



INDIAN INSTITUTE OF TECHNOLOGY MADRAS
CHENNAI – 600 036

ENGINEERING UNIT

ITEM RATE TENDER

TENDER NO. 20/ 2013 – 14/Civil

Name of the work : **Construction of New Quark building at IIT Madras.**

Approximate Value put to Tender (for reference only) : **Rs. 125.00 Lakhs**

Earnest Money Deposit : **Rs. 2.50 Lakhs**

Cost of Tender Schedule : Rs. 1500.00

Vat @ 5% 75.00

Rs. 1575.00

Last date and Time of Receipt : Date: **03-07-2013**
Time: 3.00 PM.

Pre-bid meeting : Date: **26-06-2013**
Time: 10.30AM (At the office of the Executive Engineer (Civil))

Date and Time of Opening : Date **03-07-2013**
Time: 3.10 PM.

Place of Receipt : **Office of the Executive Engineer (Civil)
Administrative Building,
3rd Floor, Engineering Unit,
IIT Madras, Chennai – 600 036.**

Certified that the tender documents downloaded is the exact replica of the document published by the IITM and no alteration and additions have been made by me / us in the tender document. The Tender Document consists of **Ninty Three (93)** Pages only.

Signature of the Contractor

Executive Engineer (Civil)

INDIAN INSTITUTE OF TECHNOLOGY MADRAS
ENGINEERING UNIT
CHENNAI – 600 036

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Signature of the Contractor

**INDIAN INSTITUTE OF TECHNOLOGY MADRAS
CHENNAI – 600 036**

TENDER NOTICE NO.:- 20 / 2013 – 14/Civil

Sealed item rate Tenders are invited by the Executive Engineer (Civil), Indian Institute of Technology Madras, Chennai – 600 036, from the **Registered Contractors of IIT Madras Civil (Class - I & II)** in item rate agreement form up to 3-00 P.M on **03 - 07 - 2013** for the work of **“Construction of New Quark building at IIT Madras.**

Approximate value of items put to tender is **Rs. 125.00 Lakhs.** This is only for general guidance.

The Tender can be downloaded from the IIT Madras web site (<http://tenders.iitm.ac.in/>)

Tenders should be accompanied by two crossed Demand Draft drawn in favour of IITM Chennai – 600 036 for **Rs. 2,50,000/- towards Earnest Money Deposit** and Rs.1575 /-(Non Refundable) towards cost of tender schedule. Tenders received without Earnest Money Deposit will be summarily rejected

Completed Tenders received at Office of Executive Engineer (Civil) in time and will be opened after 3.10 P.M on **03- 07- 2013** in the presence of Tenderers or their authorized agents.

Executive Engineer (Civil)

**INDIAN INSTITUTE OF TECHNOLOGY MADRAS
ENGINEERING UNIT
CHENNAI – 600 036**

Item Rate Tender & Contract for Works

(A) Tender for the work of: **"Construction of New Quark building at IIT Madras."**

(i) To be submitted by _____ hours on _____ to

(ii) To be opened in presence of tenderers who may be present at _____ hours
on _____ in the office of _____

T E N D E R

I / We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F, Specifications applicable, Drawings & Civils, General Rules and Directions, Conditions of Contract, Clauses of Contract, Special Conditions, Schedule of Rates & other documents and rules referred to in the conditions of contract and all other contents in the tender document for the work.

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

We agree to keep the tender open for **ninety (90) days** from the due date of submission thereof and not to make any modifications in its terms and conditions.

A sum of **Rs. 2,50,000/-** has been deposited in cash / receipt treasury challan / deposit at call receipt of a scheduled bank / fixed deposit receipt of a scheduled bank / demand draft of a scheduled bank as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/we agree that the said office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/we fail to commence work as specified, I/we agree that IITM or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, upto maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

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

Date _____

Signature of Contractor
Postal Address

Witness:

Address:

Occupation:

A C C E P T A N C E

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for an on behalf of the President of India for a sum of Rs. _____
(Rupees _____
_____)
_____)

The letters referred to below shall form part of this contract Agreement:

- a)
- b)
- c)

For & on behalf of the President of India

Signature _____

Civilation _____

Date _____

GENERAL RULES AND DIRECTIONS

1. The tender must be signed by the person / persons competent to sign as indicated in Technical bid. Same stipulations will also apply in the case of Receipt for payments made on account of work to the successful Contractor who has signed the Contract Agreement.
2. This form will state the work to be carried out, as well the date for submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender, and the amount of the security deposit to be deposited by the successful tenderer and the percentage, if any to be deducted from bills. Copies of the specifications, designs and drawings and any other documents required in connection with the work signed for the purpose of identifications by the officer inviting tender, shall also be open for inspection by the contractor at the office of officer the inviting tender, during office hours.
3. Any person who submits a tender shall fill up the form, stating at what item rate & amount he is willing to undertake the full work. Only one rate shall be given in words & figures for each item. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other condition of any sort including conditional rebates, will be summarily rejected. Tender shall have the name and number of the work to which they refer, written on the envelopes. Amount must be quoted in full rupees by ignoring fifty paise and considering more than fifty paise as rupee one.
4. The officer inviting tender or his duly authorized assistant will open Financial Bids of those Tenderers whose, Technical Bids have been found acceptable, in the presence, of any intending Contractors or their authorized agents who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the Earnest Money forwarded therewith shall thereupon be given to the Contractor. In the event of a tender being rejected, the Earnest Money forwarded with such unaccepted tender shall thereupon be returned to the Contractor remitting the same, without any interest.
5. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
6. The memorandum of work tendered for and the schedule of materials to be supplied by the institute and their issue-rates, shall be filled and completed in the office of the officer inviting tender before the tender form is published. If a form is published to an intending tenderer without having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.
7. The tenderers shall sign a declaration under the Official Secret Act, 1923, for maintaining secrecy of the tender documents, drawings or other records connected with the work given to them.
8. In the case of item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rates quoted by the contractor, will, unless otherwise proved, be taken as correct and not the amount.
9. In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tendered is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.

10. All rates shall be quoted on the tender form. The amount for each item should be worked out and the requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word 'Rs' should be written before the figure of 'Rupees' and the work ' P ' after the decimal figures, eg.' Rs 2.15P' and in case of words, the word, "Rupees" should precede and the work 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only', it should invariably be up to two decimal places. While quoting each rate in schedule of tender, the word 'only' should be written closely following the rate and it should not be written in the next line.
11. a. The Contractor, whose tender is accepted, will be required to furnish performance guarantee of 5% (five percent) of the tendered amount within specified period. This guarantee shall be in the form of Government Securities or fixed deposit receipt of any scheduled bank, guarantee bonds of any scheduled bank or state bank of India
- b. The contractor whose tender is accepted will be required to furnish by way of Security Deposit for the fulfillment of his contract, an amount equal to 5 % of the tendered value of the work. The Security deposit will be collected by deductions from the running bill of the contractor at the rates mentioned above and the earnest money if deposited in cash at the time of tender will be treated as a part of this Security Deposit. The SD amount will also be accepted in cash or in the shape of Government securities. Fixed deposit receipt of a scheduled bank or State bank of India will also be accepted for this purpose. Provided confirmatory advice is enclosed.
- On acceptance of the tender, the name of the accredited representative (s) of the Contractor who would be responsible for taking instructions from the Engineer in Charge shall be communicated in writing to the Engineer in Charge.
12. Sales-tax (VAT), service tax, purchase tax, turnover tax, Service tax, works contract tax or any other tax on material, labour and works in respect of this contract shall be payable by the contractor and IITM will not entertain any claim whatsoever in respect of the same.
13. The Contractor shall give a list of both gazetted and non-gazetted IITM employees related to him.
14. The tender for the work shall not be witnessed by a Contractor or Contractors who himself / themselves has/have tendered for the same work. Failure to observe this condition would render tenders of the Contractor tendering, as well as witnessing the tender, liable to summary rejection.
15. The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time. If he fails to do so, his failure will be a breach of the contract and the Executive Engineer (Civil) may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability on account of any violation by him of the provisions of the said Act.

Signature of Contractor

Executive Engineer (Civil)

CONDITIONS OF CONTRACT

1. The Contract means the documents forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of the IIT and the Contractor, together with the documents referred to therein including these conditions, the specifications, Civils, drawings and instructions issued from time to time by the Engineer-in-charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.
2. In the contract, the following expressions shall, unless context otherwise requires, have the meanings, hereby respectively assigned to them:-
 - i) The expression works or work shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional.
 - ii) The Site shall mean the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
 - iii) The contractor shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
 - iv) The Engineer-in-charge means the Engineer officer who shall supervise and be in-charge of the work and who shall sign the contract on behalf of IIT as mentioned in Schedule 'F' hereunder.
 - v) Accepting Authority shall mean the authority mentioned in Schedule 'F'.
 - vi) Excepted Risk are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of IITM, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by IITM of the part of the works in respect of which a certificate of completion has been issued or a caused solely due to IITM faulty Civil of works.
 - vii) Market Rate shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Schedule 'F' to cover, all overheads and profits.
 - viii) Schedules(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard schedule of Rates of the CPWD mentioned is schedule 'F' hereunder, with the amendments thereto issued upto the date of receipt of the tender.
 - ix) Department means IITM which invites tenders.
 - x) District specification means the specifications followed by the state of Tamil Nadu in the area where the work is to be executed.
 - xi) Tendered value means the value of the entire work as stipulated in the letter of award.
3. Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.

4. Headings and marginal notes to these General Conditions of contract shall not be deemed to form part thereof be taken into consideration in the interpretation or construction thereof or of the contract.
5. The contractor shall be furnished, free of cost one certified copy of the contract documents except standard specification, Schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of his contract.
6. The work to be carried out under the contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipments and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the Schedule of quantities (Schedule-A) shall, unless otherwise states, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.
7. The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the schedule of Quantities, which rates and prices shall except as otherwise provided cover all his obligation under the contract and all matters and things necessary for the proper completion and maintenance of the works.
8. The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being following in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General conditions.
- 8.1 In the case of discrepancy between the schedule of Quantities, the specifications and/or the Drawings, the following order of preference shall be observed.
 - i) Description of Schedule of Quantities.
 - ii) Particular Specification and special condition, if any
 - iii) Drawings.
 - iv) C.P.W.D Specifications
 - v) Indian Standard specifications of B.I.S.
- 8.2 If these are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the documents and his decision shall be final and binding on the contractor.
- 8.3 Any error in description, quantity or rate in schedule of Quantities or any omission there from shall not vitiate the contractor or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.
9. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall within 15 days from the stipulated date of start of the work sign the contract consisting of:-
 - i) The notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time invitation of tender and acceptance thereof together with any correspondence leading thereto.
 - ii) Standard C.P.W.D Form as mentioned in Schedule 'F' consisting of:-

- a) Various standard clauses with corrections upto the date stipulated in schedule 'F' along with annexure thereto.
- b) C.P.W.D Safety code.
- c) Model Rules for the protection of health, sanitary arrangements for workers employed by CPWD of its contractors.
- d) CPWD contractor's Labour Regulations.
- e) List of Acts omissions for which fines can be imposed.

ADDITIONAL SPECIFICATIONS

The additional specification given below is not substitute to CPWD specifications or IS specifications. These shall be read along with CPWD specifications or IS specifications.

GENERAL

1. The work shall be carried out using metric dimensions only and shall be measured and paid in metric dimensions. F.P.S. units, if any, mentioned in drawings etc are for guidance only.
2. Wherever any reference to any Indian Standard Specification occurs in the documents relating to this contract the same shall be inclusive of all amendments issued there to or revision there of if any, up to the date of receipt of tenders.
3. Unless otherwise specified in the schedule of quantities the rates for the various items are for all heights and locations.
4. Unless otherwise specified in the schedule of quantities the rate for the items of the work shall be considered as inclusive of pumping out or bailing out water, if required, for which no extra payments will be made. This will include water encountered from any source, such as rains, floods, sub-soil water table being high or due to any other cause whatsoever.
5. The tender shall study the item description, the relevant drawings and satisfy himself the item of work to be carried

Executive Engineer (Civil)

PROFORMA OF SCHEDULE

SCHEDULE – ‘A’

The Bill of Quantities enclosed separately along with Tender (Financial bid)

SCHEDULE – ‘B’

NO MATERIAL SHALL BE ISSUED TO THE CONTRACTOR BY IITM.

SCHEDULE – ‘C’

Schedule of tools and plants proposed to be hired to the contractor.

NO TOOLS AND PLANTS SHALL BE HIRED TO THE CONTRATOR.

SCHEDULE – ‘D’

Extra schedules for specific requirements / documents for the work, if any.

1. No labour shall be permitted to stay in the campus
2. All debris obtained from dismantling the existing structure should be removed from site of work before start of work.

SCHEDULE – ‘E’

Schedule of component of cement, steel other materials, labour etc for price escalation.

CLAUSE – 10 CC

Clause 10 CC of General Conditions of Contract is not applicable to this work.

SCHEDULE – ‘F’

Reference to General conditions of contract

Name of work	: “Construction of New Quark building at IIT Madras.”
Estimated cost or work	: Rs.125.00 Lakhs.
i) Earnest Money Deposit	: Rs. 2,50,000/-.
ii) Security Deposit	: 5% of tendered value (inclusive of EMD).
iii) Performance Guarantee	: 5% of tendered value.

General Rules and Directions:

Officer inviting tender : Executive Engineer (Civil), IITM

Maximum percentage for quantity of items work to be executed beyond which rates are to be determined in accordance with clause 12.2 and 12.3. : See below

Definition

2 (v)	Engineer in charge	Executive Engineer (Civil) .
2 (viii)	Accepting authority	Director, IIT Madras.
2 (x)	Percentage on cost of material and labour to cover all overheads and profits.	15%.
2 (xi)	Standard schedule of rates	CPWD DSR 2012.
2 (xii)	Department	IIT Madras.
9 (ii)	Standard CPWD contract form	CPWD Form 8 as modified and Corrected up to till date.

Clause 1

1. Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance in days. 7 (seven) Days
2. Maximum allowable extension beyond the period provided above 7(Seven) Days

Clause 2

Authority for fixing compensation under clause 2. Executive Engineer (Civil)

Clause 2a

Whether clause 2a shall be applicable Yes applicable.

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start 14 Days.

Milestones to be achieved shall be as given below.

Sl no	Cumulative financial progress of work	Cumulative Time allowed from date of start	Amount to be with held in case of non- achievement of mile stone
1.	Foundation	1 month	In the event of not achieving the necessary progress 1% of the tendered value of work will be withheld for failure to achieve each milestone.
2	Superstructure upto Ground Floor	2 months	
3	Superstructure upto First Floor & Services	3 months	
4	Finishing & handing over	4 months	

Time allowed for execution of work Four months.

Authority to give fair and reasonable Extension of work for completion of work Executive Engineer (Civil) IITM

Clause 7

Gross work to be done together with net payment/ adjustment of advances for material collected, if any, since the last such payments Rs. 10.00 Lakhs.

for being eligible to interim payment.

Clause 10 CC

Clause 10 CC is not applicable to this work

Clause 11

Specification to be followed for execution of work

Particular specifications
CPWD Specifications
IS codes
Manufacturer's specifications
General engineering practice

Clause 12.2 & 12.3

Deviation limit beyond which clauses 12.2 & 12.3 shall apply for this work

50%

Clause 16

Competent Authority for Deciding reduced rates.

Executive Engineer (Civil)
IITM

Clause 36(i)

Designation	Minimum qualification and experience required	Discipline	Rate of recovery per month
Technical Representatives	Graduate Engineer & Diploma Engineer with 5 years experience - 1 No each	Civil Engineering	Rs. 25,000/- for Graduate & Rs15,000/- for Diploma Engineer

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers

Clause 42

- i) (a) Schedule for determining theoretical quantity of cement
- DSR 2012
Published by CPWD
- ii) Variations permissible on theoretical quantities
- a) Cement
- i) to be brought by contractor
- 3% minus

For material to be brought by contractor

In case of less consumption than the above, necessary recovery shall be made as per rates given below.

However for over consumption no additional payment shall be made.

