



**INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH
THIRUVANANTHAPURAM**

**“CONSTRUCTION OF CIVIL STRUCTURES AND OTHER INFRASTRUCTURE
FACILITIES FOR RESIDENTIAL AREA UNDER PHASE I OF IISER CAMPUS AT
VITHURA, THIRUVANANTHAPURAM-BALANCE WORKS”**

NIT NUMBER: IISER-T/W(C)/350/08/14-15 DATED 21.08.2014

SECTION - I

NOTICE INVITING TENDER

**“CONSTRUCTION OF CIVIL STRUCTURES AND OTHER
INFRASTRUCTURE FACILITIES FOR RESIDENTIAL AREA UNDER
PHASE I OF IISER CAMPUS AT VITHURA, THIRUVANANTHAPURAM-
BALANCE WORKS”**

**SECTION-I
NOTICE INVITING TENDER**

NIT NO: IISER-T/W(C)/350/08/14-15 dated 21.08.2014

- 1.1 The Indian Institute of Science Education & Research Thiruvananthapuram (IISER TVM), invites sealed two part item rate composite (Civil, Plumbing & Sanitary, Electrical works, Lifts, HVAC & Fire protection system) tenders for the following works from approved and eligible contractors of CPWD and those of approved list of MES, BSNL, Railways, DOS, State PWD and PSU's as per minimum eligibility requirements defined below:

Sl. No.	Name of Work	Approx. Cost Rs.	Earnest Money Deposit Rs.	Cost of tender document	Period of completion (overall)
1	CONSTRUCTION OF CIVIL STRUCTURES AND OTHER INFRASTRUCTURE FACILITIES FOR RESIDENTIAL AREA UNDER PHASE I OF IISER CAMPUS AT VITHURA, THIRUVANANTHAPURAM-BALANCE WORKS	63.30 Crores	73.30 Lakhs	Rs.4200 /- (including VAT)	18 months (Eighteen Months)

- 1.2 The entire works are to be completed within 18 (eighteen) months in accordance with the time schedule indicated in the tender from the 15th day after the date of issue of Letter of Acceptance. **However Part-I of the work comprising of Residential Blocks C3 and C1 has to be completed within 9 months**

- 1.3 (a) Tender documents can be obtained on request in writing from the Registrar, Indian Institute of Science Education and Research Thiruvananthapuram, Computer Science Building, CET Campus, Engineering College P.O., Kulathur, Thiruvananthapuram – 695 016 on

payment of Rs.4200/- in the form of non-refundable Demand Draft drawn in favour of Indian Institute of Science Education and Research payable at Thiruvananthapuram or in cash, on any working day from 25.08.2014 to 12.09.2014 between 10.00 Hrs and 16.00 Hrs. Tender documents can also be obtained through post by submitting the request along with DD for Rs. 4700/-. IISER TVM will not be responsible for any delay during Postal transit.

1.3(b) Tender documents can also be downloaded from our website www.iisertvm.ac.in. An intimation to this effect to be sent to IISER by such tenderers through e-mail to registrar@iisertvm.ac.in on the date of downloading itself. Tender documents are to be submitted as four separate volumes (Vol I, II, III & IV) in the same manner indicated in the NIT. An amount of Rs. 4200 /- towards the cost of tender document in the form of demand draft to be enclosed along with Volume I of the tender document failing which the tender is liable to be rejected.

1.3(c) To become eligible for issue of tender, the tenderer shall have to furnish an affidavit as under :-

"I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of IISER TVM, then I/We shall be debarred from tendering in future forever. Also if such violation comes to the notice of IISER TVM before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee."

1.4 Submission of Tender

The Tenders are to be submitted in two separate envelopes, each sealed and clearly identified with envelope number and contents as indicated vide 1.6 below. The two envelopes shall be contained in a large envelope superscribed "Construction of Civil Structures and other Infrastructure facilities of Package III under Phase I for IISER Campus at Vithura, Thiruvananthapuram".

1.5 Tender duly filled in, signed and sealed, should be addressed and hand delivered/sent to the office of the Registrar, Indian Institute of Science Education & Research, CET Campus, Thiruvananthapuram, Engineering College P.O, Thiruvananthapuram -695016 so as to reach before 15.00 hrs on 24.10.2014.

