of the contract for not doing the work according to the prescribed specifications.

7. TESTING OF MATERIALS :

The contractor shall provide assistance, instruments, materials, labour and any other arrangement normally required for testing, checking of materials and workmanship as stipulated in the specifications and by statutory authority at his own cost. The Employer has the right to appoint the testing authorities. The contractor shall pay for the cost of test samples, its packing, transportation including testing fees. Failing his so doing, the Engineer at the expense of the contractor shall provide the same and the expenses may be deducted from any money due to the contractor under the contract and/or from the Security deposit or proceeds thereof or of a sufficient portion thereof.

8. CONTRACTOR'S ENGINEERS/FOREMAN AND WORKMEN :

- (a) Annexure III refers the contractor shall give all necessary personal superintendence during the execution of the work and as long thereafter as the Engineer may consider necessary until the expiration of defects liability period. The contractor shall employ competent Site-Engineer/Foreman as per CPWD norms and as approved by the Engineer whose qualification must conform to the requirement specified by the Engineer who shall be constantly in attendance of the work while the men are at work. Any direction, explanations, instructions or notices given by the Engineer to such Site-Engineer or Foreman or any other authorised agent shall be held to be given to the contractor.
- (b) The contractor shall on the request of the Engineer immediately dismiss from the works any person employed thereon who may in the opinion of the Engineer be unsuitable or incompetent or who may in the opinion of the Employer misconduct himself.

9. ACCESS :

- (a) The Engineer and the Employer or its representative shall at all reasonable time have free access to the works and/or workshops, factories or other places the materials are being prepared or constructed for the contract and also to any place where the materials are lying or from which they are being obtained and the contractor shall give every facility to them for inspection. Except the representatives of statutory authorities and those mentioned above no other person shall be allowed on the works at any time without the permission of the Engineer.
- (b) If any work is to be done at a place other than the site of works, contractor shall obtain written permission of the Engineer.

10. VARIATION AND PRICE FOR VARIATION :

- (a) The Engineer with the approval of the Employer shall have power to make any alterations / omissions / additions and/or substitutions from the original specifications, drawings, designs and written instructions and such alterations, omissions, additions, substitutions shall not invalidate the contract and any altered, additional, or substituted work which the contractor may be directed to do in the manner specified above as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work. The rates for such altered, additional or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order.
- (b) If the rates for the altered, additional or substituted work are specified in the contract for the work, the contractor is bound to carry out the altered, additional, or substituted work at the same rates as are specified in the contract for the work.

- (c) If the rates for the altered, additional, or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for a similar class of work as are specified in the contract for the work.
- (d) If the rates for the altered, additional or substituted work can not be determined in the manner specified in the sub-clause (b) & (c) above, then the contractor shall, within ten working days from the date of receipt of the order to carry out the work through notice in writing, inform the Engineer of the rate which it is his intention to charge for such class of work, supported by analysis of the rate claimed which shall be based on actual cost of work plus 10% as contractor's profit and over-heads except in case of departmental materials for which contractor's profit and over-heads shall be 2.5%. When such notice has been given, the Engineer with the consent of the Employer may agree to such a rate but if the Engineer does not agree to the contractors' rate the Engineer may cancel his order to carry out such class of work and arrange to carry out in such a manner as he may consider advisable.
- (e) Under no circumstances, the contractor shall suspend the work on the plea of non-settlement of rates of items falling under the clause.

11. FAULTY MATERIALS, WORKMANSHIP AND DEFECTS AFTER COMPLETION :

- (a) The Engineer shall have powers to require the removal from the site of all materials and work which in his opinion are not in accordance with specifications and in case of default, the Engineer shall be at liberty to employ other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials to be substituted thereof and in case of default the Engineer may cause the same to be supplied and all cost which may attend such removal and/or substitution are to be borne by the contractor.
- (b) If it shall appear to the Engineer or to the Employer based on Audit/Technical Examination, that any work has been executed with unsound imperfect or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to the contracted for or otherwise not in accordance with the contract, any defects shrinkage or other faults which may appear within the defects liability period of twelve months from the date of completion arising in the opinion of the Engineer, the contractor shall on demand in writing which shall be made within twelve months of the completion of the work from the Engineer specifying the work, materials, articles defects or other faults complained of notwithstanding that the same may have been passed certified and paid for, forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own cost. In case of any such failure, the Engineer may rectify or remove or re-execute the work or remove and replace with others, the material or articles complained of as the case may be at the risk and cost in all respects of the contractor.
- (c) In lieu of rectifying the work not done in accordance with the contract, the Employer may, allow such work to remain, and in that case make allowance for the difference in value, together with such further reduction as in his opinion may be reasonable.
- (d) Provided always that nothing in this clause shall relieve the contractor from his liability to execute the works in all respects in accordance with the terms and conditions of this contract, or from his liability to make good all defects.

12. WORKS TO BE OPEN FOR INSPECTION :

- (a) All work under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer to visit the works shall have been given to the contractor either himself be present to receive order and instruction or have a responsible agent duly accredited in writing present for that purpose.
- (b) The contractor shall give not less than seven days notice in writing to the Engineer before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured

and correct dimension thereof be taken before the same is so covered up or placed beyond the reach of measurement and shall not cover up and place beyond the reach of measurement, any work without the consent in writing of the Engineer and the Engineer shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurement without such notice having been given or the Engineer's consent obtained the same shall be uncovered at the contractors expense or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

13. ASSIGNMENT FOR SUB-LETTING :

- (a) The contract shall not be assigned or sublet without the written approval of the Employer and if the contractor shall assign or sub-let his contract or attempt to do so or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so or if any bribe, gratuity or gift, loan perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor or any of his servants or agents to any person in the employment of the Employer in any way relating to his office or employment, or if any such employee or person shall become in any way directly or indirectly interested in the contract, the Employer shall have the power to adopt any of the courses specified under clause – 23 as may be best suited to the interest of the Employer and in the event of any of the courses being adopted the consequences specified in the said clause shall ensure.
- (b) Where the contractor is a partnership firm, the approval in writing of the Employer shall be obtained before any changes in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concerns such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement hereunder the partnership firm would have the right to carry out the work hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned or sub-let in contravention of clause 13(a) and the same action may be taken and the same consequences shall ensure as provided in the said clause 13(a).

14. INDEMNIFYING AGAINST DAMAGES TO PERSONS, PROPERTY AND STATUTES :

The contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of work.

- (a) The contractor shall be responsible for all injury to persons, animals or things, and for all damage, whether such injury or damage arises from carelessness or accident in any way connected therewith. This clause shall be held to include inter-alia any damage due to causes as aforesaid to work, building (whether immediately adjacent or otherwise) and to roads, streets, footpaths, bridges or ways as well as all damage caused to the buildings and works forming the subject of this contract by inclemency of weather. The contractor indemnifies the Employer and holds him harmless in respect of all expenses arising from such injury or damages as aforesaid and also in respect of any award of compensation or damage consequent upon such claim including legal costs.
- (b) The contractor shall reinstate all damage of every sort mentioned in this clause, so as to deliver the whole of the contracted works complete and perfect in every respect so as to make good and otherwise satisfy all claims for damage as aforesaid to the property of third parties.
- (c) The contractor also indemnifies the Employer against all claim which may be made upon the Employer for acts during the currency of this contract by any employee or representative of an employee of the contractor or any sub-contractors, employed by him, for any injury to or loss of life of such employees, or for compensation payable under any law for the time being in force to any workmen or to the representative of any deceased or incapacitated workmen.
- (d) The contractor also indemnifies the Employer against all claim which may be made upon the Employer for acts during the currency of this contract by the Central/State Government or local Municipal authorities for the non-compliance of any laws, regulations, rules pertaining to wages act, safety act in force and any

amendments thereof in respect of all labour and apprentices directly or indirectly employed in the work under this contract.

- (e) The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensation costs, charges and/or expenses arising or accruing from or in respect of any such claim and/or damages as aforesaid from any sum or sums due or to become due to the contractor or security deposit.
- (f) The contractor shall indemnify the Employer against any action, claim or proceedings relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against the Employer in respect of any such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise there from. Provided that the contractor shall not be liable to indemnify the Employer if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the said Employer or his authorised representative.

15. LIEN IN RESPECT OF CLAIM IN OTHER CONTRACTS :

- (a) Any sum of money due and payable to the contractor including the security deposit under the contract may be withheld or retained by way of lien by the Employer or Government or any other contracting person or persons against any claim of the Employer or Government or such other persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Employer or Government or with such other persons.
- (b) It is agreed term of the contract that the sum of money so withheld or retained under this clause by the Employer will be kept withheld or retained as such by the Employer or till his claim arising out of in the same contract or any other contract is either mutually settled or determined by the Arbitrator if the contract is governed by arbitration clause or by the competent court as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

16. WITHHOLDING LIEN IN RESPECT OF SUMS CLAIMED :

- (a) Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the contractor, the Employer shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security deposit, if any deposited by the contractor and for the purpose aforesaid the Employer shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security deposit being insufficient to cover the claimed amount or amounts or if no security deposit has been taken from the contractor, the Employer shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which at any time thereafter may become payable to the contractor under the same or any other contract, with the Employer or any contracting person pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money so withheld or retained under the lien referred above by the Employer will be kept withheld or retained as such by the Employer till the claim arising out of or under the contract is determined by the Arbitrator (if the contract is governed by the arbitration clause) or by the competent court as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company the Employer shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum payable in any Partner/Limited company as the case may be whether in his individual capacity or otherwise.