Recovery rates for quantities beyond permissible variation

For material to be brought by contractor

SI No	Description of item	Rates in figures and words at which recovery shall be made from the contractor's	
		Excess beyond permissible variation	Less use beyond the permissible variation
1	Cement	No extra payment or deduction shall be made	Market rate at the time of execution of work plus 10% as decided by the Engineer in Charge

**CLAUSES OF CONTRACT
ADDENDA & CORRIGENDA (A & C)**

Settlement of Disputes & Arbitration

Except where otherwise provided in the contract all question and disputes relating to the meaning of the specifications, designs, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders of these conditions or otherwise concerning the works or the execution or failure to executes the same whether arising during the progress of work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned herein after.

i) If the Contractor considers any work demanded of him to be outside the requirements of the contract, or disputed any drawings, record or decision given in writing by the Engineer-in-charge or any matter in connection with or arising out of the Contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request the Executive Engineer (Civil) in writing for written instruction or decision. Thereupon, the Executive Engineer (Civil) shall give his written instructions or decisions within a period of one month from the receipt of the contractor's letter.

If the Executive Engineer (Civil) fails to give his instructions or decisions in writing within the aforesaid period or if the Contractor is dissatisfied with the instructions or decision of the Executive Engineer (Civil), the Contractor may, within 15 days of the receipt of Executive Engineer (Civil)'s decision appeal to the Chairman (Engineering Unit), IITM who shall afford an opportunity to the Contractor to be heard, if the mater so desires and to offer evidence in support of his appeal. The Chairman (Engineering Unit), IITM shall give his decision within 30 days of receipt of Contractor's appeal.

ii) If the Contractor is dissatisfied with the decision of the Chairman (Engineering Unit), the Contractor shall within a period of 15 days of the receipt of the Chairman's decision appeal to the Director , IITM who shall afford an opportunity to the Contractor to be heard, if the mater so desires and to offer evidence in support of his appeal. The Director, IITM shall give his decision within 30 days of receipt of Contractor's appeal.

iii) If the contractor is dissatisfied with the decision of the Director IITM, he shall, with in 30 days of the receipt of the decision shall give notice to the Director IITM for appointment of an arbitrator to adjudicate his claims, failing which the said decision of the Director, IITM shall be final and binding on the contractor.

iv) Except where the decision has become final, binding and conclusive in terms of Sub para (iii) above, disputes or difference shall be referred for adjudication through a sole arbitrator appointed by the Director, IITM. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Director, IITM of the appeal.

It is also a term of this contract that no person other than a person appointed by such Director, IITM, as aforesaid should act as arbitrator.

It is also a term of this Contract that if the Contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 120 days of receiving the intimation from the Engineer-in-charge that the final bill is ready for payment, the claim of the Contractor shall be deemed to have been waived and absolutely barred and IITM shall be discharged and released of all liabilities under the Contract in respect of these claims.

The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act 1996 (26 of 1996) or any statutory modifications or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also term of this Contract that the arbitrator shall adjudicate on only such disputed as are referred to him by the Director, IITM and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs.1,00,000/- the arbitrator shall give reasons for the award.

It is also a term of the Contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.

It is also a term of the Contract that the arbitrator shall be deemed to have entered on the reference on the date of issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

v) Page 55 – Claus 37 "Levy / Taxes Payable by Contractor"

Para (i) shall be substituted as under

“Sales tax including VAT if any or any other tax on materials as well as on Labour and Works in respect of this Contract shall be payable by the Contractor and IITM shall not entertain any claim whatsoever in this respect.”

CLAUSES OF CONTRACT**CLAUSE 1**

The contractor shall submit an irrevocable performance guarantee of 5 % (Five percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and / or without prejudice to any other provisions in the contract) within the period specified in schedule 'F' from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-charge upto a maximum as specified in schedule 'F' on written request of contractor stating the reason for delays in procuring the performance guarantee, to the satisfaction of the Engineer-in-charge. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs.10,000/-) or Banker's Cheque of any scheduled bank / Demand Draft of any scheduled Bank

The performance guarantee shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of performance guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.

The Engineer-in-charge shall not make a claim under the performance guarantee except for amounts to which the Institute is entitled under the contract (not withstanding and / or without prejudice to any other provisions in the contract agreement). In the event of:

(a) Failure by the contractor to extend the validity of the Performance guarantee as described herein above, in which event the Engineer-in-charge may claim the full amount of the performance guarantee.

(b) Failure by the contractor to pay the Institute any amount due, either as agreed by the Contractor or determined under any of the clauses / conditions of the agreement, within 30 days of the service of the notice to this effect by Engineer-in-charge.

In the event of contract being determined or rescinded under provision of any of the Clause / Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Institute.

CLAUSE 1 A

The person/persons whose tender(s) may be accepted (herein after called the contractor) shall permit Institute at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 5 % of the gross amount of each running bill 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. Such deductions will be made and held by Institute by way of Security Deposit unless he/ they has / have deposited the amount of Security at the rate mentioned above in cash.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from or from any sums which may be due to or may become due to the contractor by the Institute on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions.

The contractor shall within 10 days make good in cash any sum or sums which may have been deducted from his security deposit or any part thereof. The security deposit shall be collected from the running bill of the contractor at the rates mentioned above and the earnest money deposited at the time of tenders will be treated as a part of security deposit.

The Security deposit as deducted above can be released against bank guarantee issued by a scheduled bank, on its accumulations to a minimum of Rs 5 Lakhs subject to the condition that amount of such bank guarantee, except last one shall not be less than Rs 5 Lakhs.

CLAUSE 2

If the contractor fails to maintain the required progress in terms of clause 5 or fails to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Institute on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below by the authority specified in schedule 'F' (whose decision in writing shall be final and binding) may decided on the amount of tendered value of the work for every completed day / month (as applicable) that the progress remains below the specified in clause 5 or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completions has been specified.

- i. Compensation for delay of work. @ 1.5 % per month of delay to be computed on per day basis

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10 % of the tendered value of work or of the tendered value of the item or group of items of work for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Institute. In case, the contractor does not achieve a particular milestones mentioned in schedule 'F', or the re-scheduled milestone(s) in terms of clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of Extension of Time. With-holding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in

subsequent milestones, amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

CLAUSE 2A

In case, the contractor completes the work ahead of scheduled completion time, a bonus @ 1 % (one percent) of the tendered value per month, computed on per day basis shall be payable to the contractor, subject to a maximum limit of 5 % (five percent) of the tendered value. The amount of bonus, if payable, shall be paid along with final bill after completion of work. Provided always that provision of the clause 2 A shall be applicable only when so provided in schedule 'F'.

CLAUSE 3

Subject to other provisions contained in this clause, the Engineer-in-charge may, without prejudice to his any other rights remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and / or any other provisions of contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine to contract in any of the following cases:

If the contractor having been given by the Engineer-in-charge a notice in writing to rectify, reconstruct or replace any defective work or that work is being performed in an inefficient or otherwise improper or un workman like manner shall omit to comply with the requirement of such notice for a period of 7 days thereafter.

If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Engineer-in-charge.

If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completions and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-charge.

If the contractor persistently neglects to carry out his obligations under the contract and / or commits default complying with any of the terms and conditions of the contract and does not a remedy it or takes effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-charge.

If the contractor shall offer to give or agree to give to any person in Government service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or for bearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Government.

If the contractor shall enter into a contract with the Institute in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer – in – Charge.

If the contractor shall obtain a contract with the Institute as a result of wrong tendering or other non-bonafide methods or competitive tendering.

If the contractor being an individual or if a firm any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any insolvency Act of the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditor or purport so to do, or if any application be made under insolvency act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.

If the contractor being a company shall pass a resolution or the court shall make an 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 the circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.

If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.

If the contractor assigns transfers, sublets (engagement of labour on piece – work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer – in – charge.

When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-charge on behalf of the Institute shall have powers.

To determine the contract as aforesaid (of which termination notice in writing to the contractor under the hand of the Engineer-in-charge shall be conclusive evidence). Upon such determination, the Earnest Money Deposit, Security Deposit already recovered and performance guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Institute.

After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined or rescinded as above, shall not be allowed to participate in the tendering process for the balance work.

In the event of above courses being adopted by the Engineer-in-charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any material or entered into any engagements or made any advance 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 provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof actually performed under this contract unless and until the Engineer-in-charge has certified in writing the performance of such work and value payable in respect thereof and he shall only be entitled to be paid the value so certified.

CLAUSE 3 A

In case, the work cannot be started due to reason not within the control of the contractor within 1/8th of the stipulated time for the completion of the work, either party may close the contract. In such an eventuality, the earnest money deposit and performance guarantee of the contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.

CLAUSE 4

In any case in which any of the powers conferred upon Engineer-in-charge by clause 3 thereof, shall have become exercisable and the same are not exercised, the non exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensations shall remain unaffected. In the event of Engineer-in-charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Engineer-in-charge which shall be final and binding on the contractor) use as on hire, (the amount of the hire money being also in the final determination of the Engineer-in-charge) all or any tools, plants, materials and stores in or upon the works, or the site thereof belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work / or any part thereof, paying or allowing for the same in account at the contract rates, or, in the case of this not being applicable, at current market rates to be certified by the Engineer-in-charge, whose certificate thereof shall be final, and binding on the contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Engineer-in-charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor on his risk in all respects and certificate of the Engineer-in-charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

CLAUSE 5

The time allowed for execution of the works as specified in schedule 'F' or the extended time in accordance with these conditions shall be the essence of the contract. The execution of the work

shall commence from such time period as mentioned in schedule 'F' or from the date of handing over of the site whichever is later. If the contractor commits default in commencing the execution of the work as aforesaid, Institute shall without prejudice to any other right to remedy available in law, be at the liberty to forfeit the earnest money & performance guarantee absolutely.

5.1 As soon as possible after the contract is concluded the contractor shall submit a time and progress chart for each mile stone and get it approved by the Engineer-in-charge. The chart shall be prepared in direct relation to the time slated in the contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-charge and the contractor within the limitations of time imposed in the contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per mile stones given in Schedule 'F'.

If the work(s) be delayed by :

force majeure, such as abnormally bad weather, flood, cyclone or any other act of God or serious loss or damage by fire, or civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work or any other cause which, in the absolute discretion of the Engineer in charge is beyond the Contractor's control then upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the Engineer-in-charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-charge to proceed with the works.

5.3 Request for rescheduling of milestones and extension of time, to be eligible for consideration, shall be made by the contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form. The contractor may also, if practicable, indicate in such a request the period for which extension is desired.

5.4 If any such case the Engineer in Charge may give a fair and reasonable extension of time and reschedule the mile stone for completion of work. Such extension shall be communicated to the contractor by the Engineer-in-charge in writing, within 3 months of the date of receipt of such request. Non-application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-charge and this shall be binding on the contractor.

CLAUSE 6

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CLAUSE 6A

Engineer – in – charge shall, except as otherwise provided ascertain and determine measurement for the value of work done in accordance with the contract.

All measurements of all items having financial value shall be entered by the contractor complied in the shape of the Computerized Measurement Book having pages of A-4 size as per the format of the Institute so that a complete record is obtained of all the items of work performed under the contract.

All such measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Engineer - in - charge or his authorized representative as per interval or program fixed in consultation with the Engineer – in – Charge or his authorized representative. After the necessary corrections made by the Engineer – in – charge the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Engineer – in – charge for the dated signatures by the Engineer – in – charge and the contractor or their representatives in token of their acceptance.

Whenever bill is due for payment, the contractor would initially submit draft computerized measurement sheets and these measurements would be got checked / test checked from the Engineer – in – charge and / or his authorized representative . The contractor will thereafter incorporate such changes as may be done during these checks / test checks in his draft computerized measurements and submit to the Institute a computerized measurement book duly bound, and with its pages machine numbered and a soft copy of the same. The Engineer – in – Charge and / or his authorized representative would thereafter check this MB and record the necessary certificates for their checks / test checks.

The final, fair, computerized measurement book given by the contractor duly bound with its page machine numbered and soft copy of the same should be 100% correct, and no cutting or over writing in the measurements would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound, after getting the earlier MB cancelled by the Institute. There after the MB shall be taken in the Division Office records and allotted a number as per the Register of Computerized MBs . This should be done before the corresponding bill is submitted to the Engineering Unit for payment. The contractor shall submit two separate copies of such computerized MB's for the purpose of reference and record by the various officers of the Engineering Unit.

The contractor shall also submit to the Engineering Unit separately his computerized Abstract of cost and the bill based on these measurements, duly bound and its pages machine numbered along with two spare copies of the 'bill'. Thereafter this bill will be processed by the Engineering Unit and allot a number as per computerized record in the same way as done for the measurement book meant for measurements.

The contractor shall, without extra charge, provide assistance with every appliance, labour and other things necessary for checking of measurements / levels by the Engineer – in – Charge or his representative.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with procedure set forth in the specifications notwithstanding any provision in the relevant standard methods of measurements or any general or local custom. In the case of items which are not covered by specifications, measurement shall be taken in accordance with the relevant standard method of measurement issued by Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.

The contractor shall give not less than 7 days notice to the Engineer-in-charge or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of checking and / or test checking the measurement of any work in order that the same may be checked and / or test checked and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of checking measurement and / or test checking measurement and shall not cover up and place beyond reach of measurement of any work without consent in writing of the Engineer-in-charge or his authorized representative in-charge of the work who shall within the aforesaid period of 7 days inspect of the work, and if any work shall be covered up or placed beyond the reach of checking and / or test checking measurements without such notice having been given or the Engineer-in-charge's consent being obtained in writing the same shall be uncovered at the contractor expenses or in default thereof no payment or allowance shall be made for such work or the material with which the same was executed

Engineer – in - charge or his authorized representative in may cause either themselves or through another officer of the department to check the measurements recorded by the contractor and all provisions stipulated herein above shall be applicable to such checking of measurement or levels.

It is also a term of this contract that checking and / or test checking the measurements of any item of work in the measurement book and / or it payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period

CLAUSE 7

No payment shall be made for work, estimated to cost Rs.25 Lakhs/- or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs.25 Lakhs/- the interim of running account bill shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of the Institute in triplicate on or before the date of every month fixed for the same by the Engineer-in-charge. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment / adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in schedule 'F' in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. Engineer-in-charge shall arrange to have the bill verified by the taking or causing to be taken, where necessary, the requisite measurement of the work. In the event of the failure of the contractor to submit the bills Engineer-in-charge shall prepare or cause to be prepared such bills in which the events no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the Engineer-in-charge certifying the sum to which the contractor is considered entitled by way of interim payment of such rates as decided by the Engineer-in-charge. The amount admissible shall be paid within 21 working days after day of presentation of the bill by the contractor to the Engineer-in-charge

All such interim payments shall be recorded as payment of advance against final payment only and shall not preclude the requirement of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-charge relating to the work done or materials delivered forming part of such payments, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is / are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not be in any respect conclude, determine, or affect in any way powers of Engineer-in-charge under the contract or any of such payments be treated as final settlement and adjustments of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion, interim payments shall continue to be made as herein provided without prejudice to the right of the Institute to take action under the terms of this contract for delay in completion of the work, if the extension of date of completion is not granted by the competent authority.

The Engineer-in-charge in his sole discretion on the basis of a certificate from his Site Engineer to the effect that work has been completed up to the level in question make interim advance payments without detailed measurement for work done (other than foundation, item, to be covered under finishing items) upto lintel level (including sunshade etc) and slab level for each floor working out at 75 % of the assessed value. The advance payment so allowed shall be adjusted in the subsequent interim bill by taking detailed measurement thereof.