- (b) The Employer shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract etc. to be made after payment of the final

bill and if as a result of such audit and technical examination any sum is found to have been over paid in respect of any work done by the contractor under the contract or any work claimed by him to have been done by him under the contract and found not to have been executed the contractor shall be liable to refund the amount of over payment and it shall be lawful for the Employer to recover the same from him in the manner prescribed in sub-clause (a) of this clause or in any other manner legally permissible and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by the Employer to the contractor.

Provided that the Employer shall not be entitled to recover any sum over-paid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Employer on the one hand and the contractor on the other hand, under any term of contract permitting payment for work after assessment by the Employer.

17. IN-CASE OF DEATH OF CONTRACTOR :

Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Employer shall have the option of terminating the contract without compensation to the contractor.

18. SUB-CONTRACTORS :

The Employer reserves the right to use the premises and any portion of the site for the execution of any work not included in the contract. The contractor is to afford all reasonable facilities to all sub-contractors, specialists, merchants, tradesmen and others who may at any time be appointed by the Employer for executing any work or supplying any goods relating to the constructions, servicing, equipping or furnishing of the work under this contract.

19. COMPLIANCE TO LABOUR LAWS AND APPRENTICE ACT. :

The contractor shall comply with all the provisions of the minimum wages Act, 1948, contract labour (regulation and abolition) Act, 1970, and rules and orders framed there under and other labour laws affective contract labour and Apprentice Act, 1961 and the rules and orders framed there under that may be in force or brought into force from time to time.

Contractor shall obtain a valid licence under contract labour (R&A) Act 1970 and contract labour (R&A) Central rules 1971 before commencing work and which should be valid till the completion.

20. COMPENSATION FOR DELAY :

(a) The time for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be deemed to be the essence of the contract on the part of the contractor. The work shall through out the stipulated period of the contract be proceeded with all due diligence and the contractor shall pay as compensation an amount equal to 1% or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the amount of the whole work as shown in the agreement, for every week that the work remains uncommenced or unfinished after the proper dates.

(b) And further to ensure good progress during the execution of the work, the contractor shall be bound in all cases in which the time allowed for any work exceeds one month (save for special jobs) to complete one-eighth of the whole of the work before one-fourth of the whole time allowed under the contract as elapsed; three-eighth of the work before one-half of such time has elapsed, and three-fourth of the work before three-fourth of such time has elapsed. However for special jobs if the contractor has submitted a time schedule and the same has been accepted by the Employer, the contractor shall comply with the said time schedule. In the event of the contractor failing to comply with this condition, he shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the said caused of the work for every week that the due quantity of work remains in complete. Provided that the entire compensation to be paid under the provisions of this clause shall not exceeds ten percent on the caused of the work as shown in the agreement.

21. DAMAGED TO WORKS IN CONSEQUENCE OF HOSTILITIES OR WAR-LIKE OPERATIONS :

- (a) The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the employer and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or war-like operations the contractor shall, when ordered in writing by the Employer, remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking, removal of serviceable materials and for the reconstruction of all works ordered by the Employer such payment being in addition to compensation up to the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for the compensation shall be assessed by the Employer. The contractor shall be paid for the damaged/ destruction suffered and for restoring the material at the rates based on the analysis of rates tendered for in accordance with the provision of this agreement. The certificate of all the Employer regarding the quality and the quantity of materials and the purpose for which they were collected shall be final and binding on the contractor.
- (b) Provided always that no compensation shall be payable for any loss in consequence of hostilities or war-like operations (i) unless the contractor had taken all such precautions against Air Raid as are deemed necessary by the A.R.P. Officers or the Employer, (ii) for any materials etc, not on the site of the work or for any tools and plant, machinery, scaffolding, temporary buildings and other things not intended for the work.
- (c) In the event of the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Employer.

22. EXTENSION OF TIME :

- (a) If the contractor shall desire an extension of time for the completion of the work on the grounds of his having been unavoidably hindered in its execution or any other ground, he shall apply in writing to the Employer within thirty days of the date of hindrance on account of which he desires extension as aforesaid, and the Employer shall, in his opinion (which shall be final) reasonable grounds shown therefore, authorize such extension of time if any, which may in his opinion be necessary or proper.
- (b) In the event the value of work exceeds the value of the bill of quantities owing to variations the contractor shall be entitled to ask for extension of time in proportion to the increase value of the work.

23. SUSPENSION OF WORK BY CONTRACTOR :

- (a) The Employer may without prejudice to his right against the contractor in respect of any delay or inferior workmanship or otherwise or to any claims for damages in respect of any breaches of the contract and without prejudice to any rights or remedies under any of the provisions of the contract or otherwise and whether the date for completion has or has not elapsed by notice absolutely determine the contract in any of the following cases :
 - (i) If the contractor having been given by the Engineer a notice to rectify reconstruct or replace any defective work or that the work is being performed in any inefficient or otherwise improper or unworkman-like manner shall omit to comply with the requirements of such notice for a period of seven days thereafter or if the contractor shall delay or suspend the execution of the work so that in the judgement of the Employer (which shall be final and binding) he will be unable to ensure completion of the work by the date for completion or he has already failed to complete the work by that date.
 - (ii) If the contractor being a company shall pass a resolution or the court shall make in order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court of creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.

- (iii) If the contractor commits breach of any of the terms and conditions of this contract.
 - (iv) If the contractor commits any acts mentioned in Clause 13 hereof.
- (b) When the contractor has make himself liable for action under any of the cases aforesaid the Employer shall have the following powers :
- (i) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of the Employer shall be conclusive evidence). Upon such determination or rescission the security deposit of the contractor shall be liable to be forfeited and shall be absolutely at the disposal of the Employer.
 - (ii) The Engineer may employ labour paid by the Employer and to supply materials to carry out the work or any part of the work debiting the contractor with the cost of the labour and the price of the materials (of the amount of which cost and price certified by the Engineer shall be final and conclusive against the contractor and crediting him with the value of the work done in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Engineer as to the value of work done shall be final and conclusive against the contractor, provided always that action under the sub-clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the Employer are less than amount payable to the contractor at this agreement rate the difference should not be paid to the contractor.
 - (iii) After giving notice to the contractor to measure up the work of the contractor and to take such parts thereof as shall be unexecuted out of his hands and to give it to another contractor to complete in which case in any expenses which may be incurred in excess of the sum which would have been paid to the original contractor if the whole work had been executed by him (of the amount of which exceed the certificate in writing of the Engineer shall be final and conclusive) shall be borne and paid by the original contractor and may be deducted from any money due to him by the Employer under this contract or any other account whatsoever or from his security deposit.
 - (iv) In the event any one or more of the above courses being adopted by the Employer the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provisions aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

24. SECURED ADVANCE :

The contractor on signing an indenture in the form specified by the Employer during the progress of the execution of the work may be paid if agreed by the Employer upto 75% of the estimated value which shall take into account the market value and contractors tendered rates for the finished items of any material which in the opinion of the Engineer is likely to be incorporated in the work within next three months, are non perishable and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. When materials on account of which an advance has been made under this clause are incorporated in the work the amount of such advance shall be deducted from the next payment made under any of the clause or clauses of the contract.

25. CERTIFICATES AND PAYMENTS :

- (a) No payments shall be made for a work estimated to cost rupees ten thousand or less till the whole of the work shall have been completed and certificate of completion given. But in the case of a work estimated to cost more than rupees ten thousand, the contractor shall, on submitting the bill be entitled to receive a monthly payment proportionate to the part of the work executed, and to the satisfaction of the Engineer, whose certificate of the sum so payable shall be final and conclusive against the contractor, provided the

amount of work done is as per the value of intermediate certificate or for a lesser amount as the discretion of the Engineer as mentioned in the NIT. All such intermediate payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed and shall not preclude the requiring of bad, unsound, imperfect or unskilled work to be removed and taken away and reconstructed or reerected or be considered as an admission of the due performance of the contract, of any part thereof in any respect or the accruing of any claim not shall it conclude. Determine or effect in any way the powers of the Employer under these conditions or any of them as to the final settlement and adjustment of the accounts or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within two months of the date fixed for the completion of work or of the date of the certificate of completion furnished by the Employer and payment shall be made within three months if the value of the completed works is up to Rs. Two lakhs and in six months if the same exceeds Rs. Two lakhs of the submission of such bill. If there shall be any dispute about any item or items of the works then the undisputed item or items only shall be paid within the said period of three months or six months as the date may be.

- (b) Whenever there is likely to be delay in recording detailed measurement for making a running payment, advance payment without detailed measurements for work done worked out at 75 per cent of the tendered rates for assessed quantities may be made in running account bills by the Employer on the basis of a certificate from the Engineer. The advance payments so allowed shall be adjusted in the subsequent running bills by taking detailed measurements thereof. Final payments shall be made only on the basis of detailed measurements.
- (c) A bill shall be submitted by the contractor each month on or before one date fixed by the Engineer on printed forms obtainable from the Engineer's office. The Engineer shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, as far as admissible, adjusted as far as possible, before the expiry of ten days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid the Engineer may cause action within seven days of the date fixed as aforesaid an authorised representative to measure up the said work in the presence of the contractor whose signature to the measurement will be sufficient warrant and the Engineer may prepare the bill from such measurements.
- (d) Before taking any measurement of any work the Engineer or his authorised representative deputed by him shall give reasonable notice to the contractor. If the contractor fails to attend after such notice or fails to sign or to record the difference within a week from the date of measurement in the manner required by the Engineer then in any such event the measurements taken by the Engineer or by the authorised representative deputed by him as the case may be, shall be final and binding on the contractor and the contractor shall have no right to dispute the same.
- (e) The charges in the bills shall always be entered at the rates specified in the agreement or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the agreement at the rate determined as per clause 10. However in case of partially executed items of work, the Employer at his discretion allows proportionate rates for such items of work as determined by the Engineer whose certificate of the sum so payable shall be final and conclusive against the contractor.

26. SECURITY DEPOSIT :

- (a) A sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. In addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as Performance Security within the period prescribed for commencement of work in the letter of award issued to him.
- (b) In case a fixed deposit receipt of any scheduled bank is furnished by the contractor to the Employer as part of the security deposit and the bank goes into liquidation or for any reason is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security in the Employer to make good the deficit of such sum from the running bill as mentioned above. Such deductions will be held by the Employer by way of security deposit, provided always that the Employer for this purpose shall be entitled to recover the said percentage of the amount from each running bill till the balance of the amount of security deposit is

realised. All compensation of the other sums of money payable by the contractor under the terms of the contract may be deducted from the security deposit or from the interest arising there from or from any sums which may be due to or may become due to the contractor by the Employer on any account whatsoever and in the event of his security deposit being reduced by reason of any such deductions aforesaid, the contractor shall within ten days make good in cash or further fixed deposit receipt pledged in favour of the Employer. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the earnest money if deposited at the time of tenders will be treated as part of the security deposit.

- (c) The contractor if he so desires may furnish fixed deposit receipt in advance towards the security deposit. Such fixed deposit receipt shall be of a minimum value of Rs.25000/- each (The last such fixed deposit receipt could be of a lower value on the basis of the amount). In case any recovery effected from running account bills, such recovered amount shall not be replaced with fixed deposit receipt. It is in the contractor's interest to keep a watch about the adequacy of the fixed deposit receipt submitted.
- (d) No partial refund of security deposit shall be made during the defect liability period. In case the final bill is not settled within deposited period for reasons beyond control and the Employer is satisfied that the security deposit is not required for adjustment of Employers dues or whatsoever dues either in this or any other contract then this security deposit either in full or in part could be refunded at the sole discretion of the Employer.

"However release of security deposit would be only after written clearance of labour officer regarding no dues or claims is received".

- (e) In case of termination of contract, the security deposit shall be forfeited and amount necessary to make up this amount shall be recovered from money due to the contractor under this contract, or any other contract with the Employer.

27. COMPLETION CERTIFICATE :

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Employer and within ten days of the receipt of such notice the Engineer shall inspect the work. If there is no defect in the work the Employer shall furnish the contractor with a certificate of completion otherwise a certificate of completion indicating defects shall be issued but the work shall not be considered to be completed until the contractor shall have removed from the premises on which the work shall be executed all the scaffolding, surplus material, rubbish, and all huts and sanitary arrangements required for his work, people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor and cleaned of the dirt, splashes, droppings of finishing items from all wood work, doors, windows, walls, floors or other parts of any building, in upon or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof. If the contractor shall fail to comply with requirements of this clause on or before the date fixed for the completion of the work, the Employer may at the risk and cost of the contractor take action as he may think fit and the contractor shall have no claim except for any sum actually realised by the sale thereof.

28. ESCALATION :

- (a) If the prices of materials not being supplied by the Employer and/or wages of labour required for execution of the work increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contractor shall accordingly be varied subject to the condition the compensation for escalation in prices shall be available only for the work done during the stipulated period of the contract including such period for which the contract is validly extended under the provisions of Clause 22 of General Conditions of Contract without levy of compensation under Clause 20 of General Conditions of Contract and also subject to the condition that no such compensation shall be payable for a work for which the stipulated period of completion is eighteen months or less. Such compensation for escalation in the prices of materials and labour when due, shall be worked out based on the following provision.
 - (i) The base date for working out such escalation shall be the last date on which the tenders were stipulated to be received.

(ii) The cost of work on which escalation will be payable shall be reckoned as 85% of the work as per the bills, running or final, and from this amount the value of material supplied by the Employer and proposed to be recovered in the particular bill shall be deducted before the amount of compensation for escalation is worked out. In case of materials brought to site for which secured advance is included in the bill full value of such materials as assessed by the Engineer in charge (and not the reduced amount for which secured advance has been paid), shall be included in the cost of work done for operation of this clause. Similarly when such materials are incorporated in the work, the secured advance is deducted from the bill the full-assessed value of the materials originally considered for operation of this clause shall be deducted from the cost of work shown in the bill running or final. Further the cost of work shall not include any work for which payment is made for any item at prevailing market rates.

(iii) The compensation for escalation for materials & labour shall be worked out as per the formula given below:

$$VM = W \times \frac{A}{100} \times \frac{(MI - Mlo)}{Mlo}$$

VM – Variation in material cost i.e. increase or decrease in the amount in rupees to be paid or recovered.

W – Cost of work done worked out as indicated in sub para (ii) above.

A – Component of materials expressed as per cent of the total value of work and is predetermined as 75.

MI – Index numbers of Wholesale prices in India for all commodities published by the Reserve Bank of India for the period under reckoning.

Mlo – Index numbers of Wholesale prices in India for all commodities published by the Reserve Bank of India on the date of receipt of tenders.

$$VL = W \times \frac{B}{100} \times \frac{(LI - Llo)}{Llo}$$

VL – Variation in labour cost i.e. increases or decrease in the amount in rupees to be paid or recovered.

W – Value of work done, worked out as indicated in sub para (ii) above.

B – Component of labour expressed as per cent of the total value of work and is predetermined as 25.

LI – All India consumer price index numbers for industrial workers published by the Reserve Bank of India for the period under reckoning as for the period under consideration.

Llo – All India consumer price index numbers for industrial workers published by the Reserve Bank of India and valid on the stipulated date of receipt of tenders.

(b) The following principle shall be followed while working out indices mentioned in sub- para (iii) above.

(i) The compensation for escalation shall be worked out at half yearly intervals and shall be with respect to the cost of work done during the six calendar months of the said work. The first such payment shall be made at the end of the six calendar months of the said work. The first such payment shall be made at the end of the six months after the month (excluding) in which the tender was accepted and thereafter as six monthly intervals. At the time of completion of work, the last period for payment might become less than six months, depending on the actual date of completion.

(ii) The index (MI or LI) relevant to any six months for which such compensation is paid shall be the arithmetical average of the indices relevant to the six calendar months. If the period upto date of completion after the six months covered by the last such instalment of payment is less than six months, the index MI or LI shall be the average of the indices for the months falling within that period.

(iii) The base index (Mlo or Llo) shall be the one relating to the month in which the tender was stipulated to be received.

- (c) In the event the price of materials and / or wages of labour required for execution of the work decreases there shall be downward adjustment of the cost of work so that the price of materials and/or wages of labour shall be deductible from the cost of work under this contract and in this regard formula herein before stated under this clause shall mutatis mutandis apply provided that no such adjustment for the decrease in the prices of materials and/or wages of labour aforementioned would be made in case of contracts in which the stipulated period of completion of the work is six months or less.
- (d) Employer shall have the discretion to permit IEEMA (Indian Electrical & Electronics Manufacturer's Association) clause for Escalation In Case of specialized works e.g. lifts and electrical and Mechanical Installations etc. where the price variation is not similar to building works.

29. ARBITRATION :

- (a) Except where otherwise provided in the contract, all questions and disputes relating to the interpretation of the specifications, designs, drawings and instructions herein before mentioned, and as to the quality or workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, specifications, estimates, instructions, orders on these conditions or otherwise concerning the works, or the execution of failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the person appointed by the Director General, Council of Scientific and Industrial Research at the time of such dispute or if there be no Director General, Council of Scientific and Industrial Research, The Administrative Head of the Council of Scientific and Industrial Research at the time of such appointment. Any party shall appoint the Arbitrator within 30 days from the receipt of a request. The arbitrator to whom the matter is originally referred being unwilling or unable to act for any reason the Director General shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which his predecessor left it. The Arbitrator shall give a speaking award. The award of the Arbitrator shall be final and binding on the parties. The cost of the Arbitrator shall be borne equally by both the parties.
- (b) It is also a term of the contract that the party invoking arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute.
- (c) It is also a term of the contract that if the contractor does not make any demand for arbitration in respect of any claim in writing within 90 days of receiving the intimation from the Employer that the final bill is ready for payment, the claim of the contractor will be deemed to have been waived and absolutely barred and the Employer shall be discharged and released of all liabilities under the contract in respect of these claims.
- (d) Subject as aforesaid the provision of the arbitration and Conciliation Act. 1996 or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the Arbitration reference under this clause.

30. PERFORMANCE GUARANTEE :

Performance guarantee may be taken from the contractor before the award of the work, by the officer authorised to award the contract if and where considered necessary, to ensure that a part or whole of the contract is completed by the contractor. In case of non-performance, this guarantee could be encashed.

SPECIAL CONDITIONS

1. These special conditions are meant to amplify the general specifications and general conditions of contract.
2. Contractor will take all necessary actions to provide detail design, drawings, revised bill of quantities if any, execution at site after necessary approval by department, commissioning as directed for the work. All the above must be carried out within stipulated time frame as laid down by the department.
3. Work shall be done as per CPWD specification.

In case of any discrepancy the order of precedence in interpretation shall be as under :

- (a) Schedule of quantities
- (b) Drawings
- (c) Additional Conditions.
- (d) General Conditions of Contract
- (e) Special Conditions
- (f) Additional Technical Specifications.
- (g) CPWD latest civil work specifications.
- (h) I.S. Codes
- (i) International codes.
- (j) Best Engineering practice.