CLAUSE 8

Within 10 days of the completion of the work the contractor shall give notice of such completion to the Engineer-in-charge and within 30 days of the receipt of such notice the Engineer-in-charge shall inspect the work and if there is no defect in the work shall furnish the contractor a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the Contractor and / or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of the completion shall be issued, nor shall the work be considered to be completed until the contractor shall have removed from the permission on which the work shall be executed all scaffolding, surplus materials, rubbish, all huts and sanitary arrangements required his / their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and clean of the dirt from all wood work, doors, windows, walls, floor, other part of the buildings, in, upon, or above which the work is to be executed or which he may have had positions for the purpose of the execution thereof, and not until the work shall have been measured by the Engineer-in-charge. If the contractor shall fail to comply with the requirement of this clause as to removal of scaffoldings, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning of dirt on or before the date fixed for the completion of the work, the Engineer-in-charge may at the expense of the contractor remove such scaffoldings, surplus materials and rubbish etc. and dispose of the same as he thinks fit and clean of such dirt as aforesaid and the contractor shall have no claim in respect of scaffolding surplus materials as aforesaid except for any some actually realized by the sale thereof.

CLAUSE 8A

When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing, colour washing, painting etc., on walls, floor, windows, shall be removed and the surface cleaned simultaneously with the completion of these item of work in the individual rooms, quarters or premises etc. where the work is done: without waiting for the actual completion of all the other items of work in the contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either by the Institute or through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days notice in writing to the contractor.

CLAUSE 8 B

The contractor shall submit completion plan as required vide general specification for electrical works (Part I – Internal) 2005 and (Part II – External) 1994 as applicable within 30 days of the completion of the work.

In case the contractor fails to submit the completion plan as aforesaid, he shall be liable to pay a sum equivalent to 2.5 % of the value of the work subject to a ceiling of Rs.15000/- (Rupees fifteen thousand only) as may be fixed by the Superintending Engineer concerned and in this respect the decision of the Superintending Engineer shall be final and binding on the contractor.

CLAUSE 9

The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-charge whichever is earlier. No further claim shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of this bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-charge, will, as far as possible be made within the period specified herein under, the period being reckoned from the date of receipt of the bill by the Engineer-in-charge or his authorized Assistant Executive Engineer, complete with account of materials issued by the Department and dismantled materials.

- i. if the tendered value of work is upto Rs.15 Lakhs : 3 months.
- ii. if the tendered value of work exceeds Rs.15 Lakhs : 6 months.

CLAUSE 9 A

Payments due to the contractor be made to his bank registered financial co-operative or thrift societies or recognized financial institutions instead of direct to him. The contractor has to furnish the Engineer-in-charge (1) an authorization in the form of a legally valid document such as a power of attorney conferring authority on the bank. Registered, Financial, Co-operative or Thrift Societies or recognized financial institutions to receive payments and (2) his own acceptance of the correctness of the amount made out as being due to him by Institute or his signature on the bill or other claim performed against Institute before settlement by the Engineer-in-charge of the account of claim by payment to the Bank, registered, financial, co-operative or thrift society, recognized financial institutions. While the receipt given by such banks, registered, financial, co-operative or thrift societies or recognized financial institutions shall constitute a full and sufficient discharge for the payment the contractor shall whenever possible present his bills duly receipted

and discharged through his bank, registered financial, co-operative or thrift society, recognized financial institutions.

Nothing herein contained shall operate to create in favour of the bank; registered financial co-operative or thrift society, recognized financial institutions any rights or equities vis-à-vis the Institute.

CLAUSE 10

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CLAUSE 10 A

The contractor shall at his own expense, provide materials, required for the works.

The contractor shall, at his own expense and without delay, supply to the Engineer-in-charge samples of materials to be used on the work and shall get his approval in advance. All such materials to be provided by the contractor shall be in conformity with specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-charge furnish proof, to the satisfaction of the Engineer-in-charge that the materials so comply. The Engineer-in-charge shall within 30 days of supply of samples or within such further period as he may require intimate to the contractor in writing whether samples are approved by him or not. If samples or not approved the contractor shall forthwith arrange to supply to the Engineer-in-charge for his approval fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with the specifications, approval of the Engineer-in-charge shall be issued after the test results are received.

The contractor shall at his risk and cost submit the sample of materials to be tested or analysed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests are analysis have been made and materials finally accepted by the Engineer-in-charge. The contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The contractor shall, at his risk and cost make all arrangements and shall provide all facilities as the Engineer-in-charge may required for collecting and preparing the required number of samples for each tests at such time and to such place or places as may be directed by the Engineer-in-charge and bear all charges and cost of testing unless specifically provided for otherwise

elsewhere in the contract or specifications. The Engineer-in-charge or his authorized representatives shall at all times have access to the work and to all workshop and places where work is being prepared or from their materials, manufactured articles or machinery are being obtained for the work and the contractor shall afford every facility and every assistance in obtaining the rights to the such access.

The Engineer-in-charge shall have full powers to require the removal from premises of all materials which in this opinion or not in accordance with the specifications and in case of default, the Engineer-in-charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for a loss or damage that may happen or arise to such materials the Engineer-in-charge shall also have full powers require other proper materials to be substituted thereof and in case of default, the Engineer-in-charge may cause the same to be supplied and all cost which may attend such removal and substitutions shall be borne by the contractor.

The contractor shall at his own expense provide a material testing lab at the site for conducting routine field tests. The lab shall be equipped at least with testing equipments as specified in schedule – 'F'

CLAUSE 10 B

The contractor, on signing an indenture in the form to be specified by the Engineer-in-charge, shall be entitled to be paid during the progress of the execution of the work upto 90 % of the work assessed value of any materials which are in the opinion of the Engineer-in-charge non-perishable, non-fragile and noncombustible and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and / or 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 sub-clause are incorporated in the work, the amount of such advance shall be recovered / deducted from the next payment made under any of the clause or clauses of this contract.

Such secured advance shall also be payable on other items of perishable nature, fragile and combustible with the approval of the Engineer-in-charge provided the contractor provides a comprehensive insurance cover for the full cost of such materials. The decision of the Engineer-in-charge shall be final and binding on the contractor in this matter. No secured advance, shall however, be paid on high-risk materials such as ordinary glass, sand, petrol diesel etc.

Mobilization advance not exceeding 10 % of the tendered value may be given, if requested by the contractor in writing within one month of the order to commence the work. In such a case, the

contractor shall furnish a Bank Guarantee Bond from a Scheduled Nationalized Bank as Specified by the Engineer-in-charge for the full amount of mobilization advance before such advance is released. Such advance shall be in two or more installments to be determined by the Engineer-in-charge at his sole discretion. The first installment of such advance shall be released by the Engineer-in-charge to the contractor on a request made by the contractor to the Engineer-in-charge in this behalf. The second and subsequent installments shall be released by the Engineer-in-charge only after the contractor furnishes a proof of the satisfactory utilization of the earlier installment to the entire satisfaction of the Engineer-in-charge.

Provided always that the provision of clause 10B (ii) shall be applicable only when so provided in 'Schedule F'.

An advance for plant, machinery & shuttering material required for the work and brought to site by the contractor may be given, if requested by the contractor in writing, within one month of bringing such plant and machinery to site. Such advance shall be given on such plant and machinery, which in the opinion of the Engineer-in-charge will add to the expeditious execution of work and improve the quality of work. The amount of advance shall be restricted to 5 % (five percent) of the tender value. In the case of new plant and equipment to be purchased for the work, the advance shall be restricted to 90 % of the price of such new plant and equipment paid by the contractor for which the contractor shall produce evidence satisfactory to the Engineer-in-charge. In the case of second hand and used plants and equipment, the amount of such advance shall be limited to 50 % of the depreciated value of plant and equipment as may be decided by the Engineer-in-charge. The contractor shall, if so required by the Engineer-in-charge submit the statement of value of such old plant and equipment duly approved by a Registered Value recognized by the Central Board of Direct Taxes under the Income-Tax Act, 1961. No such advance shall be paid on any plant and equipment of perishable nature and on any plant and equipment of a value less than Rs.50,000/- seventy five per cent of such amount of advance shall be paid after the plant & equipment is brought to site and balance twenty five percent on successfully commissioning the same.

Leasing of equipment shall be considered at par with purchase of equipment and shall be covered by tripartite agreement with the following:

Leasing company, which gives certificate of agreeing to lease equipment to the contractor.
Engineer-in-charge and the contractor.

This advance shall further be subject to the condition that such plant and equipment (a) are considered by the Engineer-in-charge to be necessary for the works; (b) and are in and are maintained in working order; (c) hypothecated to the Institute as specified by the Engineer-in-charge before the payment of advance is released. The contractor shall not be permitted to

remove from the site such hypothecated plant and equipment without the prior written permission of the Engineer-in-charge. The contractor shall be responsible for maintaining such plant and equipment in good working order during the entire period of hypothecation failing which such advance shall be entirely recovered in lump sum. For this purpose, steel scaffolding and form work shall be treated as plant and equipment.

The contractor shall insure the plant and machinery for which mobilization advance is sought and given, for a sum sufficient to provide for their replacement at site. Any amounts not recovered from the insurer will be borne by the contractor.

The mobilization advance and plant and machinery advance in (ii) & (iii) above bear simple interest at the rate of 10 percent per annum and shall be calculated from the date of payment to the date of recovery, both days inclusive, on the outstanding amount of advance. Recovery of such sums advanced and interest shall be made by the deductions from the contractors bills commencing after first 10% of the Gross value of the work is executed and paid, on prorata percentage basis to the Gross value of the work build beyond 10% in such a way that the entire advance is recovered by the time 80% of the Gross value of the contract is executed and paid, together with interest due on the entire outstanding amount up to the date of recovery of the installment.

If the circumstances are considered reasonable by the Engineer-in-charge, the period mentioned in (ii) and (iii) for request by the contractor in writing for grant of mobilization advance and plant and equipment advance may be extended at the discretion of the Engineer-in-charge.

The said bank guarantee for advances shall initially be made for the full amount and valid for the contract period, and be kept renewed from time to time to cover the balance amount and likely period of complete recovery together with interest.

CLAUSE 10 C

If after submission of the tender, the price of any material incorporated in the works(excluding the materials covered under Clause 10CA and not being a material supplied the Engineer-in-Charge's stores in accordance with Clause 10 thereof and/or wages of labour increases as a direct result of the coming into force of any fresh law, or statutory rule or order (but not due to any changes of rate in sales tax/VAT, Central/State Excise/Custom Duty) beyond the prices/wages prevailing at the time of the last stipulated date of receipt of tenders including extensions, if any, for the work during contract period including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, then the amount of the contract shall accordingly be varied and provided further that any such increase shall be limited to the price/wages

prevailing at the time of stipulated date of completion or as prevailing for the period under consideration, whichever is less. If after submission of the tender, the price of any material incorporated in the works (excluding the materials covered under Clause 10CA and not being a material supplied from the Engineer-in-Charge's stores in accordance with Clause 10 thereof) and/or wages of labour as prevailing at the time of last stipulated date of receipt of tender including extensions, if any, is decreased as a direct result of the coming into force of any fresh law or statutory rules or order (but not due to any changes of rate in sales tax/VAT, Central/State Excise/Custom Duty), Institute shall in respect of materials incorporated in the works (excluding the materials covered under Clause 10CA and not being material supplied from the Engineer-in-Charge's stores in accordance with Clause 10 hereof) and/or labour engaged on the execution of the work after the date of coming into force of such law statutory rule or order be entitled to deduct from the dues of the contractor, such amount as shall be equivalent to the difference between the prices of the materials and/or wages as prevailed at the time of the last stipulated date for receipt of tenders including extensions if any for the work and the prices of materials and/or wages of labour on the coming into force of such law, statutory rule or order. This will be applicable for the contract period including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2.

Engineer-in-Charge may call books of account and other relevant documents from the contractor to satisfy himself about reasonability of increase in prices of materials and wages. The contractor shall, within a reasonable time of his becoming aware of any alteration in the price of any such materials and/or wages of labour, give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in position to supply.

For this purpose, the labour component of the work executed during period under consideration shall be the percentage as specified in Schedule F, of the value of work done during that period and the increase/decrease in labour shall be considered on the minimum daily wages in rupees of any unskilled adult male mazdoor, fixed under any law, statutory rule or order.

Clause 10 CA

If after submission of the tender, the price of materials specified in schedule 'F' increases / decreases beyond the price(s) prevailing at the time of the last stipulated date for receipt of tenders (including extension, if any) for the work, then the amount of the contract shall accordingly be varied and provided further that any such variations shall be effected for stipulated period of contract including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2

However for work done / during the justified period extended as above it will be limited to indices prevailing at the time of stipulated date for completion or as prevailing for the period under consideration, whichever is less.

The increase / decrease in prices shall be determined by the All India wholesale price indices of Materials as published by Economic Advisor to Government of India, Ministry of Commerce and Industry and base price for material as issued under the authority of Director General (Works), CPWD as valid on the last stipulated date of receipt of tender, including extension if any and for the period under consideration. In case price index of a particular material is not issued by the Ministry of Commerce and Industry the price of nearest similar material as indicated in schedule F shall be followed.

The amount of the contract shall accordingly be varied for all such materials and will be worked out as per the following formula given below :

a) Adjustment for component of 'Cement'

$$V = P \times Q \times \frac{CI - CI0}{CI0}$$

Where,

V = Variation in material cost i.e. increase or decrease in the amount in Rupees to be paid or recovered.

P = Base Price of materials as issued under authority of DG (W), CPWD valid at the time of the last stipulated date of receipt of tender including extensions, if any.

Q = Quantity of materials used in the works since previous bill.

CI0 = All India wholesale Price Index for the material as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce as valid on the last stipulated date of receipt of tenders including extensions, if any.

CI = All India wholesale Price Index for the material for period under consideration as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce.

(In respect of the justified period extended under the provisions of clause 5 of the contract with out any action under clause 2, the index prevailing at the time of stipulated date of completion or the prevailing index of the period under consideration whichever is less shall be considered)

b) Adjustment for component of 'Steel'

$$Vs = Ps \times Qs \times \frac{SI - SI0}{SI0}$$

Where,

Vs = Variation in cost of steel reinforcement bars i.e. increase or decrease in the amount in rupees to be paid or recovered.

Ps = Base Price of steel reinforcement bars, as issued under authority of DG (W), CPWD at the time of the last stipulated date of receipt of tender including extensions, if any.

Qs = Quantity of steel paid either by way of secured advance or used in the works since previous bill. (Whichever is earlier)

SIO= All India wholesale Price Index for Steel (bars & rods) for the period under consideration as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce as valid on the last stipulated date of receipt of tenders including extensions, if any.

SI = All India wholesale Price Index for Steel (bars & rods) for the period under consideration as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce.

Note: (i) In respect of the justified period extended under the provisions of clause 5 of the contract with out any action under clause 2, the index prevailing at the time of stipulated date of completion or the prevailing index of the period under consideration whichever is less shall be considered)

(ii) If during progress of work or at the time of completion of work, it is noticed that any material brought at site is in excess of requirement, then amount of escalation if paid earlier on such excess quantity of material shall be recovered on the basis of cost indices as applied at the time of payment of escalation or as prevailing at the time of effecting recovery, whichever is higher.

Provided always that provisions of the preceding Clause 10 C shall not be applicable in respect of materials covered in this clause.

CLAUSE 10 CC

Deleted

CLAUSE 10 D

The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as Institute's property and such materials shall be disposed off to the best advantage of Institute according to the instructions in writing issued by the Engineer-in-charge.

CLAUSE 11

The contractor shall execute the whole and every part of the work in the most substantial and work manlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also confirm exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Engineer-in-charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specification of Central Public Works Department specified in Schedule 'F' or in any Bureau of Indian Standard or any other, published standard or code or, schedule of rates or any other printed publication referred to elsewhere in the contract.

The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervisions of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

CLAUSE 12

The Engineer-in-charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein any in any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.

12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended, if requested by the contractor, as follows :

- i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus.
- ii) 25 % of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-charge.

12.2 In the case of extra item(s) the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis, for the work and the Engineer-in-charge shall within one month of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

In the case of substituted items, the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the aforesaid para.

In the case of substituted items (items that are taken up with partial substitution or in lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following para

If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).

If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule 'F', the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis, for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities the Engineer-in-charge shall within one month of receipt of the claim supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates to be determined.

12.3 The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Schedule 'F', and the Engineer-in-charge

shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.

12.4 The contractor shall send to the Engineer-in-charge once every three months an upto date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-charge which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right. However, the Superintending Engineer may authorize consideration of such claims on merits.

12.5 For the purpose of operation of Schedule 'F', the following works shall be treated as works relating to foundation unless & otherwise defined in the contract.

For Buildings : All works up to 1.2 metres above ground level or up to floor 1 level whichever is lower.

For abutments, piers and well staining : All works up to 1.2 m above the bed level.

For retaining walls, wing walls, compound walls, chimneys, over head reservoirs/tanks and other elevated structures : All works up to 1.2 metres above the ground level.

For reservoirs/tanks (other than overhead reservoirs/tanks) : All works up to 1.2 metres above the ground level.

For basement: All works up to 1.2 m above ground level or up to floor 1 level whichever is lower.

For Roads, all items of excavation and filling including treatment of sub base.

12.6 Any operation incidental to or necessarily has to be in contemplation of tenderer while filing tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.

CLAUSE 13

If at any time after acceptance of the tender, the Institute shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer-in-charge shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or

advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates full amount for works executed at site and, in addition, a reasonable amount as certified by the Engineer-in-charge for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure:

Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office; storage accommodation and water storage tanks.

Institute shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however, Institute shall be bound to take over the materials or such portions thereof as the contractor does not desire to retain. For materials taken over or to be taken over by Institute, cost of such materials as detailed by Engineer-in-charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.

If any materials supplied by Institute are rendered surplus, the same except normal wastage shall be returned by the contractor to Institute at rates not exceeding those at which these were originally issued less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the contractor. In addition, cost of transporting such materials from site to Institute stores, if so required by Institute, shall be paid.

Reasonable compensation for transfer of T & P from site to contractor's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable.

Reasonable compensation for repatriation of contractor's site staff and imported labour to the extent necessary.

The contractor shall, if required by the Engineer-in-charge furnish to him books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition.

The reasonable amount of items on (i), (iv) and (v) above shall not be in excess of 2 % of the cost of the work remaining incomplete on the date of closure, i.e. total stipulated cost of the work as per accepted tender less the cost of work actually executed under the contract and less the cost of contractor's materials at site taken over by the Institute as per item (ii) above. Provided always that against any payments due to the contractor this account or otherwise the Engineer-in-charge shall be entitled to recover or be credited with any outstanding balances due from the contractor for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by the Institute from the contractor under the terms of the contract.

CLAUSE 14

If contractor:

At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 days in this respect from the Engineer-in-Charge; or.

Commits default in complying with any of the terms and conditions of the contract and does not remedy it or takes effective steps to remedy it within 7 days even after a notice in writing is given in that behalf by the Engineer-in-Charge; or

Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined, and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-Charge.

The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to Institute, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to:

- (a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or
- (b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor

The Engineer-in-Charge shall determine the amount, if any, is recoverable from the contractor for completion of the part work/ part incomplete work of any item(s) taken out of his hands and execute at the risk and cost of the contractor, the liability of contractor on account of loss or damage suffered by Institute because of action under this clause shall not exceed 10% of the tendered value of the work.

In determining the amount, credit shall be given to the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor. The certificate of the Engineer-in-Charge as to the value of work done shall be final and conclusive against the contractor provided always that action under this clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the Institute are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor.

Any excess expenditure incurred or to be incurred by Institute in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by Institute as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to Institute in law or per as agreement be recovered from any money due to the contractor on any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

If the contractor fails to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge shall have the right to sell any or all of the contractors' unused materials, constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract.

In the event of above course being adopted by the Engineer-in-Charge, 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 advance on any account or with a view to the execution of the work or the performance of the contract.

CLAUSE 15

The contractor shall, on receipt of the order in writing of the Engineer-in-charge, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:

on account of any default on the part of the contractor or; for proper execution of the works or part thereof for reasons other than the default of the contractor; or for safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-charge.

If the suspension is ordered for reasons (b) and (c) in sub-para (i) above; the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25 % for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and ; If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the contractor shall, in addition, be entitled to such compensation as the Engineer-in-charge may consider reasonable in respect of salaries and / or wages paid by the contractor to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2 % to cover indirect expenses of the contractor.

Provided the contractor submits his claim supported by details to the Engineer-in-charge within fifteen days of the expiry of the period of 30 days.

If the works or part thereof is suspended on the orders of the Engineer-in-charge for more than three months at a time, except when suspension is ordered for reason (a) in sub-para (i) above, the contractor may after receipt of such order serve a written notice on the Engineer-in-charge requiring permission within fifteen days from receipt by the Engineer-in-charge of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by Institute or where it affects whole of the works, as an abandonment of the works by Institute shall within 10 days of expiry of such period of 15 days give notice in writing of his intention to the Engineer-in-charge. In the event of the contractor treating the suspension as an abandonment of the contract by Institute, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Engineer-in-charge may consider reasonable, in respect of salaries and / or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2 % to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-charge within 30 days of the expiry of the period of 3 months.

Provided, further, that the contractor shall not be entitled to claim any compensation from Institute for the loss suffered by him on account of delay by Institute in the supply of materials in schedule 'B' where such delay is covered by difficulties relating to the supply of wagons, force majeure including non-allotment of such materials by controlling authorities, acts of God, acts of enemies of the state / country or any reasonable cause beyond the control of the Institute.

CLAUSE 16

All works under or in course of execution or executed in pursuance of the contract shall at all times be open and accessible to the inspection and supervision of the Engineer-in-charge, his authorized subordinates in charge of the work and all the superior officers, officer of the Quality Assurance unit of the Institute or any organization engaged by the Institute for Quality Assurance and of the Chief Technical Examiner's Office , and the contractor shall, at all times, during the usual working hours and all at other time at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-charge or his authorized subordinates in-charge of the work or officers of the organization engaged by the Institute for quality assurance to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect,

or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months (six months in case of work costing Rs. 10 Lac and below except road work) of the completion of the work from the Engineer-in-charge specifying the work, materials or articles 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 charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default.

In such case the Engineer-in-charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the competent authority may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and / or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

CLAUSE 17

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grass land, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within twelve months (six months in the case of work costing Rupees Ten lacks and below except road work) after a certificate final or otherwise of its completion shall have been given by the Engineer-in-charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-charge as cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of twelve months (six months in the case of work costing Rupees Ten lakhs and below except road work) after the issue of the certificate final or otherwise of completion of work or till the final bill has been prepared and passed whichever is later. Provided that in case of road work, in the opinion of the Engineer in charge, half of the security deposit is sufficient, to meet all liabilities of the contractor under this contract, half of the

security will be refundable after six months and the remaining half after twelve months of the issue of the said certificate of completion or till the final bill has been prepared and passed whichever is later.

In case of Maintenance and Operation works of E & M services, the security deposit deducted from contractors shall be refunded within one month from the date of final payment or within one month from the date of completion of the maintenance contract whichever is earlier.

CLAUSE 18

The contractor shall provide at his own cost all materials (except such special materials if any as may in accordance with the contract be supplied from the Engineer – in – Charge stores), machinery, tools & Plants as specified in schedule 'F'. In addition to this appliances, implements, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing the same may be provided by the Engineer-in-charge at the expense of the contractor and the expenses may be deducted, from any money due to the contractor, under this contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portions thereof.

CLAUSE 18 A

In every case in which by virtue of the provision sub-section (1) of Section 12, of the Workmen's Compensation Act, 1923, Institute is obliged to pay compensation to a workman employed by the contractor, in execution of the works, Institute will recover from the contractor, the amount of the compensation so paid; and without prejudice to the rights of the Institute under sub-section (2) of section 12, of the said Act, Institute shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Institute to the contractor whether under this contract or otherwise. Institute shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except on the written request of the contractor and upon his giving to Institute full security for all costs for which Institute might become liable in consequence of contesting such claim.

CLAUSE 18 B

In every case in which by virtue of the provisions Contract Labour (Regulation and Abolition) Act 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, Institute is obliged to pay any amount of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under clause 19H or under the C.P.W.D. contractors, labour regulations, or under the rules framed by Government of India from time to time for the protection of health and sanitary arrangements for workers employed by contractors, Institute will recover from the contractor, the amount of wages so paid or the amount of expenditure so uncured; and without prejudice to the rights of the Institute under sub-section(2) of Section 20, and sub-section (4) of Section 21, of the Contract labour (Regulation and Abolition) Act, 1970, Institute shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Institute to the contractor whether under this contract or otherwise Institute shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of section 21, of the said Act, except on the written request of the contractor and upon his giving to the Institute full security for all costs for which Institute might become liable in contesting such claim.

CLAUSE 19

The contractor shall obtain a valid license under the Contract Labour (R&A) Act 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.

The contractor shall also comply with the provision of the building and other construction workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.

Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.

CLAUSE 19A

No labour below the age of eighteen years shall be employed on the work.

CLAUSE 19B

Payment of Wages:

The contractor shall pay to labour employed by him either directly or through sub-contractors, wages

not less than fair wages as defined in the C.P.W.D. Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.

The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.

In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Central Public Works Department contractor's Labour Regulations made by Government of India from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorizedly made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract labour (Regulation and Abolition) Central Rules 1971, wherever applicable.

The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the regulations.

Under the provision of Minimum wages (Central) Rules, 1950, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labors and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-charge concerned.

The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947 Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made thereunder from time to time.

The Contractor shall indemnify and keep indemnified institute against payments to be made under and for the observance of the laws aforesaid and the C.P.W.D. Contractor's labour Regulations without prejudice to this right to claim indemnity from his sub-contractors.

The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the contractor to the workman directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.

The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

CLAUSE 19 C

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per C.P.W.D. Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs.200/- for each default and in addition the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

CLAUSE 19 D

The Contractor shall submit by the 4th and 19th of every month, to the Engineer-in-charge a true statement showing in respect of the second half of the preceding month and the first half of the current month respectively. The number of labourers employed by him on the work, Their working hours, The wages paid to them, The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them, and

The number of female workers who have been allowed maternity benefit according to Clause 19F and the amount paid to them. Failing which the contractor shall be liable to pay to Institute, a sum not exceeding Rs.200/- for each default or materially incorrect statement. The decision of the Engineer-in-charge shall be final in deducting from any bill due to the contractor; the amount levied as fine and be binding on the contractor.

CLAUSE 19 E

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with all the rules framed by Government of India/Institute from time to time for the protection of health and sanitary arrangements for workers employed by the Institute and its contractors.

CLAUSE 19 F

Leave and pay during leave shall be regulated as follows :-

Leave :

In the case of delivery – maternity leave not exceeding 8 weeks, 4 weeks upto and including the day of delivery and 4 weeks following that day,

In the case of miscarriage – upto 3 weeks from the date of miscarriage.

Pay :

In the case of delivery – leave pay during maternity leave will be at the rate of the women's average daily earnings, calculated on total wages earned on the days when full time work was done during a period of three months immediately preceding the date on which she gives notice that she expects to be confined or at the rate of Rupee one only a day whichever is greater.

In the case of miscarriage – leave pay at the rate of average daily earning calculated on the total wages earned on the days when full time work was done during a period of three months immediately preceding the date of such miscarriage.

Conditions for the grant of maternity Leave.

No maternity leave benefit shall be admissible to a woman unless she has been employed for a total period of not less than six months immediately preceding the date on which she proceeds on leave.

The contractor shall maintain a register of Maternity (Benefit) in the prescribed Form as shown in annexure – I and II, and the same shall be kept at the place of work.

CLAUSE 19 G

In the event of the contractor(s) committing a default or breach of any of the provisions of the Central Public Works Department, Contractor's Labour Regulations and Model Rules for the protection of health and sanitary arrangements for the workers as amended from time to time or furnishing any information or submitting or filing any statement under the provisions of the above regulations and Rules which is materially incorrect, he / they shall, without prejudice to any other liability, pay to the Institute a sum not exceeding Rs.200/- for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractors defaulting continuously in this respect, the penalty may be enhanced to Rs.200/- per day for each day of default subject to a maximum of 5 per cent of the estimated cost of the work put to tender. The decision of the Engineer-in-charge shall be final and binding on the parties.

Should it appear to the Engineer-in-charge that the contractor(s) is / are not properly observing and complying with the provisions of the C.P.W.D. Contractor's Labour Regulations and Model Rules and

the provisions of the Contract Labour (Regulation and Abolition) Act 1970, and the Contract Labour (R&A) Central Rules 1971, for the protection of health and sanitary arrangements for work-people employed by the contractor(s) (hereinafter referred as 'the said Rules') the Engineer-in-charge shall have power to give notice in writing to the contractor(s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice. If the contractor(s) shall fail within the period specified in the notice to comply with and / observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-charge shall have the power to provide the amenities herein before mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his/their own expense and to approved standards all necessary huts and sanitary arrangements required for his / their work-people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-charge shall have power to give notice in writing to the contractor(s) requiring that the said huts and sanitary arrangements be remodeled and/or reconstruct such huts and sanitary arrangements according to approved standards, and if the contractor(s) shall fail to remodel or reconstruct such huts and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-charge shall have the power to remodel or reconstruct such huts and sanitary arrangements according to approved standards at the cost of the contractor(s).

CLAUSE 19 H

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CLAUSE 19 I

The Engineer-in-charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors employ upon the work who may be incompetent or misconduct himself and the contractor shall forthwith comply with such requirements.

CLAUSE 19 J

It shall be the responsibility of the contractor to see that the building under construction is not occupied by any body unauthorized during construction, and is handed over to the Engineer-in-charge with vacant possession of complete building, If such building through completed is occupied illegally, then the Engineer-in-charge shall have the option to refuse to accept the said building / buildings in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay a levy upto 5% of tendered value of work may be imposed by the Engineer-in-charge whose decision shall be final both with regard to the justification and quantum and be binding on the contractor.

However, the Engineer-in-charge, through a notice, may require the contractor to remove the illegal occupation any time on or before construction and delivery.

CLAUSE 19K

The contractor shall, at all stages of work, deploy skilled / semi skilled tradesmen who are qualified and possess certificate in particular trade from CPWD training institute / Industrial Training Institute / national Institute of Construction Management and Research (NICMAR) / National Academy of Construction / CIDC or any similar reputed and recognized institute managed ./ certified by State / Central Government. The number of such qualified tradesmen shall not be less than 20 % of total skilled / semi skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade , its scheduling and the list of qualified tradesmen along with requisite certificate from recognized institute to Engineer – in – charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade the contractor shall substitute such tradesmen with in two days of written notice from Engineer in charge . Failure on the part of the contractor to obtain approval of Engineer – in – charge or failure to deploy qualified tradesmen will attract a compensation to be paid by contractor at the rate of RS 100 per such tradesman per day. Decision of the Engineer – in – charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding. Provided always, the provisions of this clause, shall not be applicable for works with estimated cost put to tender being less than Rs 5 crores

CLAUSE 20

The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970, amended from time to time and rules framed thereunder and other labour laws affecting contract labour that may be brought into force from time to time.

CLAUSE 21

The contract shall not be assigned or sublet without the written approval of the Engineer-in-Charge. And if the contractor shall assign or sublet 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, 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 agent to any public officer or person in the employ of Government in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-Charge on behalf of the Institute shall have power to adopt the course specified in Clause 3 hereof in the interest of Institute and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.

CLAUSE 22

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Institute without reference to the actuals, loss or

damage sustained and whether or not any damage shall have been sustained.

CLAUSE 23

Where the contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained any change is made in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concern such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

CLAUSE 24

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

CLAUSE 25

Settlement of Disputes & Arbitration

Except where otherwise provided in the contract all question and disputes relating to the meaning of the specifications, designs, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders of these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned herein after.

1.1 If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-charge or any matter in connection with or arising out of the Contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request the Superintending Engineer in writing for written instruction or decision. Thereupon, the Superintending Engineer shall give his written instructions or decisions within a period of one month from the receipt of the contractor's letter.

If the Superintending Engineer fails to give his instructions or decisions in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision of the Superintending

Engineer, the contractor may, within 15 days of the receipt of Superintending Engineer's decision appeal to the Chairman (Engineering Unit), IITM who shall afford an opportunity to the contractor to be heard, if the matter so desires and to offer evidence in support of his appeal. The Chairman (Engineering Unit), IITM shall give his decision within 30 days of receipt of contractor's appeal.