4. STEEL

- (a) Steel to be issued as stated elsewhere in the contract shall be for reinforcement bars for RCC work. For all other items of steel work the contractor shall procure the same.
- (b) Reinforcement bars for RCC work will be issued in available coils and straight lengths. No claim for straightening the bars whatsoever shall be entertained.
- (c) Issue of steel of diameters above 10 mm dia will be regulated on sectional weight basis, weight being calculated with the help of the standard sectional weights as given in the CPWD LATEST SPECIFICATIONS FOR CONVERSION OF LENGTH TO WEIGHT. However, for bars up to and including 10 mm dia the following procedure shall be adopted. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The actual weight of steel issued shall be modified to take into account the variations between the actual and the standard co-efficient and the contractor's account will be debited by the cost of this modified quantity only.
- (d) For theoretical consumption of steel reinforcement bars will be balanced diameter wise for the purpose of penal recovery as envisaged in the contract.

5. CEMENT : Cement to be issued as stated elsewhere in the contract shall be only for site work. For factory made products such as Pre-cast tiles, hollow concrete blocks. RCC pipes etc. cement shall not be issued.
6. Unless otherwise provided in the schedule of quantities the rates tendered by the contractor shall apply for all heights, lifts, leads and depths of the work and nothing extra shall be payable on this account.
7. The surplus excavated earth, which is beyond the requirement of the Employer's work, may be allowed by the Employer to be disposed off by the contractor on his own or sell the surplus excavated earth to private parties at the discretion. But nothing extra will be paid for the cartage or disposal of surplus earth if the same is not required on any other work of the Employer.

ADDITIONAL CONDITIONS

1. The structural and architectural drawings shall at all times be properly correlated before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and drawings relating to the relevant item the former shall prevail unless and otherwise given in writing by the Engineer.
2. No payment shall be made to the contractor for any damage caused by the rain, snowfall, floods or any other natural cause whatsoever during the execution of work. The damage to work will be made good by the contractor at his own cost, and no claim on this account shall be entertained.
3. All materials used shall be as per specifications and ISI marked whenever applicable ISI marking referred relate to latest BIS code as published by Bureau of Indian Standards up to 30 days before the date of opening the tender.
4. The contractor shall give a performance test of the entire installation(s) as per standard specifications and / or as directed by the Engineer and will also submit test certificates as are required by Municipal / Electrical authority or any other authority. Nothing extra shall be payable for the same other than the fees paid to such authorities, which shall be reimbursed on production of receipts.

INDENTURE FOR SECURED ADVANCE

The indenture made the _____ day of _____ 2002 between _____
(hereinafter called the contractor which expression shall where the content as admits or implies be deemed to include his heirs, executors, administrators and permitted assignees) of the one part and Council of Scientific & Industrial Research, New Delhi, a Society registered under the Societies Registration Act, 1860 (hereinafter called the Employer which expression shall include its successors and assignees and authorised officers of the Society) of the other part.

WHEREAS by an agreement dated _____ (hereinafter called the said agreement) the contractor has agreed AND WHEREAS the contractor has applied to the Employer that he may be allowed advances on the security of materials absolutely belonging to him and brought by him to the site of the works the subject of the said agreement for use in the construction of such of the works as he has undertaken to execute all rates fixed for the finished work (inclusive of the cost of materials and labour and other charges). AND WHEREAS the Employer has agreed to advance to the contractor the sum of Rs. _____ (Rupees _____) on the security of materials the quantities and other particulars of which are detailed in accounts of secured advances attached to the running account bill for the said works signed by the contractor on _____

and the Employer has reserved to himself the option of making any further advance or advances on the security of other materials brought by the contractor to the site of the said works. Now THIS INDENTURE WITNESSETH that in pursuance of the said agreement and in consideration of the sum of Rs. _____ on or before the execution of these presents paid to the contractor by the Employer (the receipt whereof the contractor doth hereby acknowledge and of such further advances (if any) as may be made to him as aforesaid the contractor doth hereby convenient agree with the Employer and declare as follows :-

1. That the said sum of Rs. _____ advanced by the Employer to the contractor as aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the contractor in or towards expediting the execution of the said works and for no other purpose whatsoever.
2. That the materials detailed in the said account of required advance which have been offered to and accepted by the Employer as security are absolutely the contractor's own property and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the contractor indemnifies the Employer against all claims to any materials in respect of which an advance has been made to him as aforesaid.
3. That the materials detailed in the said account of secured advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the contractor solely in the execution of the said works in accordance with the directions of the Engineer and in the terms of the said agreement.
4. That the contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protections against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the contractor's custody and on his own responsibility and shall at all times be open to inspection by the Employer or any officer authorised by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Engineer.
5. That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Employer or any Officer authorised by him on that behalf.

6. That the advances shall be repayable in full when or before the contractor receives payments from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. However, if any intermediate payments are made to the contractor on account of work done then on the occasion of each such payment the Employer will be at liberty to make a recovery from the contractor's bill for such payment by deducting there from the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.
7. That if the contractor shall at any time make any default in the performance or observance in any respect of any of the terms of provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing to the Employer shall immediately on the happening of such default be repayable by the contractor to the Employer together with interest thereon at twelve per cent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the Employer in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the contractor and the contractor hereby covenants and agrees with the Employer to repay and pay the same respectively to him accordingly.
8. That the contractor hereby charges all the said materials with the repayment to the Employer of the said sum of Rs. _____ and any further sum or sums advanced as aforesaid and all costs charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the powers contained therein if and whenever the covenant for payment and repayment herein before contained shall become enforceable and the money owing shall not be paid in accordance therewith the Employer may at any time thereafter adopt all or any of the following courses as he may deem best.
- (a) Seize and utilise the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provisions in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and amount due in respect of advances under these presents and crediting the contractor with the value of work done as if he had carried in out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor he is to pay same in the Employer on demand.
 - (b) Removed and sell by public auction and seized materials or any part thereof and out of the moneys arising from the sale retain all the sum aforesaid repayable or payable to the Employer under these presents and pay over the surplus (if any) to the contractor.
 - (c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the contractor under the said agreement.
9. That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.

In witness whereof the said _____ and _____ by the order and direction of the Employer have hereunto set their respective hands the day and year above written.

Signed sealed and delivered

By the said contractor : _____

In the presence of

Signature : _____

Name : _____

Address : _____

Signed by : _____

By the order and direction

Of the Employer : _____

In the presence of

Signature : _____

Name : _____

Address : _____

ADDITIONAL CONDITIONS OF CEMENT AND STEEL**CONDITIONS FOR CEMENT**

1. The contractor shall procure 33 grade (conforming to IS:269) or 43 grade Conforming to IS:8112) ordinary Portland cement, as required in the work, from reputed manufacturers of cement, having a production-capacity of one million tonnes per annum or more, such as ACC, L&T, J. P. Rewa, Vikram, Shri. Cement, Birla jute and Cement Corporation of India etc. as approved by Ministry of Industry, Government of India, and holding licence to use ISI certification mark for their product whose name shall be got approved from Engineer-in-charge. Supply of cement shall be taken in 50 Kg. Bags bearing manufacturer's name and ISI marking, samples of cement arranged by the contractor shall be taken by the Engineer-in-charge and got tested in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within week's time or written order from the Engineer-in-charge to do so.
2. The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer-in-charge.
3. The cement go-down of the capacity to store a minimum of 2000 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made. Double lock provisions shall be made to the door of the cement go-down. The keys of one lock shall remain with the Engineer-in-charge or his authorized representative and the key of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement go-down. The contractor shall facilitate the inspection of the cement go-down by the Engineer-in-charge at any time.
4. The contractor shall supply free of charge the cement required for testing. The Cost of tests shall be borne by the contractor.
5. The actual issue and consumption of cement on work shall be regulated and Proper accounts maintained as provided in Clause 6 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in Clause –6 of the contract and shall be governed by conditions laid therein.
6. Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-charge.

CONDITIONS FOR STEEL

1. The contractor shall procure steel reinforcement bars conforming to relevant BIS codes from main producers as approved by the Ministry of Steel. The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work. Samples shall also be taken and got tested by the Engineer-in-charge as per the provisions in this regard in relevant BIS Codes. In case the test results indicate that the steel arranged by the contractor does not conform to BIS codes, the same shall stand rejected and shall be removed from the site of work by the contractor at his cost within a week's time from written orders from the Engineer-in-charge to do so.
2. The steel reinforcement shall be brought to the site in bulk supply of 10 tonnes or more as directed by the Engineers-in-charge.
3. The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
4. For checking nominal mass, tensile strength, bend test, re-bend test etc. Specimen of sufficient length shall be cust from each size of the bar at random at frequency not less than that specified below :

Size of Bar	For consignment below 100 tonnes	For consignment over 100 tonnes
Under 10mm dia	One sample for each 25 tonnes or part thereof	One sample for each 40 tonnes or part thereof
10mm to 16mm dia	One sample for each 35 tonnes or part thereof	One sample for each 45 tonnes of part thereof
Over 16mm dia	One sample for each 45 tonnes or part thereof	One sample for each 50 tonnes of part thereof

5. The contractor shall supply free of charge the steel required for testing. The cost of tests shall be borne by the contractor.
6. The actual issue and consumption of steel on work shall be regulated and proper Accounts maintained as provided in Clause-6 of the contract. The theoretical Consumption of steel shall be worked out as per procedure in Clause-6 of the contract and shall be governed by conditions laid therein.
7. Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.