1.2 If the contractor is dissatisfied with the decision of the Chairman (Engineering Unit), he may within a period of 15 days of the receipt of the Chairman's decision appeal to the Director, IITM who shall afford an opportunity to the contractor to be heard, if the matter so desires and to offer evidence in support of his appeal. The Director, IITM shall give his decision within 30 days of receipt of contractor's appeal.

1.3 If the contractor is dissatisfied with the decision of the Director IITM, he shall within 30 days of the receipt of the decision shall give notice to the Director, IITM for appointment of an arbitrator to adjudicate his claims, failing which the said decision of the Director, IITM shall be final and binding on the contractor.

1.4 Except where the decision has become final, binding and conclusive in terms of Sub para (iii) above, disputes or difference shall be referred for adjudication through a sole arbitrator appointed by the Director, IITM. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, another sole arbitrator shall be appointed in the manner aforesaid. Such person shall proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Director, IITM of the appeal.

It is also a term of this contract that no person other than a person appointed by such Director, IITM, as aforesaid should act as arbitrator.

It is also a term of this Contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 120 days of receiving the intimation from the Engineer-in-charge that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and IITM shall be discharged and released of all liabilities under the Contract in respect of these claims.

The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act 1996 (26 of 1996) or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this

clause.

It is also term of this Contract that the arbitrator shall adjudicate on only such disputed as are referred to him by the Director, IITM and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs.1,00,000/- the arbitrator shall give reasons for the award.

It is also a term of the Contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.

It is also a term of the Contract that the arbitrator shall be deemed to have entered on the reference on the date of issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

CLAUSE 26

The contractor shall fully indemnify and keep indemnified the Institute against any action, claim or proceeding 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 Institute 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 therefrom, provided that the contractor shall not be liable to indemnify the Institute 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 Engineer-in-Charge this behalf.

CLAUSE 27

Deleted

CLAUSE 28

In the case of any class of work for which there is no such specifications as referred to in Clause 11, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as

per manufacturer's specifications, if not available then as per District Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

CLAUSE 29 (To be discussed in detail)

i) Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, the Engineer-in-Charge or the Institute shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Engineer-in-Charge or the Institute 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 being insufficient to cover the claimed amount or amounts or if no security has been; taken from the contractor, the Engineer-in-Charge or the Institute 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 may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-in-Charge of the Institute or any contracting person through the Engineer-in-Charge pending finalization of adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or Institute will be kept withheld or retained as such by the Engineer-in-Charge or Institute till the claim arising out of or under the contract is determined by the arbitrator (if the contractor is govern by the arbitration clause) 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 Engineer-in-Charge or the Institute 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 found payable to any partner/ limited company as the case may be, whether in his individual capacity or otherwise.

ii) Institute 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 overpaid in respect of any work done by the contractor under the contract or any work claimed 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 Institute to recover the same from him in the manner prescribed in sub-clause (i) 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 Institute to the contractor, without any interest thereon whatsoever.

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

CLAUSE 29A

Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or the Institute or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or Institute or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer-in-Charge or the Institute or with such other person or persons.

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the Institute will be kept withheld or retained as such by the Engineer-in-Charge or the Institute or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the 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 on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

CLAUSE 30

The contractor shall not employ coal mining or controlled area labour falling under any category whatsoever on or in connection with the work or recruit labour from area within a radius of 32 km (20 miles) of the controlled area. Subject as above the contractor shall employ imported labour only i.e., deposit imported labour or labour imported by contractors from area, from which import is permitted.

Where ceiling price for imported labour has been fixed by State or Regional Labour Committees not more than that ceiling price shall be paid to the labour by the contractor.

The contractor shall immediately remove any labourer who may be pointed out by the Engineer-in-Charge as being a coal mining or controlled area labourer. Failure to do so shall render the contractor liable to pay to Institute a sum calculated at the rate of Rs.100/- per day per labourer. The certificate of the Engineer-in-Charge about the number of coal mining or controlled area labourer and the number of days for which they worked shall be final and binding upon all parties to this contract.

It is declared and agreed between the parties that the aforesaid stipulation in this clause is one in which the public are interested within the meaning of the exception in Section 74 of Indian Contract Act, 1872.

Explanation : Controlled Area means the following areas :

Districts of Dhanbad, Hazaribagh, Jamtara – a Sub-division under Santhal Pargana Commissionery,
Districts of Bankura, Birbhum, Burdwan, District of Bilaspur

Any other area which may be declared a controlled area by or with the approval of the Central Government.

CLAUSE 31

The contractor(s) shall make his / their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions.

- i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Engineer-in-charge.
- ii) The Engineer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are in the opinion of the Engineer-in-Charge, unsatisfactory.
- iii) No bore wells / open wells shall be constructed inside the IITM Campus for drawl of water.

CLAUSE 31 A

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CLAUSE 32

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CLAUSE 33

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CLAUSE 34

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CLAUSE 35

The contractor undertakes to make arrangement for the supervision of the work by the firm supplying

the bitumen used.

The contractor shall collect the total quantity of bitumen required for the work as per standard formula, before the work is started and shall hypothecate it to the Engineer-in-Charge. If any bitumen remains unused on completion of the work on account of lesser use of materials in actual execution for reasons other than authorized changes of specifications and abandonment of portion of work, a corresponding deduction equivalent to the cost of unused materials as determined by the Engineer-in-Charge shall be made and the material returned to the contractors. Although the materials are hypothecated to Institute, the contractor undertakes the responsibility for their proper watch, safe custody and protection against all risks. The materials shall not be removed from site of work without the consent of the Engineer-in-Charge in writing.

The contractor shall be responsible for rectifying defects noticed within a year from the date of completion of the work and the portion of the security deposit relating to asphaltic work shall be refunded after the expiry of this period.

CLAUSE 36

Contractors Superintendence, Supervision, Technical Staff & Employees

The contractor shall provide all necessary superintendence during execution of the work and as along thereafter as may be necessary for proper fulfilling of the obligations under the contract.

The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge, the name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising the work, minimum requirement of such technical representative(s) and their qualifications and experience shall not be lower than specified in Schedule 'F'. The Engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative(s) to the contractor. Any such approval may at any time be withdrawn and incase of such withdrawal, the contractor shall appoint another such representative(s) according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the contractor in this respect. Such a principal technical representative shall be appointed by the contractor soon after receipt of the approval from Engineer-in-Charge and shall be available at site before start of work.

If the contractor (or any partner in case of firm/company) who himself has such qualifications, it will not be necessary for the said contractor to appoint such a principal technical representative but the contractor shall designate and appoint a responsible agent to represent him and to be present at the work whenever the contractor is not in a position to be so present. All the provisions applicable to the principal technical representative under the clause will also be applicable in such a case to contractor or his responsible agent. The principal technical representative and/or the contractor shall on receiving

reasonable notice from the Engineer-in-Charge or his designated representative(s) in charge of the work in writing or in person or otherwise, present himself to the Engineer-in-Charge and/or at the site of work, as required, to take instructions. Instructions given to the principal technical representative of the responsible agent shall be deemed to have the same force as if these have been given to the contractor. The principal technical representative and/or the contractor or his responsible authorized agent shall be actually available at site especially during important stages of execution of work, during recording of measurement of works and whenever so required by the Engineer-in-Charge by a notice as aforesaid and shall also note down instructions conveyed by the Engineer-in-Charge or his designated representative in the site order book and shall affix his signature in token of noting down the instructions and in token of acceptance of measurements.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) is / are effectively appointed or is / are effectively attending or fulfilling the provision of this clause, a recovery (nonrefundable) shall be effected from the contractor as specified in Schedule 'F' and the decision of the Engineer-in-Charge as recorded in the site order book and measurement recorded checked / test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint a suitable technical representative and / or other technical representative(s) and if such appointed persons are not effectively present are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is / are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative(s) along with every on account bill/final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.

The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work.

The Engineer-in-Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer-in-Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

CLAUSE 37

Clause 37 "Levy / Taxes Payable by Contractor"

Sales tax including VAT (except Service tax) Building and other Construction Workers Welfare Cess or any other tax or Cess in respect of this contract shall be payable by the Contractor and IITM shall not entertain any claim whatsoever in this respect. However in respect of service tax, same shall be paid by the contractor to the concerned department on demand and it will be reimbursed to him by the Engineer-in-charge after satisfying that it has been actually and genuinely paid by the contractor.

The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.

If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the Institute and does not any time become payable by the contractor to the State Government / Local authorities in respect of any material used by the contractor in the works then in such a case, it shall be lawful to the Institute and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the contractor.

CLAUSE 38

i) All tendered rates shall be inclusive of all taxes and levies (Except Service tax) payable under respective statutes. However. If any further tax or cess is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies/cess, the contractor shall be reimbursed the amount so paid. provided such payments, if any, is not, in the opinion of the Engineer-in-charge (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.

ii) 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 Institute and/or the Engineer-in-Charge and further shall furnish such other information/document as the Engineer-in-Charge may require from time to time.

iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or excess, , give a written notice thereof to the Engineer-in-Charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

CLAUSE 39

Without prejudice to any of the rights or remedies under this contract if the contractor dies, the Engineer-in-charge on behalf of the Institute shall have the option of terminating the contract without

compensation to the contractor.

CLAUSE 40

The contractor shall not be permitted to tender for works in the Institute (responsible for award and execution of contracts) in which his near relative is posted as Assistant Registrar(Engineering unit, IITM) or as an officer in any capacity between the grades of the Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Official in the Institute. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of the Institute. If however the contractor is registered in any other department, he shall be debarred from tendering in Institute for any breach of this condition

NOTE: By the term "near relatives" is meant wife, husband, parents and grand parents, children and grand children, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.

CLAUSE 41

No engineer of gazetted rank or other gazetted officer employed in engineering or administrative duties in an engineering department of the Government of India shall work as a contractor or employee of a contractor for a period of one year after his retirement from government service without the previous permission of Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of Government of India as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.

CLAUSE 42

Refer Schedule 'F'

CLAUSE 43

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 Engineer-in-Charge 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 warlike operation, the contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the 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 or removal of serviceable material and for reconstruction of all works ordered by the Engineer-in-Charge, such payments being in addition to compensation upto 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 Superintending Engineer concerned. The contractor shall be paid for the damages/destruction suffered and for the restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract.

Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the A.R.P. Officers or the Engineer-in-Charge (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work.

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 Engineer-in-charge.

CLAUSE 44

The contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the Superintending Engineer may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

CLAUSE 45

Security Deposit of the work shall not be refunded till the contractor produces a clearance certificate from the Labour Officer. As soon as the work is virtually complete the contractor shall apply for the clearance certificate to the Labour officer under intimation to the Engineer-in-charge. The Engineer-in-charge on receipt of the communication shall write to the Labour officer to intimate if any complaint is pending against the contractor in respect of the work. If no complaint is pending on record till after 3 months after completion of the work and/or no communication is received from the Labour officer to this effect till six months after the date of completion it will be deemed to have received the clearance certificate and the security deposit will be released if otherwise due.

GUARANTEE BOND
FORM OF GUARANTEE BOND FOR EMD

In consideration of the Indian Institute of Technology Madras (hereinafter called "The Institute") Having offered to accept the terms and conditions of the proposed tender for the work of
having agreed to production of a irrevocable bank Guarantee for Rs.....(Rupees.....only) as security from the contractor (s) for compliance of his obligations in accordance with the terms and condition in the tender.

1) We.....(Indicate the name of the Bank).....(hereinafter referred to as "the Bank") hereby undertake to pay to the Institute an amount not exceeding Rs.....
(Rupees.....only) on demand by the Institute.

2) We.....do hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on a demand from the Institute stating that the amount claimed is required to that recoveries due or likely to be due from the contractor (s). Any such demand on the Bank shall be conclusive as regard the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees.....only)

3) We, the said bank further undertake to pay to IITM any money so demanded notwithstanding any dispute or disputes raised by the contractor (s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present guarantee being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability payment therein under and the contractor (s) shall have no claim against us for making such payment.

4) We.....(indicate the name of the bank).....further agree that the guarantee herein Contained shall remain in full force during the **SIX months period**.

5) We.....(indicate the name of the bank).....further agree with the Institute that the Institute shall have the fullest liberty without our consent without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Institute against the said contractor (s) and to forebear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor (s) or for any forbearance, act of omission on the part of the Institute on any indulgence by the Institute to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6) This guarantee will not be discharged due to the change in the constitution of the bank or the contractor (s).

7) We.....(indicate the name of the bank).....lastly undertake not to revoke this Guarantee except with the previous consent of the Institute in writing.

8) This guarantee shall be valid up to **SIX months** unless extended on demand by Institute. Notwithstanding anything mentioned above, our liabilities under this guarantee is restricted to Rs ... (Rupees) and unless a claim of writing is lodged with us within six month of the date of expiry or extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharge.

Dated the.....day of.....for..... (Indicate the name of the Bank)

FORM OF PERFORMANCE SECURITY (GUARANTEE)
BANK GUARANTEE BOND

In consideration of the Indian Institute of Technology Madras (hereinafter called "The Institute") Having offered to accept the terms and conditions of the proposed agreement betweenand.....(hereinafter called "the said contractor (s))for the work.....(hereinafter called "the said agreement") having agreed to production of a irrevocable bank Guarantee for Rs.....(Rupees.....only) as security / guarantee from the contractor (s) for compliance of his obligations in accordance with the terms and condition in the said agreement.

1) We.....(hereinafter referred to as "the Bank") hereby (Indicate the name of the Bank) Undertake to pay to the Institute an amount not exceeding Rs.....(Rupees.....only) on demand by the Institute.

2) We.....do hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on a demand from the Institute stating that the amount claimed is required to that recoveries due or likely to be due from the contractor (s). Any such demand on the Bank shall be conclusive as regard the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees.....only)

3) We, the said bank further undertake to pay to IITM any money so demanded notwithstanding any dispute or disputes raised by the contractor (s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability payment therein under and the contractor (s) shall have no claim against us for making such payment.

4) We.....further agree that the guarantee herein (indicate the name of the bank) Contained shall remain in full force and effect during the period that would be taken for the said performance of the said agreement and that it shall continue to be enforceable till all the dues of the Institute under or by virtue of the said agreement have been fully paid and claims satisfied or discharged or till Engineer-in-charge on behalf of the Institute certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor (s) and accordingly discharges this guarantee.

5) We.....further agree with the Institute that (Indicate the name of the Bank) the Institute shall have the fullest liberty without our consent without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Institute against the said contractor (s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor (s) or for any forbearance, act of omission on the part of the Institute on any indulgence by the Institute to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6) This guarantee will not be discharged due to the change in the constitution of the bank or the contractor (s).

7) We.....lastly undertake not to revoke this(Indicate the name of the Bank) Guarantee except with the previous consent of the Institute in writing.

8) This guarantee shall be valid up to.....unless extended on demand by Institute. Notwithstanding anything mentioned above, our liabilities under this guarantee is restricted to Rs ... (Rupees) and unless a claim of writing is lodged with us within six month of the date of expiry or extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharge.

Dated the.....day of.....for.....(Indicate the name of the Bank)

GUARANTEE TO BE EXECUTED BY TENDERERS FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER PROOFING WORKS

The Agreement made this..... day of Two thousand andbetween Son of hereinafter called the guarantor of the one part and the Indian Institute of Technology (hereinafter called Institute) of the other part datedand made between the GUARANTOR OF THE ONE part and the Institute of the other part, whereby the contractor, inter alia, undertook to render the buildings and structures in the said contract recited completely water and leak-proof.

AND WHEREAS GUARANTOR agreed to give a guarantee to effect that the said structures will remain water and leak-proof for ten years from the date of giving of water proofing treatment.

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

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

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

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render the building waterproof to the satisfaction of the Engineer-in-charge at his cost ad shall commence the work for such rectification with in 7 days from the date of issue of the notice by the Engineer-in-charge calling upon him to rectify the defects failing which the work shall be got done by the Institute by some other contractor at the GUARANTOR'S cost and risk, and the decision of Engineer-in-charge as to the cost, payable by the guarantor shall be final and binding.

That if the guarantor fails to execute the water proofing or commits breach there under then the guarantor will indemnify the Institute and his successors against all loss, damage, cost, expense or otherwise which may be incurred by him by reason of any default on the part the GUARANTOR in form and observance of this supplementary agreement. As the amount of loss and or charge and / or cost incurred by the Institute the decision of the Engineer-in-charge will be final and binding on the parties.

IN WITNESS WHEREOF those present have been executed by theand by.....and for and on behalf of the Indian Institute of Technology Madras on the day, month and year first above written.

SIGNED SEALED and delivered by OBLIGOR in the presence of-

- 1.
- 2.

SIGNED For and on behalf of the Indian Institute of Technology Madras
by.....in the presence of-

- 1.
- 2.

ADDITIONAL CONDITIONS - I

1. The contractor shall make arrangement for obtaining electric connections, power and water supply if required and make necessary payments at his/her own risk and cost.
2. Other agencies doing works related with this project will also simultaneously execute the works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc, for laying/burying in the work of pipes, cable, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for other agencies. Conduits for electrical wiring/cables will be laid in a way that they leave enough space for concreting and do not adversely affect the structural members. Nothing extra over the agreement rates shall be paid for the same.
3. Some restrictions may be imposed by the security staff etc. on the working and on movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on this account.
4.
 - (a) The building work will be carried out in the manner complying in all respects with the requirements of relevant bye-laws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-Charge and nothing extra will be paid of this account.
 - (b) The work of water supply, internal sanitary installations and drainage work etc. shall be carried out as per local Municipal Corporation or such local body-byelaws and the contractor shall produce necessary completion certificate from such authorities after completion of the work, if required.
 - (c) Water tanks, taps sanitary, water supply and drainage pipes, fitting and accessories should conform to bye-laws and specification of the Municipal Body/Corporation where CPWD specifications are not available. The contractor should engage licensed plumbers for the work and get the materials (fixtures/fittings) tested by the Municipal Body/Corporation authorities wherever required at his own cost.
 - (d) The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rule and regulations and pay all fees and charge, which he may be liable.
5. The contractor shall take instructions from the Engineer-in-Charge for stacking of materials in any place. No excavated earth or building materials shall be stacked on areas where other buildings, roads, services compound walls are to be constructed.
6. Construction labour shall not be permitted (except staff for watch and ward) to stay inside the campus. The contractor has to arrange for necessary photo identity passes for the labour for entry in to the campus. The labour movement should be restricted to the areas where work is carried out.

ADDITIONAL CONDITIONS - II

2.0 AGREEMENT

Agreement shall be drawn with the successful Tenderer as per General Conditions of Contract for CPWD works. This document is a priced publication and interested tenderers may purchase and study the various clauses before submitting the tender.

3.0 TIME FOR COMPLETION OF WORK

The time allowed for carrying out the work will be **Four months** from the 14th day after the date of written order to commence the work or from the first day of handing over the site, whichever is later, in accordance with the phasing if any indicated in the Tender documents.

4.0 AVAILABILITY OF SITE

The site for the work is available.

6.0 CLARIFICATIONS ON TENDER DOCUMENTS

A prospective Tenderer requiring any clarification on the Tender Document may notify Executive Engineer (Civil) , IITM at Chennai. The Executive Engineer (Civil) will respond to any request for clarification which he receives earlier than 15 days prior to the deadline for submission of Tenders. Copies of the response shall be forwarded who have attended the meeting.

9. EARNEST MONEY

The Tender should be accompanied by Earnest Money for an amount of **Rs. 2,50,000/- (Rupees Two Lakhs and Fifty Thousand Lakhs only)**. The EMD shall be paid in the form of Demand Draft drawn in favor of IITM Chennai – 600 036 on any Scheduled Bank payable at Chennai. Any Tender not accompanied by Earnest Money in an acceptable form shall be rejected by the Employer as non-responsive. The Earnest Money of the successful Tenderer will be taken as part of the Security Deposit as stipulated in Clause 1A of “General conditions of Contract”. The Earnest Money will be forfeited to an extent of 50%, if during the period of Tender Validity, the tenderer

(a) Withdraws his Tender

or

(b) Makes any modifications in the terms and conditions of the Tender which are not acceptable to the Employer.

The Earnest Money will be forfeited in full if the successful Tenderer.

(i) Fails to commence the work on 14th day after the date on which the Employer issues written order to commence the work/ handing over the site which ever is later.

10. ALTERNATIVE PROPOSALS BY THE TENDERERS

The Tenderers shall submit offers, which comply strictly with the requirements of the Tender Document. Alternatives or any modification shall render the Tender invalid.

11. AUTHORITY TO SIGN

- (a) If the Applicant is an individual, he should sign above his full type written name and current address.
- (b) If the Applicant is a proprietary firm, the Proprietor should sign above his full type written name and the full name of his firm with its current address.
- (c) If the Applicant is a firm in partnership, the Documents should be signed by all the Partners of the firm above their full type written names and current addresses. Alternatively the Documents should be signed by a Partner holding Power of Attorney for the firm and in this case a certified copy of the Power of Attorney should accompany the Documents. In both cases a certified copy of the Partnership Deed and current address of all the partners of the firms should be furnished.
- (d) If the Applicant is a limited Company, or a Corporation, the Documents shall be signed by a duly authorized person holding Power of Attorney for signing the Documents, accompanied by a copy of the Power of Attorney. The Applicant should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

LATE TENDER

Any Tender received after the deadline prescribed will be returned unopened to the Tenderer.

NOTE ON GENERAL CONDITION OF CONTRACT AND SCHEDULES A TO F

- 1. The general condition of contract Clauses of Contract and Schedules A to F should be read in conjunction with Correction Slip (C.S.) issued by the DG (Works), CPWD, New Delhi up to till date
- 2. Wherever the expression "The President of India" or "The Government" or "The CPWD" appears in the clauses it should be substituted by the expression "IITM" representing "Indian Institute of Technology Madras".
- 3. Wherever the expression "divisional Officer" appears in the Clauses, it should be substituted by the expression "Executive Engineer (Civil)".
- 4. "Engineer in Charge" means Executive Engineer (Civil) , IITM, and the Engineer means the officer representing the Engineer-in-Charge of the Project.

SPECIAL CONDITIONS

1. No plot rent shall be charged for materials stocked in the institute land during the course of construction with the prior approval the engineer provided all such materials are removed within one month after the works are completed.
2. Royalty or charges due for use of private quarries and private land shall be paid by the Contractor.
3. No labour camps shall be permitted inside the IIT campus. Workers should be made to confine themselves to the work areas and should not wander in to the near by areas / buildings/ forests.
4. If night work is required to be carried out to fulfill the agreed rate of progress all arrangement shall be made by the Contractor inclusive of lighting the area without any claim for extra rate. To the extent possible engaging women labour in the night shift should be avoided.
5. The works shall be carried as per C.P.W.D specifications with Addenda and Corrigenda issued up o the date of receipt of tender and as per best Engineering practice.
- 6 No variations from, additions to and omissions from in the items of work shall vitiate the contract. All such variations, additions, substitutions etc shall be decided as per the terms of the contract agreement.
7. Child Labour is strictly prohibited.
8. Water will be supplied by I.I.T Madras and the contractors will be charged @ 1.5% of the total value of work done.
9. Holes and chasis for water supply and drainage, etc, shall be provided as directed during progress of work without any claim for extra for finishing.
10. The work shall be carried out with least hindrance to the adjoining building and offices and the contractors will be responsible for any damages, caused to the existing fixtures, electric fitting, etc. in the course of execution and the contractor shall make good any such, damages without any claim for extra.
11. Any dispute arises out in the agreement the legal jurisdiction will be at Chennai, Tamil Nadu, India only
12. 10% of the tendered value will be retained for ten years as guarantee for the work and the guarantee amount can be released against the submission of bank guarantee obtained from any schedule bank by the contractors

Special condition for Protection for Environment

1. The debris / construction waste and other waste generated from the work spot should not be thrown inside the campus. All waste material should be taken out of the campus and necessary payment towards the same will be made as per the quoted rate for the disposal of debris.
2. The above tender involves dismantling works at terrace level; hence all debris should bring to ground floor level by using pulley and winches only. Throwing of debris from terrace will not be allowed
3. All construction material should be stored only at places earmarked by the engineer in charge. Material like cement, aggregate, steel etc should not be stored in buildings that are in use. If any material stored in unauthorized location the same shall got removed at the cost of contractor and necessary rent shall be levied for the area used for storage.

4. Necessary display boards indicating the following shall be displayed in a conspicuous place near the work spot.
 - a) Name of the work
 - b) Name of the contractor and Contact Number
 - c) Tendered cost
 - d) Date of start and stipulated date of completion
 - e) AEE and JE in charge for the work and Contact number
5. A Suggestion box should be kept near the above said board.
6. For Inter-carting of various materials animal drawn vehicles are strictly prohibited.
7. Preparation of concrete, mortars in the roads, pavements, under the building bare floors is strictly prohibited.
8. While transporting the materials along the road, spillage of material should be avoided. If any spillage occurs the same should be got cleaned immediately.
9. No vegetation inside the campus should be damaged.
10. Drinking water requirement of the labour should be arranged by the contractor and they should be instructed not to misuse the facilities available in the various buildings.
11. All labour should be dressed properly attending to work wearing dhotis, lungies should be avoided to the extent possible.
12. The workmen shall wear suitable protection devices like mask, gloves, shoes etc,

Any violation of above will attract levy of compensation by the engineer in charge on the contractor.

INSURANCE TO BE TAKEN BY THE CONTRACTOR AND EMPLOYER TO BE INDEMNIFIED

Third Party Insurance

Before commencing the execution of the Works, the contractor shall insure against the liability for any material or physical damage, loss or injury which may occur to any property or life including that of the Employer or to any person, including any employee of the Employer, by or arising out of the execution of the works or in the carrying out of the Contract. The cum insured will be for Rs. 5 lakhs,

Such insurance shall be effected with an insurer and in terms approved by the Employer. The Contractor shall, whenever required, produce before the Engineer-in-charge the policy or policies of insurance and the receipts of payment of the current premiums.

Workmen's Insurance

The Employer's shall not be liable for any payment in respect of any damages or compensation payable according to law in respect or in consequence of any accident or injury or loss of life to any workman or other person in the employment of the Contractor or any sub-contractor, except an accident or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall insure against such liability with an insurer approved by the Employer for sum of the established norms during the entire period till completion of Period of Maintenance.

Recovery from the Contractor

Without prejudice for the other rights of the Employer against the Contractor in respect of such default, the Employer shall be entitled to deduct from any sums payable to the Contractor the amount of any damages, compensation costs, charges and other expenses paid by the Employer and which are payable by the Contractor under this clause.

Period of Policies

All the insurance covers mentioned above shall be kept alive during the complete period of the contract. Remedy on Contractor's Failure to Insure. If the Contractor shall fail to effect and keep in force the insurance referred to above, or any other insurance which he may be required to effect under the terms of the Contract, then and in any such case the Employer on advice of the Engineer-in-Charge may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any moneys due or which may become due to the Contractor, or recover the same as debt due from the Contractor.

Damage to Persons and Property – Employer to be Indemnify

The Contractor shall indemnify the Employer against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto, except any compensation or damages for or with respect to:

- (a) The permanent use or occupation of land by the works or any part thereof.
- (b) The right of the Employer to execute the works or any part thereof on, over, under, in or through any land.
- (c) Injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents, such part of the compensations as may be just and equitable having regard to the extent of the responsibility of the Employer, his servant or agent or other Contractors, for the damage or injury.

Signature of Contractor

Executive Engineer (Civil)

CONDITIONS FOR CEMENT BROUGHT BY THE CONTRACTOR FOR USE IN THE WORK

CEMENT

1. The contractor shall procure 43grade (conforming to IS 8112)ordinary Portland cement or PPC as decided by the Engineer in Charge from reputed manufactures of cement having a production capacity of one million tones per annum or more ,such as ACC, Ultratech (L & T), Ramco, Chettinadu, Birla Cement Corporation of India, etc or any approved by the Ministry of Industry, Government of India and holding license to use ISI Certification mark for their product whose name shall be got approved from the Engineer-in –Charge. The tenderer may submit a list of names of cement manufactures whose product they propose to use. The Engineer incharge has right to accept or reject the names of the manufactures which the tenderer propose to use in the work. No change in tendered rates will be accepted if the tendered accepting authority does not accepting the list of cement manufactures given by the tenderer with fully or partly. Supply of cement shall be taken in 50 kg bags bearing manufacture's name and ISI marking Samples of cement arranged by the contractor shall be got tested in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by the contractor do not confirm to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost with in a week's time of written order form 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 The cement go-down of the capacity to store a maximum of 2000 bags of cement shall be constructed by the contractor at site or work for which no extra payment shall be more. Double lock provision shall be made in 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 or his authorized representative at any time
3. The contractor shall supply free of charge the cement required for testing, at the frequency and the details of the test shall be decided by the Engineer-in-Charge depending on the quantum of supply in each batch. The cost of tests shall be born by the contractor/Institute in the manner indicated below
 - 3.1. by the contractor, if the results show that the cement does not conform to the relevant BIS Codes.
 - 3.2. by the Institute, if the results show that the cement conforms to relevant BIS Codes
4. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in the contract and shall be governed by conditions laid there in.

Items for which standard coefficients of cement consumption are not available in DSR 2002, the same shall be decided by the Engineer-in-charge.

5. 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.
6. The cement bags shall be stacked on proper floors consisting of two layers of dry bricks laid on well consolidated earth at a level of at least one foot above ground level. The stacks shall be in rows of two and 10 bags high with a minimum of 0.6 m clear space all round. The bags should be placed horizontally continuous in each line. actual size/shape of go-down shall be as per site requirements and nothing shall be paid on this account. The decision of Engineer-in-charge regarding the capacity of the godown shall be final.
7. Cement register for the cement shall be maintained at site. The account of daily receipt and issue of cement shall be maintained in register in the proforma prescribed and signed daily by the contractor or this authorized agent.

Over theoretical quantity of materials so computed a variations shall be allowed as specified in schedule F. if the quantities of materials actually used are less than the theoretical Quantities including authorized variations, the cost at market rates plus 10% including cartage to the site of such quantities of materials as determined by Engineer-in-charge, which shall be final and binding, shall be recovered from the contractor without prejudice to department rights/remedies available under the contractor, for action against substandard work.

FLY ASH CONCRETE BLOCK

1. GENERAL

1. Terminology Connected with this work shall be same as those applicable for Brick Work
2. The contractor whose tender is accepted shall furnish the name(s) of the manufacturer from whom he proposes to procure the blocks and get the same approved from the Engineer in Charge before procuring the material. The Engineer in Charge may inspect / get inspected the factory from where the contractor proposes to procure the blocks before accord of approval. The contractor shall arrange for the inspections.
3. The contractor shall furnish the following and obtain prior approval of the Engineer before procuring the blocks.
4. The size and grading of stone aggregate to be used.
5. The grading of fine aggregate.
6. Details of fines obtained from stone crushing proposed to be used in the manufacture of the blocks.
7. The type of cement proposed to be used.
8. The type of fly ash proposed to be used and % proposed.
9. Details of additives etc if any to be used.

10. The proportion of the ingredients may be decided by the contractor / manufacturer to obtain the required strength and other required qualities and got approved in advance.
11. Concrete Blocks shall be manufactured in a factory equipped with weigh batching arrangements for weighing the various ingredients and the blocks shall be manufactured using machinery equipped with vibratory / mechanical compaction arrangements.
12. The blocks shall have smooth rectangular faces with sharp corners and shall be uniform in colour and shall emit a ringing sound when struck
13. Necessary quality control and testing facilities should be available in the factory for conducting routine tests on each batch of the blocks and necessary records should be available.
14. Dimension of the Blocks
The blocks shall be of size 225 x 115 x 70 MM
15. The blocks shall be tested as per procedure detailed in IS 2185 (Part I) – 2005
16. The tolerances shall be as given below
Length = +or - 5MM
Width / Thickness = + or – 3 MM
17. Strength of the Blocks
18. The class designation of the blocks shall be M10. The average compressive strength shall not be less than 10 N per sqmm and strength of individual units shall not be less than 8 N per sqmm. The blocks shall be tested as per procedure detailed in IS 2185 (Part – I) - 2005
19. Water absorption
20. The blocks shall be tested as per procedure detailed in IS 2185 (Part – I) – 2005 for water absorption and the absorption shall not exceed 10 %.
21. Drying Shrinkage
22. The blocks shall be tested as per procedure detailed in IS 2185 (Part – I) – 2005. The drying shrinkage shall not exceed 0.06 %
23. Moisture Movement
24. The blocks shall be tested as per procedure detailed in IS 2185 (Part – I) – 2005. The moisture movement shall not exceed 0.09 %
25. Masonry Work
26. The method of construction, the bonds, width of joints, curing, measurements, tolerances in masonry work, etc shall be as per CPWD specifications detailed for “Brick work”

27. WATER PROOFING TREATMENT

General:

- 27 All the water proofing treatment shall be got executed through one of the approved special agencies. The contractor shall furnish the following particulars immediately after the issue of acceptance of the tender by the department

The name of specialized firm

The trade names of the product, which would be used.