AMENDMENTS-CONDITIONS OF CONTRACT FOR WORKS

SL. NO.	PAGE	PARA	MODIFY
1.	8	After para 5	Add a new para 5A:- "SUFFICIENCY OF TENDER the contractor shall be deemed to have satisfied himself before tendering as to correctness and sufficiency of the tender for the works and the rates and prices quoted in the schedule of items, which rates and prices shall, except as otherwise provided, cover all his obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works."
2.	10	6	Add sub para(g) as "in case of easy availability of approved quality of cement and steel in the open market it will be Employer's discretion to make these items as contractor's supply."
3.	11	10	Add sub para 10(f) as "Deviation Limits" Building Work 30% Maintenance / emergency works 50% Foundation Works 100% Services Works 30%
4.	20	After para 30	Add Para 31 to as under : "DISMANTLED MATERIAL the contractor shall treat all material dismantled during dismantling of a structure, services subsystems / installations, excavation of the site for a work etc., as employer's property and such material shall disposed of to the best advantage of the Employers according to the instructions issued in writing by the Engineers. Add Annexure III as below :- <u>Contractor's site Super intendance</u> Staff to be employed by contractor on works. The contractor shall employ the following staff during execution of Works :- (a) For Building and road works (i) One Graduate Engineer, when the tendered cost of work exceeds Rs. 10 lakhs. (ii) One qualified Diploma Holder (oversee) with experience not less than 3 years when the tendered cost of work exceeds Rs. 5 lakhs but is less than Rs. 10 Lakhs. (iii) One qualified Diploma Holder when the tendered cost of work is more than Rs. 2 lakhs but less than Rs. 5 lakhs. (b) For sanitary and water supply works one qualified diploma holder with experience of not less than 5 years, out of which one year should be in sanitary and water supply works when the tendered cost of work is more than Rs. 50,000/-.
5.	25	After Annexure II	(c) For Electrical Works (i) One Qualified Graduate Engineer possessing Degree in Electrical Engineering from recognized university with an experience of not less than 3 years or a Diploma holder in Electrical Engineering with an experience of not less than 7 years when the tendered cost of the work is not less than Rs. 1.5 Lakhs. (ii) One Graduate Electrical Engineer with two years experience or a Diploma Holder in Electrical Engineering with experience of not less than 3 years, when the tendered cost of the work is more than Rs. 75,000/- but less than Rs. 1.5 lakhs. (iii) One Diploma Holder in Electrical Engineering with experience of not less than 3 years when tendered cost of work more than Rs. 37,000/- but less than Rs. 75,000/-. (iv) One licensed Supervisor with experience of not less than 3 years when the tendered cost of work is more than Rs. 7,500/- and less than Rs. 37,000/- (d) In case the contractor fails to employ the technical staff as aforesaid, he shall be liable to pay reasonable amount not exceeding the amount shown below for each month of default. These recoveries are subject to modifications from time to time by CSIR based on CPWD :- (i) In case when a Graduate Engineer is to be employed Rs. 3,000/-. (ii) In case when a qualified Diploma Holder is required to be employed Rs. 1,500/-. (iii) In case when a Technical Supervisor is required to be employed Rs. 750/-
6.	29	After Annexure III	Add Annexure IV as below :- Cess @ 1% of the cost of building & other construction works will be deducted in accordance with the Finance Department (Govt. of West Bengal) Order No. 853-F dated 01.02.2006 read with the Central Govt. Notification no. S.O.2879 dated 26.9.1996.

AMENDMENTS-CONDITIONS OF CONTRACT FOR WORKS

SL. NO.	PAGE	PARA	MODIFY
1.	2		Amend 'six to twelve'
2.	5		Add a new sub para after 'work' as below: EMPLOYER shall mean Director-General, CSIR or "any officer authorized by Director General for the purpose.
3.	6	After para	Add a new para 5A:- "SUFFICIENCY OF TENDER the contractor shall be deemed to have satisfied himself before tendering as to correctness and sufficiency of the tender for the works and the rates and prices quoted in the schedule of items, which rates and prices shall, except as otherwise provided, cover all his obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works."
4.	8	6	Add sub para(g) as "in case of easy availability of approved quality of cement and steel in the open market it will be Employer's discretion to make these items as contractor's supply."
5.	8	8(a)	Add "Annexure (1)....."
6.	9	10	Add sub para 10(f) as "Deviation Limits" Building Work 30% Maintenance / emergency works 50% Foundation Works 100% Services works 30%
7.	9	11(b)	Modify to read as"..... it shall appear to the Engineer or to the Employer based on audit/technical examination that any Work has been executed.
8.	12	19	Add "Contractor shall obtain a valid license under contract Labour (R & A) Act 1970 and Contract Labour (R & A) Central Rules
9.	16	26(d)	Add "However release of security deposit would be only after written clearance of Labour Officer regarding no dues or claims is received."
10.	17	28	Add sub para (d) as "Employer shall have the discretion to permit the IEEMA (Indian Electrical & Electronics Manufacturers' Association) clause for escalation in case of specialized works e.g. lifts and electrical and mechanical installations etc. Where the price variation is not similar to building works.
11.	17	29	Modified as below :
		29	ARBITRATION (a) Except where otherwise provided in the contract, all quotation and disputes relating to the interpretation of the specification, designs, drawings and instructions before mentioned, and as to the quality or workmanship or materials used on the work or as

			<p>to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, specifications, estimates, instructions, orders on these conditions or otherwise concerning the works, or the execution or failure to execute the same, whether arising during the progress of the work or after the completion or abandonment thereof, shall be referred to the sole arbitration of the person appointed by the Director General, Council of Scientific & Industrial Research. The arbitrator shall be appointed within 30 days from the receipt of a request by any party. The arbitrator to whom the matter is originally referred, being unwilling or unable to act for any reason, the Director General shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to precede with the reference from the stage give a speaking award. The Award of the arbitrator shall be final and binding on the parties. The cost of the Arbitrator shall be borne equally by both the parties.</p> <p>(b) It is also term of the contract that the party invoking arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amount claimed in respect of each such dispute.</p> <p>(c) It is also a term of the contract that if the contractor does not make any demand for arbitration in respect of any claim in writing within 90 days of receiving the intimation from the Employer that the final bill is ready for, payment, the claim of the contractor will be deemed to have been waived and absolutely barred and the Employer shall be discharged and released of all liabilities under the contract in respect of these claims.</p> <p>(d) Subject as aforesaid the provisions of the Arbitration and Conciliation Act. 1996, or any statutory modification or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration reference under this clause.</p> <p>Add Para 30 to as under: "DISMANTLED MATERIAL the contractor shall treat all material dismantled during dismantling of a structure, services subsystems / installations, excavation of the site for a work etc, as employer's property and such material shall disposed of to the best advantage of the Employers according to the instructions issued in writing by the Engineers.</p>
12.			
13.	18		<p>Add Para 31 as: "PERFORMANCE GUARANTEE may be taken from the contractor before the award of work, by the officer authorized to award the contract, if and where considered necessary, to ensure that a part or whole of the contract is completed by the contractor. In case of non-performance, this guarantee could be en-cashed.</p>
14.	19	2	<p>Modify as "In case of any discrepancy; the order of precedence in interpretation shall be as under :</p> <p>(i) Schedule of quantities</p> <p>(ii) Drawings</p> <p>(iii) Additional Conditions</p>

15.	24		<ul style="list-style-type: none"> (iv) General conditions of contract (v) Special condition (vi) Additional Technical Specifications (vii) CPWD latest Civil and Electrical Specifications. (viii) IS Codes (ix) International codes (x) Best Engineering practice <p>Add Annexure III as below:-</p> <p>Contractor's site Super intendance</p> <p>Staff to be employed by contractor on works. The contractor shall employ the following staff during execution of Works :</p> <p>(a) For Building and road works</p> <ul style="list-style-type: none"> (i) One Graduate Engineer, when the tendered cost of work exceeds Rs. 10 lakhs. (ii) One qualified Diploma Holder (oversee) with experience not less than 3 years when the tendered cost of work exceeds Rs. 5 lakhs but is less than Rs. 10 Lakhs. (iii) One qualified Diploma Holder when the tendered cost of work is more than Rs. 2 lakhs but less than Rs. 5 lakhs. <p>(b) For sanitary and water supply works one qualified diploma holder with experience of not less than 5 years, out of which one year should be in sanitary and water supply works when the tendered cost of work is more than Rs. 50,000/-.</p> <p>(c) For Electrical Works</p> <ul style="list-style-type: none"> (i) One Qualified Graduate Engineer possessing Degree in Electrical Engineering from recognized university with an experience of not less than 3 years or a Diploma holder in Electrical Engineering with an experience of not less than 7 years when the tendered cost of the work is not less than Rs. 1.5 Lakhs. (ii) One Graduate Electrical Engineer with two years experience or a Diploma Holder in Electrical Engineering with experience of not less than 3 years, when the tendered cost of the work is more than Rs. 75,000/- but less than Rs. 1.5 lakhs. (iii) One Diploma Holder in Electrical Engineering with experience of not less than 3 years when tendered cost of work more than Rs.37,000/- but less than Rs.75,000/-. (iv) One licensed Supervisor with experience of not less than 3 years when the tendered cost of work is more than Rs.7,500/- and less than Rs. 37,000/-
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			<p>(d) In case the contractor fails to employ the technical staff as aforesaid, he shall be liable to pay reasonable amount not exceeding the amount shown below for each month of default. These recoveries are subject to modifications from time to time by CSIR based on CPWD :.</p> <p>(i) In case when a Graduate Engineer is to be employed Rs. 3,000/-</p> <p>(ii) In case when a qualified Diploma Holder is required to be employed Rs. 1,500/-</p> <p>(iii) In case when a Technical Supervisor is required to be employed Rs. 750/-</p>
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**AMENDMENT TO THE CLAUSE 28, PARA (ii) OF GENERAL
CONDITIONS OF CONTRACT**

EXISTING CLAUSE	MODIFIED CLAUSE
"The cost of work on which escalation will be payable shall be reckoned as the cost of the work as per the bills, running or final, and from this amount the value of material supplied by the employer _____ _____ _____ any items at prevailing market rates."	"The cost of work on which escalation will be payable shall be reckoned as 85% of the work as per the bills, running or final, and from this amount the value of material supplied by the employer _____ _____ _____ any items at prevailing market rates."