List of works where the treatment had been used

Quantity of chlorides and sulphides used in the product.

28 GUARANTEE FOR WATER PROOFING TREATMENT

Ten years guarantee in prescribed proforma attached shall be given by the contractor for the water proofing treatment.

29 10 %(ten percent) of the cost of the items pertaining to water proofing shall be retained as guarantee to watch the performance of work executed.

30 However, half of this amount (withheld) would be released after 2 years from the date of completion of the work, if the performance of the water proofing works is satisfactory.

31 The remaining with held amount shall be released after completion of 10 years from the date of completion of work, if the performance of the water proofing works is satisfactory.

32 If any defect is noticed during the guarantee period, it should be rectified by the contractor within 7days of issuing of notice by Engineer-in-charge.

33 If not attended to, the same shall be got done through other agency at the risk and cost of the contractor and recovery shall be effected from the amount retained towards guarantee.

34 In any case the contractor and the specialist agency during the guarantee period shall inspect and examine the treatment once in every year and make good any defect observed and conform the same in writing.

35 The security deposit can be released in full, if bank guarantee of equivalent amount, valid for the duration of guarantee period, is produced and deposited with the Institute.

Signature of Contractor

Executive Engineer (Civil)

MEASUREMENT & PREPARATION OF BILL

14.1 Computerized Bill to be submitted by the Contractor

Conventional measurement book shall be replaced by a bound volume of computerized measurements to be furnished by the contractor, duly machine numbered for the pages, and with MB number given by the Institute. The pages of these measurements books shall be of A4 size. All these measurements books shall be serially numbered and a record of these computerized measurements book shall be maintained in a separate register. The same format as in existing measurement books shall be used for the computerized measurement books. The measurements shall be carried forward from the previous recorded measurement as per the existing procedure.

14.2 Mode of measurements

The measurements shall be recorded and entered in the computerized format in the first instance by the contractor and a hard copy shall be submitted to the Institute. All entries shall be made as per the existing procedure. This measurements shall then be 100% checked by the Junior Engineer/ Assistant Engineer, and test checked by the Asst. Executive Engineer and Executive Engineer/ Executive Engineer (Civil) as per the existing procedure. If Junior Engineer is not available, then the Asst Executive Engineer shall perform 100% check of the measurements.

The contractor shall incorporate all such changes or corrections, as may be done during the checks / test checks, to his draft computerized measurements and submit the final computerized measurements in the form of a book, duly hard bound in red colour on the lines of the conventional measurements books now in use with its pages machine numbered.

The Junior Engineer / Asst. Engineer, Assistant Executive Engineer, Executive Engineer/ Executive Engineer (Civil) shall check the computerized measurements to ensure that all the changes or corrections made by them earlier in the draft measurements are correctly incorporated in the final measurements. This book shall be treated as computerized measurement.

The Junior Engineer/ Asst. Engineer, Assistant Executive Engineer and Executive Engineer shall record the necessary certificate for their checks and test checks as per the existing procedure in this computerized measurement books. The computerized measurements book shall be allotted a serial number as per the register of computerized measurement books maintained by IITM.

14.3 Cuttings / over writing/ insertions in the computerized measurements books are not allowed.

The computerized measurements books given by the contractor, duly bound, with its pages numbered, shall have no cutting or over writing. In case of any error, computerized misprints shall be canceled and the contractor shall re submit a fresh computerized measurements books.

This should be done before submission of corresponding computerized billing. The contractor shall submit as many copies of computerized measurement books as may be required and as specified in the NIT / contract for the purpose of reference and recording the various office of the department.

14.4 Computerized bill to be submitted by the contractor

The contractor shall submit his running and final bill in a computerized form in the same format as the existing conventional bills with all the pages machine numbered and hard bound made and with all the entries as per the existing procedure. The contractor shall submit as many copies of the computerized bills as may be required for the purpose of reference and record. The bill shall be carried forward from the previous running account bill as per the existing procedure. The computerized bill may be processed as per the existing procedure.

Computerized bill to be submitted by the contractor

The contractor shall submit his running and final bill in a computerized form in the same format as the existing conventional bills with all the pages machine numbered and hard bound made and with all the entries as per the existing procedure. The contractor shall submit as many copies of the computerized bills as may required for the purpose of reference and record. The bill shall be carried forward from the previous running account bill as per the existing procedure.

The computerized bill as may be processed as per the existing procedure.

Signature of the Contractor

Executive Engineer (Civil)

LIST OF APPROVED MAKE

SL.NO	DESCRIPTION	MAKE/ BRAND
1	Cement - OPC 53 Grade / PPC	Coromandel, Penna, Ramco, Ultratech and Zuari
2	Reinforcement Steel.	SAIL, TISCO, RINL, VIZAG
3	Door Shutter	Godrej Entranza series / Kutty
4	Flush Doors	Western India / Kutty
5	Aluminium work for doors, windows , ventilators	Indal / Jindal
6	Glazing in Aluminium door, window, ventilator shutters	Saint Gobain / Modi Float
7	Ceramic tiles	Johnson/ Kajaria/ Nitco
8	Ceramic Glazed floor tiles	Johnson/ Kajaria/ Nitco
9	Ceramic glazed wall tiles	Johnson/ Kajaria/ Nitco
10	White cement	Birla White, J.K.White
11	Cement Paint	Snowcem Plus /Durocem / Supercem
12	Plastic emulsion - Inner walls	Asian / Berger/ ICI
13	Acrylic emulsion - Outer walls	Asian / Berger / ICI
14	Enamel paint	Asian / Dulux ICI / Berger
15	Water closet (European /Indian type)	Parryware / Hindware.
16	Wash basin	Parryware / Hindware.
17	Stainless steel A ISI 304 (18/8) kitchen sink	Diamond / Butterfly.
18	Stainless steel soap dish	Parryware / Jaquar
19	Stainless steel towel rail,	Parryware / Jaquar
20	Stainless steel towel ring	Parryware / Jaquar
21	CPVC Pipes	Astral / Finolex
22	UPVC Pipes	Prince / Finolex / Astral
23	PVC floor trap	Prince / Finolex
24	Chlorinated Polyvinyl Chloride (CPVC) pipes	Astral / Prince.
25	Gun metal gate valve	Leader / Audco.
26	Check valve	Leader / Audco.
27	Pump set	Kirloskar / Texmo.
28	Mirror rectangular 458mm x 357mm	Saint Gobain / Modi Float
29	All C.P.Fittings	Metro
30	Fly ash concrete block	Saraswathi, Midas Industries, Vedas Bricks & blocks
31	All PTMT Fittings	Prayag
32	G.I Pipe	TATA / Apollo
33	Flyash cement concrete block	Saraswathi
34	Fittings for joineries	Godrej / Link

INDIAN INSTITUTE OF TECHNOLOGY MADRAS

Bill of Quantities

Name of work : **“Construction of New Quark building at IIT Madras.”**

Tender No : **20/ 2013-14 / Civil.**

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
1	620.00	Earthwork in Excavation over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m & lift upto 1.5m, disposed earth to be levelled & neatly dressed. All kinds of soil	Cum		
2	50.00	Excavating trenches of required width for pipes, cables etc. including excavation for sockets, and dressing of sides and ramming of bottoms, depth upto 1.5m, including getting out the excavated soil and then returning the soil as required, in layers notAll kinds of soil. Pipes, cables etc exceeding 80mm dia but not exceeding 300mm dia	Mts		
3	270.00	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth : consolidating each deposited layer by ramming and watering, lead upto 50m and lift upto 1.5m	Cum		
4	250.00	Extra for every additional lift of 1.5m or part thereof in :All kinds of soil	Cum		
5	180.00	Supplying and filling in plinth with river sand under floors including watering, ramming, consolidating and dressing complete	Cum		
6	20.00	Supplying chemical emulsion in sealed containers including delivery as specified. Chloropyriphos emulsifiable concentrate of 20%	Lts		
7	250.00	With Chloropyriphos E.C. 20% with 1% concentration	Mts		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
8	120.00	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level :1 : 4 : 8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size)	Cum		
9	15.00	Making plinth protection 50mm thick of cement concrete 1:3:6(1 cement :3 coarse sand :6 graded stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top & sides.	Cum		
10	2800.00	Centering and shuttering for getting neat exposed concrete finish (no external plastering will be allowed for RCC work) for all RCC works with film coated plywood shuttering board or using steel wall form work including strutting, propping etc., and removing for all RCC works.	Sqm		
11	1.00	Extra for shuttering in Circular work (20 % of respective centring and shuttering items)	Cum		
12	48000.00	Steel Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete Thermo-Mechanically Treated bars: Fe415/Fe500D	Kgs		
13	1.00	Add or deduct for plaster drip course / groove in plastered surface or moulding to RCC projections	Mts		
14	470.00	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade / RMC for reinforced cement concrete structural elements, excluding the cost of centring, shuttering, finishing and reinforcement but including admixture et for M35 grade concrete. Minimum cement content 360kg/cum.	Cum		
15	40.00	Deduct for using less cement than the quantity as provided in the item of batch mix concrete/RMC as arrived as per mix design.	Qtl		
16	110.00	Exposed Brick work with factory made wire cut bricks of class designation 100 in all levels including neat pointing / grooving etc. complete with Cement mortar 1:6 (1 Cement : 6 fine sand)	Cum		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
17	100.00	Half Brick masonry with fly ash solid concrete blocks of class designation 100 in all levels using Cement mortar 1:4 (1 Cement : 4 Coarse sand)	Sqm		
18	90.00	Extra for providing and placing in position 2 Nos. 6mm dia M.S. bars at every third course of half brick masonry.	Sqm		
19	50.00	Masonry work with fly ash solid concrete block M10 grade for superstructure above plinth and up to floor V level using C.M. 1:6. Saraswathi /	Cum		
20	20.00	Providing and fixing 18mm thick gang saw cut mirror polished, premoulded and prepolished, machine cut granite top for kitchen platforms, vanity counters, window sills, facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick C.M 1:4. The joints are treated with white cement and matching pigments, epoxy touchups. Granite of jet black colour and shade as approved by IITM Area of slab over 0.50 sqm	Sqm		
21	30.00	Extra for providing edge moulding to 18mm thick granite stone counters, vanities etc. including machine polishing to edge to give high glass finish etc. complete as per design approved by Engineer - in – charge. Granite work	Mts		
22	2.00	providing and fixing 18mm thick stone slab table rubbed, edges rounded and polished 1.8 cm thick fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete. Granite stone of jet black and shade as approved by IIT M	Sqm		
23	2.00	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position. Second class teak wood	Cum		
24	55.00	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked black enamelled M.S. butt hinges with necessary screws excluding panelling which will be paid for separately. Second class teak wood. 35mm thick	Sqm		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
25	5.00	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or glazed shutters 25mm to 40mm thick. Second class teak wood	Sqm		
26	5.00	Extra for providing frosted glass panes 10 kgs / sqm (4mm thick) instead of ordinary glass panes 10 kgs / sqm (4mm thick) in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured	Sqm		
27	55.00	Extra for providing ISI marked Stainless Steel butt hinges instead of black enamelled M.S.butt hinges with necessary screws. (Shutter area to be measured).	Sqm		
28	20.00	Providing and fixing 25mm thick shutters for cupboard etc. Panelled or panelled & glazed shutters. Second class teakwood including ISI marked anodised aluminium butt hinges with necessary screws.	Sqm		
29	25.00	Providing and fixing ISI marked flush door shutters, non decorative type, core of block board construction with frame of First class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces 35mm thick including ISI marked Stainless steel butt hinges with necessary screws.	Sqm		
30	25.00	Extra for providing lipping with second class teak wood battens 25mm minimum depth on all edges of shutters (Overall area of door shutter to be measured) over Item no.: 28 and 29	Sqm		
31	8000.00	Providing and fixing M.S. grills of required pattern in frames of windows, etc. with M.S. flats, square or round bars etc. all complete. Fixed to openings / wooden frames with rawl plugs, screws/anchor fasteners etc.	Kgs		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
32	25.00	Providing and fixing hard drawn steel wire fabric 75 x 25 mm mesh of weight not less than 7.75 kg per sqm to windows frames, etc. including 62 x 19 mm beading of second class teak wood.	Sqm		
33	78.00	Providing and fixing ISI marked oxidised M.S. single acting spring hinges with necessary screws etc complete : 100 mm	Nos.		
34		Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc., complete.			
34.a	108.00	100 x 58 x 1.90 mm	Nos.		
34.b	25.00	75 x 47 x 1.80 mm	Nos.		
34.c	10.00	50 x 37 x 1.50 mm	Nos.		
35	10.00	Providing and fixing 50 mm bright finished brass cupboard or wardrobe knob with necessary screws (best make of approved quality) :	Nos.		
36	35.00	Providing and fixing bright finished brass handles with screws etc. complete : 100 mm	Nos.		
37	6.00	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws etc. complete	Nos.		
38	2.00	Providing and fixing IS : 3564 marked Aluminium die cast body tubular type hydraulic door closer, Hardwyn make (Classic Queen) or equivalent with necessary accessories and screws etc. complete	Nos.		
39	6.00	Providing and fixing aluminium pull bolt lock ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc complete	Nos.		
40	2.00	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc complete. twin rubber stopper.	Nos.		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
41	25.00	Providing and fixing aluminium casement stays ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc complete	Nos.		
42	6.00	Providing and fixing bright finished brass 100 mm mortice latch and lock ISI marked with 6 levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles with necessary screws etc complete (best make of Godrej / Link)	Nos.		
43	25.00	Providing and fixing PVC rigid foam sheet 1mm thick on existing door shutters (Bathroom and W.C doors) using synthetic rubber based adhesive.	Sqm		
44	12500.00	Structural Steel work in builtup tubular trusses including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, welded and bolted including special shape washers etc. complete. Hot finished seamless type tubes.	Kgs		
45	80.00	Providing and fixing circular / hexagonal M.S. sheet ceiling fan box with clamp of 140mm internal dia, 73mm height, 3mm thick rim, bottom and top lid of 1.5mm thick MS sheet. Lids shall be screwed into M.S. box by means of 3 mm dia round headed screws. Clamp shall be made of 12mm dia MS bar bent to shape as per standard specification.	Nos.		
46	8250.00	Steel work welded in built up sections / framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladders, railings, staircase, brackets, gates and similar works.	Kgs		
47	75.00	Providing and fixing S.S. angle 50 x 50 x 5 mm to act as nosing with lugs of M.S. flat 10 x 5 mm 10 cm long forked at end 60 cm apart (minimum three lugs to be provided) including necessary welding and necessary fixtures for exposed surface etc. complete	Kgs		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
48	250.00	Providing and fixing 1st quality ceramic glazed tiles (Industrial type) thickness to be specified by the manufacture of approved make in all colours, shades except bergundy, bottle green, black of any size as approved by Engineer - in - charge in skirting, riser of steps and dados over 12mm thick cement mortar 1:3 and jointing and pointing epoxy grout of matching shade and providing spacers of 3mm thick etc. complete.	Sqm		
49	25.00	Providing and laying Anti-skid Ceramic glazed floor tiles 300 x 300 mm or more (thickness to be specified by the manufacturer) of 1st quality confirming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:3 and jointing and pointing epoxy grout of matching shade and providing spacers of 3mm thick etc. complete.	Sqm		
50	60.00	Providing and laying vitrified floor tiles (Industrial quality) in different sizes (thickness to be specified by the manufacturer) with water absorptions less than 0.08% and conforming to IS: 15622 of approved make in all colours and shades, laid on 20 mm thick cement mortar 1:3 and jointing and pointing epoxy grout of matching shade and providing spacers of 3mm thick etc. complete. Size of Tile 50 x 50 cm or more	Sqm		
51	330.00	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness and approved size) on roofs jointed with cement mortar 1 : 4 (1 Cement : 4 Coarse sand) mixed with 2% of integral water proofing laid over a bed of 20 mm thick cement mortar 1:4 and finished neat complete.	Sqm		
52	150.00	Providing Gola 75 x 75 mm in cement concrete 1 : 2 : 4 (1 Cement : 2 Coarse sand : 4 stone aggregate 10 mm and down gauge) including finishing with Cement mortar 1 : 3 (1 Cement : 3 fine sand) as per standard design. In 75 x 75 mm deep chase.	Mts		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
53	6.00	Making Khurras 45 x 45 mm with average minimum thickness of 5 cm cement concrete 1 : 2 : 4 (1 Cement : 2 Coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1m x 1m x 400 micron, finished with 12 mm Cement plaster 1 : 3 (1 Cement: 3 Sand)	Nos.		
54		Providing and fixing on wall face unplasticised - Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion, Single socketed pipes			
54.a	75.00	75mm diameter	Mts		
54.b	50.00	110mm diameter	Mts		
55		Providing and fixing on wall faced unplasticised - PVC moulded fitting / accessories for unplasticised - Rigid PVC rain water pipe conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expand.			
a		Coupler			
b	10.00	75mm	Nos.		
c	10.00	110mm	Nos.		
56		Single Tee with door			
a	10.00	75 x 75 x 75 mm	Nos.		
b	10.00	110 x 110 x 110 mm	Nos.		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
57		Single Tee without door			
a	10.00	75 x 75 x 75 mm	Nos.		
b	1.00	110 x 110 x 110 mm	Nos.		
58		Bend 87.5 degree			
a	10.00	110mm bend	Nos.		
59		Shoe (Plain)			
a	5.00	110mm shoe	Nos.		
60		Providing and fixing unplasticised PVC pipe, clips of approved design to unplasticised - PVC rain water pipe by means of 50 x 50 x 50 mm hard wood plugs, screwed with MS screws of required length including cutting brick work and fixing in cement mortar.			
a	5.00	75mm	Nos.		
b	5.00	110mm	Nos.		
61	430.00	12 mm cement plaster of mix.1:4 (1 Cement : 4 Fine sand)	Sqm		
62	540.00	15mm cement plaster on the rough side of single or half brick wall of mix :1:6 (1 Cement : 6 Fine sand)	Sqm		
63	8000.00	12 mm thick plain cement mortar bands in cement mortar 1 : 4 (1 cement : 4 fine sand). Raised band	Cm		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
64	900.00	Applying one coat of cement primer of approved brand and manufacture on wall surface. Cement primer.	Sqm		
65	900.00	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade: New work (2 or more coats applied @ 1.43 ltr / 10 sqm over and including base coat of water proofing cement paint applied @ 2.20 kg / 10 sqm)	Sqm		
66	170.00	Applying priming coat, With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/steel works :-	Sqm		
67	600.00	Finishing with epoxy paint (2 or more coats) at all locations prepared and applied as per manufacturers specification including appropriate priming coat, preparation of surface etc complete. On concrete work	Sqm		
68	55.00	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade. 2 or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	Sqm		
69	55.00	Painting with aluminium enamel paint of approved brand and manufacture to give an even shade. 2 or more coats on new work	Sqm		
70	10.00	Polishing on wood work with ready made wax polish of approved brand and manufacture. New work. MRF/ICI	Sqm		
71	3.00	Providing and fixing water closet squatting pan (Indian type W.C Pan) with 100mm sand cast iron P or S Trap, 10 lts. low level PVC flushing cistern with manually controlled device (handle lever) confirming to IS : 7231, with all fittings and fixture complete including cutting and making good the walls and floors. White Vitreous china Orissa Pattern WC pan of size 580 x 440 mm with integral type foot rests	Nos.		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
72	1.00	Providing and fixing White Vitreous China Pedestal type water Closet (European type W.C Pan) with seat and lid, 10 lts. Low level white PVC flushing cistern with manually controlled device (handle lever) confirming to IS : 7231, with all fittings and fix. WC Pan with ISI marked white solid plastic seat and lid	Nos.		
73	3.00	Providing and fixing White Vitreous China flat back half stall urinal of size 580 x 380 x 350 mm with white PVC automatic flushing cistern, with fittings, standard size CP brass flush pipe, spreaders with unions and clamps (All in CP brass) with waste fixings. Single half stall urinal with 5 lt. PVC automatic flushing cistern.	Nos.		
74	10.00	Providing and fixing PVC waste pipe for sink or wash basin including PVC waste fittings complete. Semi rigid pipe 32 mm dia	Nos.		
75	10.00	Providing and fixing 100 mm sand cast iron grating for gully trap.	Nos.		
76	10.00	Providing and fixing mirror of superior glass of approved quality and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing. Rectangular shape 453 x 357 mm	Nos.		
77	10.00	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour. Waste coupling 31 mm of 79 mm length and 62 mm breadth weighing not less than 45 gms.	Nos.		
78	10.00	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour weighing not less than 105 gms	Nos.		
79	3.00	Providing and fixing PTMT towel ring trapezodial shape 215 mm long, 200 mm wide with a minimum distance of 37 mm from wall face with concealed fittings arrangements of approved quality and colour weighing not less than 80 gms	Nos.		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
80	3.00	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour .450 mm long towel rail with total length of 495 mm, 78 mm wide and effective height of 88 mm, weighing not less than 170 gms.	Nos.		
81	3.00	Providing and fixing PTMT 15 mm Urinal spreader size 95 x 69 x 100 mm with 1/2" BSP thread and shape, weighing not less than 60 gms	Nos.		
82	3.00	Providing and fixing PTMT urinal cock of approved quality and colour. 15 mm nominal size 80 mm long, 42 mm high and 30 mm wide with BSP female threads weighing not less than 48 gms .	Nos.		
83		Providing and Fixing Chlorinated Polyvinyl Chloride(CPVC) pipes having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the clamps at 1 m spacing. This includes jointing of pipes and fitting with 1 step CPVC solvent and tep copst of cutting, chasses and making good the same including testing of joints complete as per direction of Engineer-in-charge. Internal work exposed on wall.			
a	75.00	20 mm nominal outer dia pipes	Mts		
b	75.00	25 mm nominal outer dia pipes	Mts		
84		Providing and Fixing Chlorinated Polyvinyl Chloride(CPVC) pipes having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the clamps at 1 m spacing. This includes jointing of pipes and fitting with 1 step CPVC solvent and tep copst of cutting, chasses and making good the same including testing of joints complete as per direction of Engineer-in-charge. Concealed work including cutting, chasing and making good the wall			

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
a	100.00	20 mm nominal outer dia pipes	Mts		
b	50.00	25 mm nominal outer dia pipes	Mts		
c	50.00	32 mm nominal outer dia pipes	Mts		
85	25.00	Providing and fixing GI pipes complete with GI fittings and clamps including cutting and making good the walls etc. (Internal work). 25 mm dia nominal bore.	Mts		
86		Providing and fixing GI pipes complete with GI fittings including trenching and re filling etc. (External work)			
a	50.00	25 mm dia nominal bore	Mts		
b	50.00	32 mm dia nominal bore	Mts		
c	50.00	40 mm dia nominal bore	Mts		
87		Making connection of GI distribution branch with GI Main of following sizes by providing and fixing Tee, including cutting and threading the pipe etc. complete			
a	2.00	25 to 40 mm nominal bore	Nos.		
b	2.00	50 to 80 mm nominal bore	Nos.		
88	1.00	Fixing water meter and stop cock in GI pipe line including cutting and threading the pipe and making long screws etc. complete (Cost of water meter and stop cock to be paid seperately)	Nos.		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
89		Providing and fixing gun metal gate valve with CI wheel of approved quality (Screw ended)			
a	5.00	25mm nominal bore	Nos.		
b	2.00	40mm nominal bore	Nos.		
90	3.00	Providing and fixing ball valve (brass) of approved quality complete. High or low pressure with plastic floats 25 mm nominal bore.	Nos.		
91	2.00	Providing and fixing brass ferrule with CI mouth cover including boring and tapping the main. 25mm nominal bore	Nos.		
92	16.00	Providing and fixing unplasticised PVC connection pipe brass unions. 30 cm length. 15mm nominal bore	Nos.		
93	7500.00	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support	Lts		
94	10.00	Providing and fixing C.P brass bib cock of approved quality conforming to IS:8931. 15mm nominal bore	Nos.		
95	10.00	Providing and fixing PTMT bib cock of approved quality and colour .. 15mm nominal bore, 86 mm long, weighing not less than 88 gms	Nos.		
96	10.00	Providing and fixing PTMT bib cock of approved quality and colour .. 15mm nominal bore, 122 mm long, weighing not less than 99 gms	Nos.		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
97	5.00	Providing and fixing PTMT stop cock of approved quality and colour. 20mm nominal bore, 89 mm long, weighing not less than 88 gms	Nos.		
98	16.00	Concealed stop cock, 15mm nominal bore, 108 mm long, weighing not less than 108 gms	Nos.		
99	10.00	Providing and fixing PTMT pillar cock of approved quality and colour. 15mm nominal bore, 125 mm long, weighing not less than 120 gms.	Nos.		
100	16.00	Providing and fixing PTMT push cock of approved quality and colour. 15mm nominal bore, 98mm long, weighing not less than 75 gms	Nos.		
101		Providing and fixing PTMT grating of approved quality and colour. Circular type.			
a	15.00	100mm nominal dia	Nos.		
b	5.00	125mm nominal dia with 25mm waste hole.	Nos.		
102	10.00	Rectangular type with openable circular lid. 150mm nominal size square, 100mm dia. Of the inner hinged round grating .	Nos.		
103		Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated rod with L.P. / H.P.H.D. plastic ball.			
104	3.00	25 mm nominal size, 152 mm long, weighing not less than 440 gms.	Nos.		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
105	6.00	Providing and fixing PTMT Soap Dish Holder having length of 138 mm, breadth 102 mm, height of 75 mm with concealed fitting arrangements, weighing not less than 106 gms.	Nos.		
106	3.00	Providing & Fixing PTMT Extension Nipple for water tank pipe, fittings of approved quality and color. 25mm nominal size, with dimensions 81X51X51 mm weighing not less than 65gms	Nos.		
107		Providing, Laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40mm nominal size) upto haunches of SW pipes including bed concrete as per standard design :			
a	50.00	100/110mm dia SW/UPVC Pipe	Mts		
b	25.00	150mm dia SW/UPVC pipe	Mts		
108	8.00	Providing and fixing square mouth SW gully trap grade A complete with C.I grating brick masonry chamber with water tight C.I cover with frame of 300 x 300 mm size (Inside) the weight of cover to be not less than 4.5 kg and frame to be not less than 2.70. 100 x 100 mm size P type. With FPS bricks class designation 75	Nos.		
109	24.00	Providing and laying non pressure NP2 class (light duty) RCC pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete . 300mm dia. RCC pipe.	Mts		
110	2.00	Constructing brick masonry manhole in cement mortar 1 : 4 (1 cement : 4 coarse sand) RCC top slab with 1 : 2 : 4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1 : 4 : 8 mix (1 cement : 4 coarse sand. Inside size 90 x 80 cm and 45 cm deep including CI cover with frame (light duty) 455 x 610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg). With F.P.S. bricks with class designation 75	Nos.		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
111	6.00	Inside size 120 x 90 cm and 90 cm deep including CI cover with frame (medium duty) 500 mm internal diameter total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg). With F.P.S. bricks with class designation 75	Nos.		
112	3.00	Extra for depth for manholes. Size 90 x 80 cm. With F.P.S. bricks class designation 75	Mts		
113	5.00	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12 mm dia steel bar confirming to IS : 1786 having minimum cross section as 23 mm x 25 mm and overall minimum length 263 mm and width as 165 mm with	Nos.		
114	2.00	Making connection of drain or sewer line with existing manhole including breaking into and make good the walls, floors with cement concrete 1 : 2 : 4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides.. For pipes 100 to 230 mm diameter	Nos.		
115	5.00	Constructing brick masonry chamber for underground CI inspection chamber and bends with 75 class designation bricks in cement mortar 1 : 4 (1 cement : 4 coarse sand) CI cover with frame (light duty) 455 x 610 mm internal dimensions, total weight of cove. Inside dimensions 455 x 610 mm and 45 cm deep for single pipe line. With F.P.S. bricks	Nos.		
116	1.50	Extra for depth beyond 45cm of brick masonry chamber, For 455 x 610mm size. With FPS bricks	Mts		
117	8.00	Providing and fixing aluminium round shape handle of outer dia 100mm with SS screws etc. complete as per direction of Engineer-in-charge. Polyester powder coated minium thickness 50 micron aluminium.	Nos.		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
118	1.00	Cleaning jungle and vegetation area including disposal of cut vegetation with in 50m lead.	100sm		
119	1.00	Dismantling of existing quark building including shell roof structure, all temporary sheds, sumps, water tank, pipe lines up to foundation level for facilitating the new construction. The rate quoted shall be inclusive of disposal of debris and all materials generated from dismantling of above mentioned existing quark building premises. The contractor shall obtain necessary approval from the local authorities for disposal of the debris outside the IIT Madras campus. The quoted amount will be deducted from the contractor's first running account bill.	1 L.S		
120	320.00	Supply & application of Sikalastic 450 I (Premium)(HLM 5000 of BASF/ Elastiment 645 of Max bond) over the tack free primed surface @ 0.5-0.6 kg/m2 depending upon the substrate porosity. Before application of the system a coat of primer with Sikalastic 450 h Primer (or equivalent product of BASF/ FOSROC)@ 0.45-0.5 kg/m2 should be applied. Over the 1st coat of Sikalastic 450 I (Premium), Sika Fab1 shall be laid immediately after 1st coat. 2nd coat of Sikalastic 450 I (Premium) (or equivalent product of BASF/ FOSROC)shall be applied @0.5-0.6 kg/m2 once the 1st coat is cured properly. No additional payment will be made for khuras (treating rain water mouth). The system should have the following properties: • Hardness min 50 • Weight loss max 20% • Non volatile content in 80% • Low temperature flexibility (- 26 ° C) Pass • Low temperature crack bridging (- 26 ° C) Pass • Extensibility after heat ageing (mm): No crack after extension of 6.4 mm • Stability, No cracking and blister formation (12000 hours) • Tensile strength 2N/mm2 • Elongation at Break 500%.	Sqm		

S. No.	Qty	Description	Unit	Rate in Rs. (in figures and words)	Amount in Rs.
121	600.00	Providing, laying and fixing in position roofing with sheets of specified / approved makes / brands and ranges, laid flat, sloped or curved, on available steel trusses and purlins. Ondulit sanwiched multi-layer sheet, 4 mm thick of approved colour and measured flat upto a pitch of 1.10m. The rate quoted shall be inclusive of ridge, valley, barge boards, tools, plants, labour charges, fastners for levels and heights.	Sqm		
122	1200.00	Grinding and honing of concrete floor using diamond abrasives to remove all minor scratches to bring an even surface. Later hardening the surface with concrete hardener and polish the surface with floor polishing machine. The floor will be burnished with 1200 RPM Burnishes. The rate inclusive of polsihing of concrete floors but excluding the cost of concrete.	Sqm		
123	8.00	Supplying and fixing white colour oval shape counter top wash basin not less than 530mm with necessary fixing arrangements etc / complete. (Parryware / Hindware) (Parryware / Hindware)	Nos.		
	Total Amount in Rs				

Total Amount in Rs. (In words).....

Signature of the Contractor

Executive Engineer (Civil)