CONTRACTOR'S SITE SUPERINTENDENCE

Staff to be employed by contractor on works. The contractor shall employ the following technical staff during execution of works :

For building and road works

- I. One Graduate Engineer, when the tendered cost of work exceeds Rs. 10 lakhs.
- II. One specified Diploma holder (overseer) with experience not less than 3 years when the tendered cost of work exceeds Rs. 5 lakhs but is less than Rs. 10 lakhs.
- III. One qualified Diploma holder when the tendered cost of work is more than Rs. 2 lakhs but less than Rs. 5 lakhs.

For sanitary and water supply works one qualified diploma holder with experience of not less than 5 years, out of which one year should be in sanitary and water supply works when the tendered cost of work is more than Rs. 50,000.

For electrical works

- (i) One qualified Graduate Engineer possessing Degree in Electrical Engineering from recognised university with an experience of not less than 3 years or a Diploma holder in Electrical Engineering with an experience of not less than 7 years when the tendered cost of the work is not less than Rs. 1.5 lakhs.
- (ii) One Graduate Electrical Engineer with two years experience or a Diploma holder in Electrical Engineering with experience of not less than 3 years, when the tendered cost of the work is more than Rs. 75,000 but less than Rs. 1.5 lakhs.
- (iii) One Diploma holder in Electrical Engineering with experience of not less than 3 years when tendered cost of work is more than Rs. 37,000, but less than Rs. 75,000.
- (iv) One licensed Supervisor with experience of not less than 3 years when the tendered cost of work is more than Rs. 7,500 and less than Rs. 37,000.

In case the contractor fails to employ the technical staff as aforesaid, he shall be liable to pay reasonable amount not exceeding the amount shown below for each month of default. These recoveries are subject to modifications from time to time by CCSF based on CPWD :

- | | | |
|---|---|-------------|
| (i) In case when a Graduate Engineer is to be employed | — | Rs. 3,000/- |
| (ii) In case when a qualified Diploma holder is required to be employed | — | Rs. 1,500/- |
| (iii) In case when a technical supervisor is required to be employed | — | Rs. 750/- |

INTEGRITY PACT

Between

Council of Scientific & Industrial Research (CSIR) / Central Mechanical Engineering Research Institute (CMERI) hereinafter to as "The Principal".

and

_____ hereinafter referred to as "The Bidder / Contractor"

Preamble

The Principal intends to award, under laid down organizational procedures, contract / s for _____ The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and / or Contractor(s).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section I – Commitments of the Principal

- 1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles :
 - a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - b) The Principal will, during the tender process treat all Bidder(s) with the equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- 2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC / PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder(s) / Contractor(s)

- 1) The Bidder(s) / Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - a) The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he / she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b) The Bidder(s) / Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
 - c) The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC / PC Art ; further the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d) The Bidder(s) / Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2) The Bidder(s) / Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender proces and exclusion from future contracts

If the Bidder(s) / Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s) / Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings".

Section 4 – Compensation for Damages

- 1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit / Bid Security.

- 2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 – Previous transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 3 years with any other Company in any country conforming to the anti corruption approach or with any other Government / Semi-Government Organisation in India that could justify his exclusion from the tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

Section 6 – Equal treatment of all Bidder(s) / Contractor(s) / Subcontractors

- 1) The Bidder(s) / Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- 2) The Principal will enter into agreements with identical conditions as this one with all Bidder(s) / Contractor(s) and Subcontractors.
- 3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidder(s) / Contractor(s) / Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the DG, CSIR/ Chief Vigilance Officer.

Section 8 – Independent External Monitor / Monitors

- 1) The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent and parties comply with the obligations under this agreement.

- 2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently.
- 3) The Bidder(s) / Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) / Subcontractor(s) with confidentiality.
- 4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 6) The word "**Monitor**" would include both singular and plural.

Section 9 – Pact Duration

This pact begins when both parties have legally signed it. It expires for the Contractor 10 (ten) months after the last payment under the contract, and for all other Bidders 6 (six) months after the contractor has been awarded.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by the Director, CMERI / DG, CSIR.

- 1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered office of the Principal, i.e. New Delhi.
- 2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 3) If the Contrator is a partnership or a consortium this agreement must be signed by all partners or consortium members.

- 4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

_____ (For & on behalf of the Principal)

_____ (For & On behalf of Bidder(s) / Contractor (s))

(Office Seal)

Place _____

Dated _____

Witness 1 :

(Name & Address) _____

Witness 2 :

(Name & Address) _____

SAFETY CODE

1. There shall be maintained in a readily accessible place first aid appliances including adequate supply of sterilized dressing and cotton wool.
2. An injured person shall be taken to a public hospital without loss of time, in cases where the injury necessitates hospitalization.
3. Suitable and strong scaffolds should be provided for workmen for all works that can not be done from ground.
4. No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30 cm. (clear) and the distance between two adjacent rungs shall not be more than 30 cm. When a ladder is used, an extra majdoor shall be engaged for holding the ladder.
5. The excavated material shall not be placed within 1.5 meters of the edge of the trench or half or the depth of trench whichever is more. All trench and excavations shall be provided with necessary fencing and lighting.
6. Every opening in the floor of a building or in a working platform is provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum heights shall be one meter.
7. No floor, roof or other part of the structure shall be so overloaded with debris or materials as to render it unsafe.
8. Workers employed on mixing and handling materials such as asphalt, cement mortar or concrete and lime mortar shall be provided with protective footwear and rubber hand gloves.
9. Those engaged in welding works shall be provided with welder's protective eye-shields and gloves.
- 10.1. No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- 10.2. Suitable facemasks should be supplied for use by the workers when the paint is applied in the form of spray or surface having lead paint dry rubbed and scrapped.
11. Overall shall be supplied by the contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during the periods of cessation.
12. Hoisting machines and tackles used in the works, including their attachments, anchorage and suppliers shall be in perfect condition.
13. The ropes used in hoisting or lowering materials or as a means of suspension shall be durable quality and adequate strength and free from defects.
14. Workers employed for working on high scaffolding such as external plaster, painting, finishing, sanitary & plumbing work etc. shall be provided with safety belt and others as advised by the Employer.
15. Workers shall be provided with helmet.
16. Temporary electrical wiring shall be done in the manner as advised by the Employer with necessary supports when drawn overheads and proper clamping / fixing should be done when drawn through wall as per regulation of electrical wiring.



सी एस आई आर –केन्द्रीय यांत्रिक अभियांत्रिकी अनुसंधान संस्थान
1/वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद्)
महात्मा गांधी एवेन्यू, दुर्गापुर-713 209, पश्चिम बंगाल
CSIR-Central Mechanical Engineering Research Institute
(Council of Scientific & Industrial Research)
Mahatma Gandhi Avenue, Durgapur-713209, West Bengal

निविदा आमंत्रण सूचना/NOTICE INVITING TENDER

सं /No.3/76/537/18-19/ESD/CI/GAP 2219/Re

दिनांक /Date: 11/06/2019

Sealed Tenders are hereby invited for the following works from contractors of appropriate class of CPWD/PWD/Railways/MES/P&T/PSUs and/ or from those who have carried out similar works for Central/State Government, Autonomous Bodies, Semi-Govt. Organizations or working contractor of any CSIR Lab./Instt. The tenderers are required to produce proof of fulfilling all the conditions along with copies of PAN, GST No., Valid trade licenses certificate, while making request for issue of Tender documents.

Sl. No.	Name of Work	1) Estimated Cost (Rs.) 2) Earnest Money Deposit (EMD) (Rs.)	Cost of Tender Document (Rs.)	Time of Completion	Defined work of similar nature	Last date & time of issue of blank tender form	Last date & Time of Receipt of Tender	Date & Time of Opening of Tender	Experience (Last five years)
1.	Construction Water Storage Tank, Tube well platform and installation of 2 nos IIRP at Illambazar and Kanksa, Burdwan.	1) 1,90,210.00 (Excluding GST) 2) 3,810.00	500/-	01(One) Month	Construction/renovation/ other civil work.	17/06/2019 4.00PM	19/06/2019 1:00 PM	19/06/2019 3:00 PM	At least 1/2/3 Civil works of Rs. 1.522/1.14 2/ 0.761 Lakhs resp

Tenders can be obtained from the office of the Administrative Officer, CMERI on a written request. Cost of tender document should be in cash or demand draft drawn in favour of Director, CMERI. Tender paper will be issued if the application is accompanied by tender paper cost & EMD. Validity of tender will be 90 days from the date of opening of tender. In case of holidays, the tender will be received/opened on the next working day. Earnest money in the form of demand draft should be drawn in favour of Director, CMERI. Estimated cost has been prepared based on CPWD DSR 2016 & WB PWD 17. Cost of Tender documents is non-refundable & non-transferable. Tender documents can also be seen & downloaded from website <https://cmeri.res.in>. Contractors can also send downloaded tender documents along with EMD, Cost of Tender Documents & all relevant documents directly to CMERI, Durgapur. In that case CMERI will not be responsible for any incomplete or illegible downloaded tender documents being rejected on that ground alone. The contractor has to submit copies of satisfactory work completion certificate in respect of similar nature of work done in the last five years. Tender documents as held in the office of the undersigned will be treated as valid for reference purpose. The credentials including satisfactory completion certificate in respect of works mentioned in the last column along with EMD (if downloaded) and other relevant documents as mentioned in last column 'experience' shall be in an envelope and the tender documents (signed & stamped) along with rates shall be in a separate envelope with superscription 'CREDENTIALS' and 'PRICE-BID' respectively. A Civil and Electrical Contractor cannot give his consent to more than one bidder in case of composite works. Conditional tenders are liable to be rejected. By submission of a tender for the work, a tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the work, about the quality and availability of required quantity of materials and that the tendered rates will be adequate to complete the work as per specification with quantity. Tender will be rejected if white fluid is used anywhere in the Tender Document. Earnest Money is liable to be forfeited if the contractor awarded the work fails to start the work immediately and in any case within 7 (Seven) days from the date of work order. For further details regarding this tender or for further amendments, Corrigendum, extension of NIT or revision, etc., please visit our website <https://cmeri.res.in>. Director, CMERI reserves the right to reject any or all tenders without assigning any reason. Notwithstanding anything stated elsewhere, the quoted rates should be exclusive of service tax. The Service Tax as per actual is reimbursable. **PPC & PSC cement are also allowable to use along with OPC cement**

Sd-
(Administrative Officer)



CENTRAL MECHANICAL ENGINEERING RESEARCH INSTITUTE
(Council of Scientific & Industrial Research)
Durgapur-713 209

All payments to Contractors/Bidders will be made by e-payment mode namely Electronic Clearance System (ECS)/National Electronic Fund Transfer(NEFT)/Real Time Gross Settlement(RTGS)/Net Banking by direct credit to their account.

As State Bank of India(SBI) is the Banker for Council of Scientific & Industrial Research(CSIR) and Central Mechanical Engineering Research Institute(CMERI), it would be convenient for the Institute to make e-payment through this bank.

Therefore, all the Contractors/Bidders are required to furnish all relevant details of their bank account along with the bid documents.

1. Name & Address of the Party:
2. Core Banking Account No.:
3. Type of account:
4. Name & Address of the Bank:
5. Branch Code:
6. IFSC Code:
7. MICR Code:

(To be signed by the owner/Proprietor/ Partner of the firm Only with Stamp/ Seal)

SCHEDULE

Name of the work: "Construction of water storage tank, tube well platform and installation of 02 nos. IIRP at Illambazar, Birbhum and Kanksa, Burdwan"

Item No.	Description	Unit	Qty.	Estimated	
				Rate (Rs.)	Amount (Rs.)
Earth Work					
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil.	cum	7		
2	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 or as directed by EIC.	cum	9		
3	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	Cum	1		
Finishing					
4	12 mm. cement plaster finished with a floating coat of neat cement of mix 1:4 (1 cement : 4 fine sand).	Sqm	35		
5	12 mm cement plaster of mix of mix 1:4 (1 cement : 4 fine sand). (No separate payment shall be made for scaffolding)	Sqm	35		
6	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade: New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	Sqm	25		
7	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work	Sqm	30		
Plain Cement Concrete (PCC)					
8	Providing and laying in position 1:2:4 (1 Cement : 2 Coarse Sand (Zone-III) : 4 graded stone aggregate 20 mm nominal size) cement concrete of specified grade excluding the cost of centering and shuttering, all the work are to plinth level	Cum	2		
Reinforced cement concrete Work (R.C.C.)					
9	Providing and laying specified grade of reinforced cement concrete work excluding the cost of centering, shuttering, finishing & reinforcement all work upto plinth level with 1:1.5:3 (1cement: 1.5coarse sand: 3graded aggregate 20mm nominal size).	Cum	2		
10	Hire and labour charges for shuttering with centering and necessary staging upto 4 m using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs, beams and columns, lintels curved or straight including fitting, fixing and striking out after completion of works (upto roof of ground floor): 25 mm to 30 mm thick wooden shuttering as per decision & direction of	Sqm	25		

Dehikar
04/03/19

11	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction. For works in foundation, basement and upto roof of ground floor/upto 4 m, Tor steel, SAIL/ TATA	M.T	0.25		
Brick work					
12	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in 1:6 grade (1 cement: 6 coarse sand).	Cum	11		
13	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in cement mortar 1:4 (1 cement : 4 coarse sand)	Sqm	2		
14	Single Brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand	Sqm	3		
STEEL WORK					
15	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer. G.I. pipes	KG	180		
TILES WORK					
16	Supplying, fitting & fixing 1st quality Ceramic tiles in walls and floors to match with the existing work & 4 nos. of key stones (10mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide if required to match the colour of tiles including roughening of concrete surface, if necessary or by synthetic adhesive & grout materials etc. Wall: With Sand Cement Mortar (1:3) 15 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg/Sq.m & joint filling using white cement slurry @ 0.20kg/Sq.m. Coloured decorative	Sqm	15		
PLUMBING WORKS					

Dabhiyog
4/03/19

17	Supplying, fitting and fixing PVC pipes of approved make of Schedule 80 (medium duty) conforming to ASTM D - 1785 and threaded to match with GI Pipes as per IS : 1239 (Part - I). with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, long screw, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads, fitting, fixing etc. complete in all respect including cost of all necessary fittings as required, jointing materials and two coats of painting with approved paint in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accessories, specials. Payment for painting will be made separately) For Exposed Work PVC Pipes (Dia) 25 mm	meter	5		
18	Supplying, fitting and fixing G.I. pipes of TATA make with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, long screw, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads, fitting, fixing etc. complete in all respect including cost of all necessary fittings as required, jointing materials and two coats of painting with approved paint in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accessories, specials. Payment for painting will be made separately) For Exposed Work 40 mm dia. medium quality	meter	35		
IIRP					
19	Supplying, filling, spreading & leveling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer-in-charge	cum	4		
20	Supplying, filling, spreading & leveling gravels of size range 20 mm to 25 mm, in the recharge pit, over the existing layer of boulders, in required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	cum	4		
21	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 40 mm nominal bore	Each	7		
22	Supplying, fitting and fixing alloy iron with brass spindle bib cock/ stop cock of approved brand and make, spray painted and tested to 21 kg per sq. cm. 25 mm	Each	6		
23	Shifting of 02 nos. of IIRP unit, filter media from CMERI office to site by mechanical transport and lifting the existing tube well up to 2 meter height and installation of IIRP	Each	1		
(Rupees in words)	Say Rs.	

Adhikary
4/3/19

**CSIR-CENTRAL MECHANICAL ENGINEERING RESEARCH INSTITUTE
(COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH)
M.G.AVENUE, DURGAPUR- 713209, INDIA**

Annexure-2

Name of the work: "Construction of water storage tank, tube well platform and installation of 02 nos. IIRP at Illambazar, Birbhum and Kanksa, Burdwan"

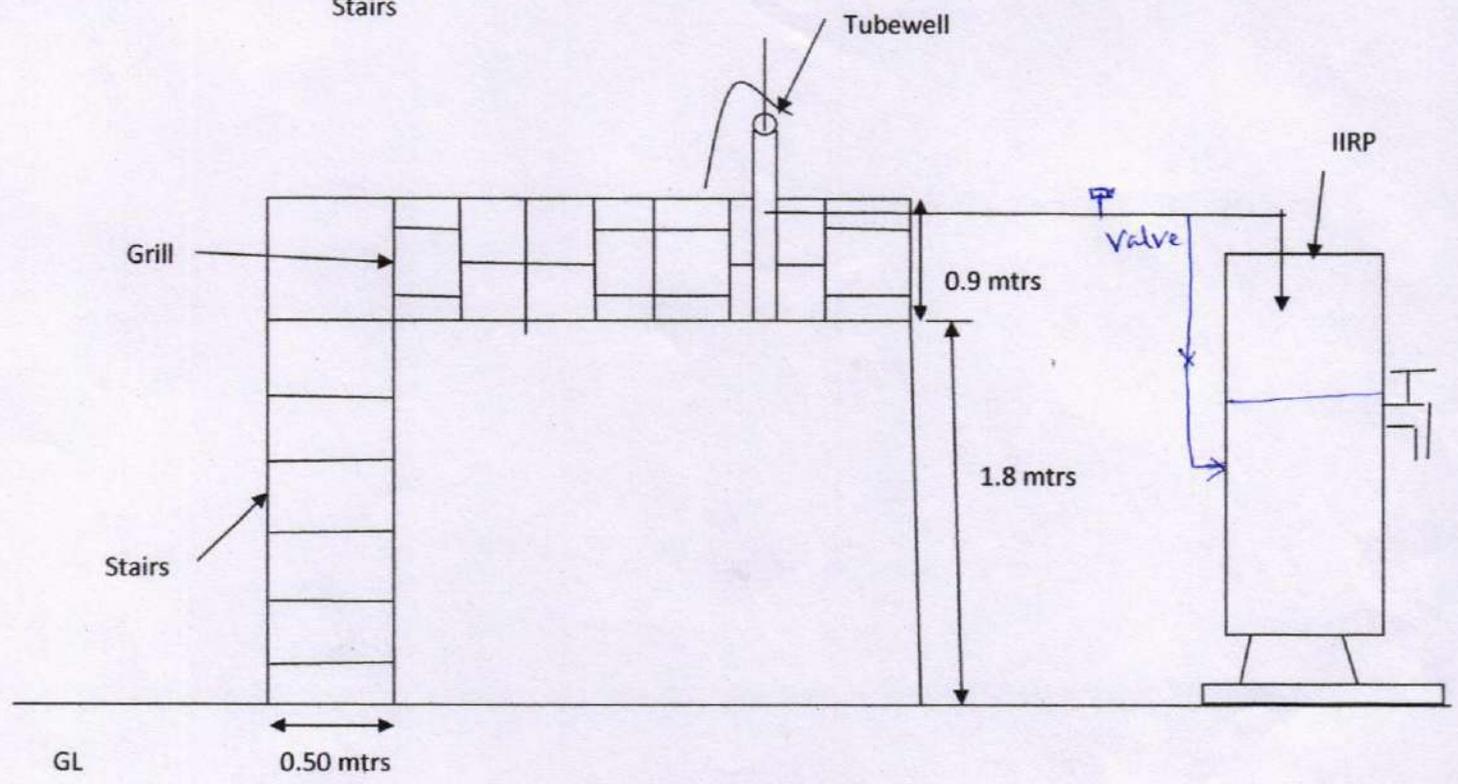
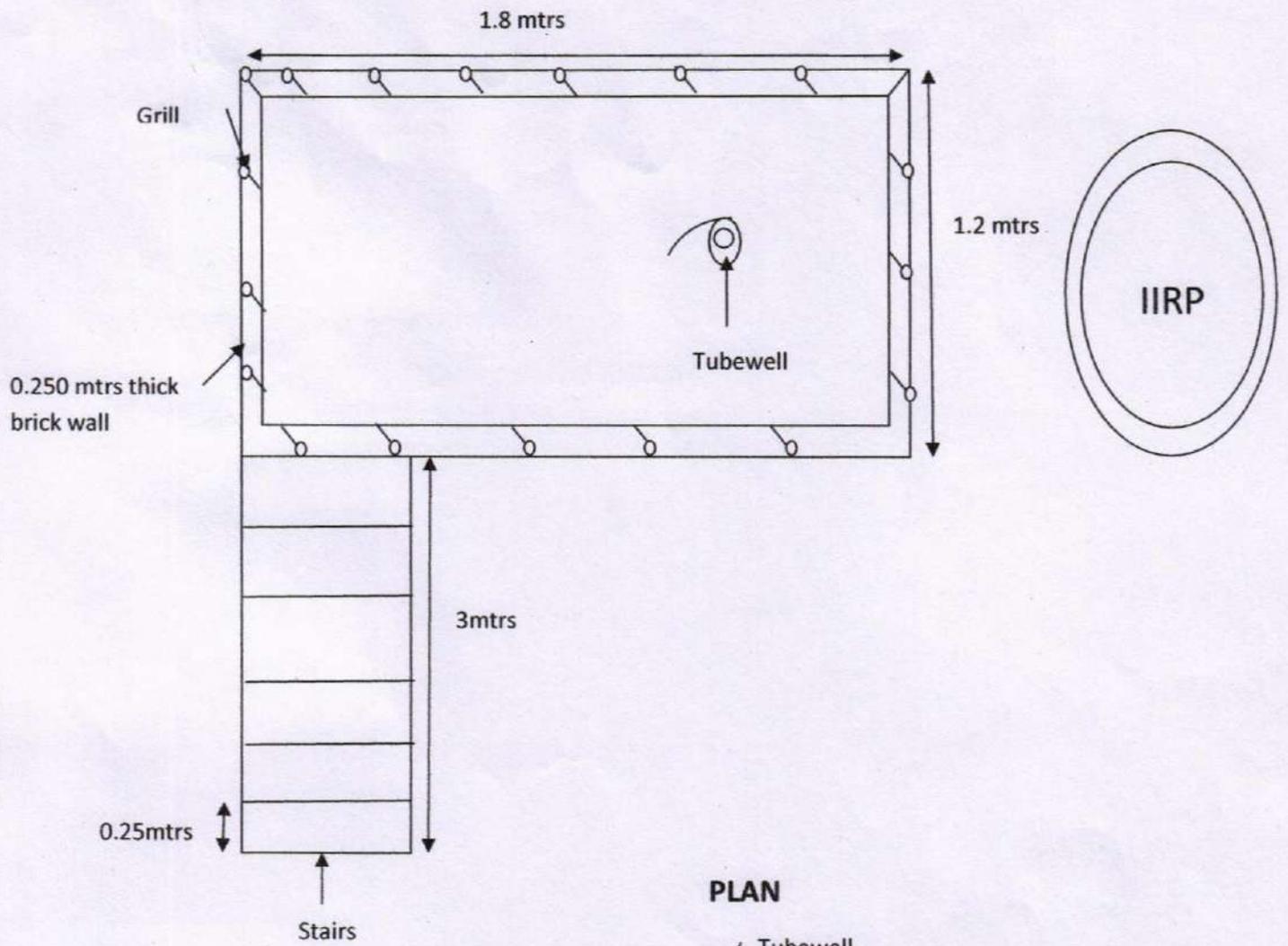
LIST OF APPROVED MAKES FOR CIVIL WORK.

1. The Contractor shall obtain approval from the Engineer-In-Charge before placing order for any specific material or engaging any of the specialized agencies.
2. Wherever applicable the Engineer-In-Charge may approve any material equivalent to that specified in the tender subject to proof being offered by the Contractor for equivalence to his satisfaction.
3. Unless otherwise specified, in the tender document all the materials which are ISI Marked shall be used in the work and if the ISI marked materials are not available, materials conforming to IS shall be used, and for the materials which are neither ISI marked not conform to IS, the manufacturer's Specification shall be approved through EIC.

Description	Approved Makes
Cement	ACC, LAFARGE , ULTRATECH, Birla-Unique
Coarse Sand	CONFORMING TO ZONE -III
Reinforcement, MS Angle, Channels	TATA, SAIL
G.I. pipes	TATA

Dishit
6/2/19

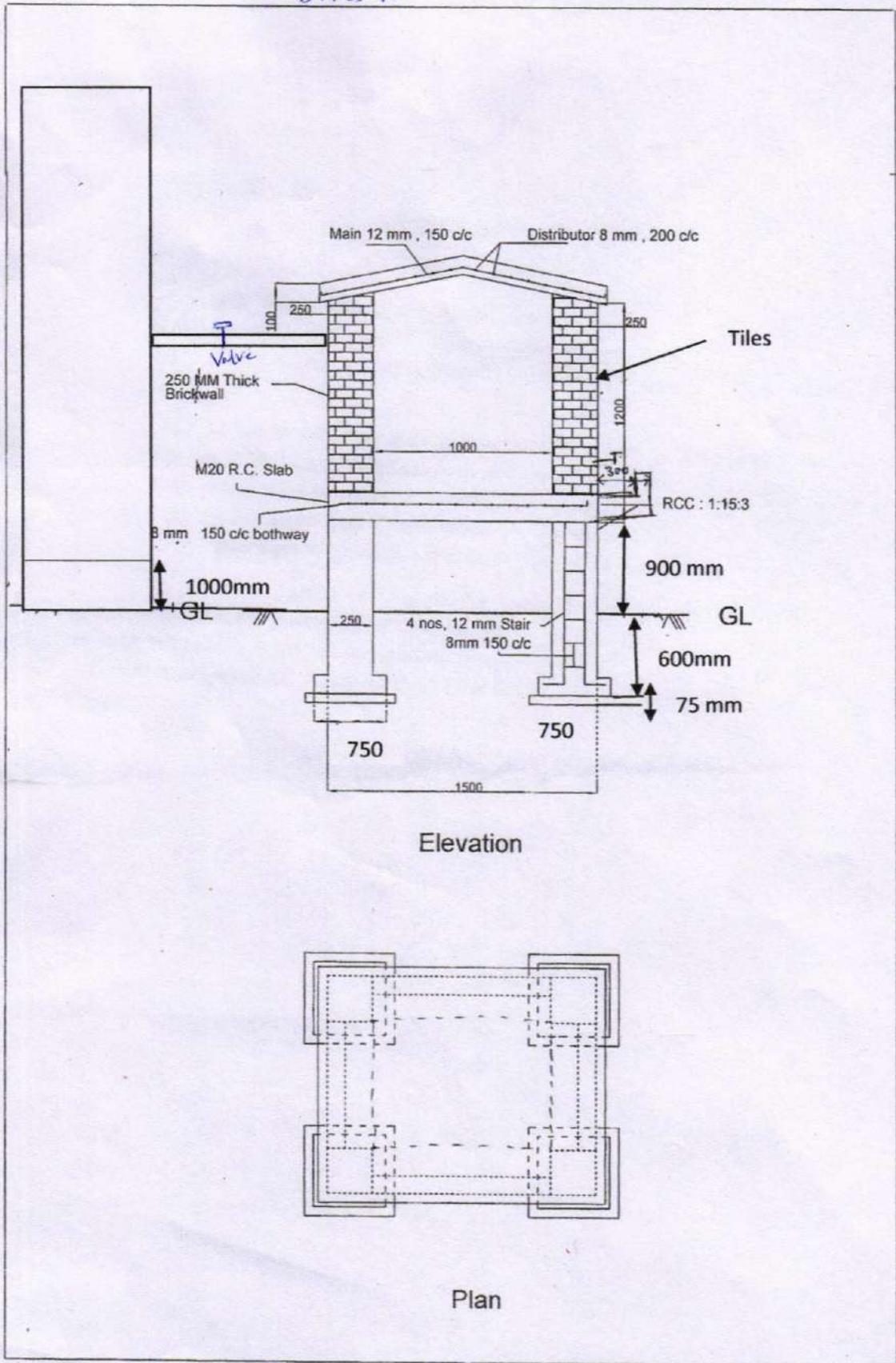
Site: B



Handwritten signature
04/2/19

Handwritten initials
04/2/19

Site:- A



Handwritten signature
04/2/19

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