1.6 The Tender Document will comprise of the following:

- A. ELIGIBILITY CRITERIA & CONDITIONS OF CONTRACT – VOLUME I
- B. TECHNICAL SPECIFICATIONS – VOLUME II
- C. BILL OF QUANTITIES – VOLUME III
- D. TENDER DRAWINGS (only in the form of CD) – VOLUME IV

The Tenderers have to return all the above in 2 Envelopes while submitting the Tender after duly filling in, signing and stamping as detailed below.

1.6.1 Envelope 1 –

a. Volume I of the Tender Document including all certificates/documents regarding the eligibility criteria as per the enclosed formats.

b. Earnest Money Deposit of Rs.73.30Lakhs /- (Rupees Seventy Three Lakh Thirty Thousand Only) in the form of Fixed Deposit Receipt/Demand Draft/Bank Guarantee only from a scheduled Bank in favour of Indian Institute of Science Education and Research, payable at Thiruvananthapuram. The Bank Guarantee submitted as part of Earnest Money Deposit shall be valid for a period of six months or more from the date of submission of tender. EMD exemption certificate shall not be accepted.

c. Certificate regarding satisfying the eligibility criteria in the enclosed format.

d. Volume II of the tender document regarding Technical Specifications.

e. CD containing the Tender Drawings (duly signed by the tenderer with CD marker)

This envelope shall be super scribed "Envelope 1 – Tender for Construction of Shopping Center & Health Center for IISER Campus at Vithura, Thiruvananthapuram".

1.6.2 Envelope 2 –

This envelope shall contain only Bill of Quantities (Volume III of Tender Document) duly filled in and signed on each page by the Tenderer. No commercial or technical condition or qualification of any sort shall be indicated by the tenderer in the Envelope No. 2 and if otherwise the tender shall be liable to be rejected. This envelope shall be super scribed "Envelope No. 2 – Bill of Quantities for Construction of Civil Structures and other Infrastructure facilities of Package III under Phase I for IISER Campus at Vithura, Thiruvananthapuram".

1.7 MINIMUM ELIGIBILITY CRITERIA

Tenderers before submitting the tender must study these documents carefully and satisfy themselves that they fulfill the eligibility criteria. Firms/

Contractors who fulfill the following criteria are eligible to apply. Joint ventures are not accepted.

A. Should have experience of having successfully completed construction works as mentioned below during last 7 years ending the last day of May 2014.

(i) Three similar works each costing not less than Rs.26 crores, or two similar works each costing not less than Rs.38 crores, or one similar work costing not less than Rs.51 crore.

and

(ii) One work of any nature (either part of (i) above or a separate one) costing not less than Rs.26 crore with some Central/State Government Department/Central Autonomous body/Central Public Sector Undertaking.

Note:

1. Similar work shall mean construction of Reinforced Cement Concrete framed structure, Institutional, Residential or Commercial building of minimum 4 storey or 12m height from plinth level under a composite tender consisting of Civil, Plumbing, Sanitary, Electrical works, etc.

2. The value of the completed works shall be brought to current costing level by enhancing the actual value @ simple rate of 7% per annum calculated from the date of completion to the last date of receipt of applications for tender.

B. Should have average annual financial turnover on construction works not less than Rs.19 crore during the last 3 financial years ending 31.03.2014.

C. Should not have incurred any loss in more than two years during the last five financial years ending 31.03.2014.

D. Should have a solvency of Rs.26 crore.

1.8. The tenderer shall submit the certificate regarding the eligibility and other required documents in the formats given in Appendix A&B and Form T1 to T7. Decision of IISER TVM in this regard shall be final and binding.

1.9. Tenderers who wish to include any condition / stipulation / seek clarification regarding the tender document, should submit the same in writing on or before 15.00 hrs. on 18.09.2014. A pre-bid meeting will be held at 10.00 hrs on 24.09.2014 at the office of the Indian Institute of Science Education & Research, CET Campus, Thiruvananthapuram- 695016. The clarifications sought / conditions etc. of all the Tenderers, will be examined and discussed in the pre-

bid meeting and the decisions will be intimated to the tenderers in writing which shall form part of the Tender document. IISER TVM may modify the bidding documents during the tender process or before the deadline for submission of bids by issuing addendum. This shall be part of the tender documents as well as contract document and shall be communicated in writing or by e-mail/fax. Prospective bidders shall acknowledge receipt of each addendum in writing or by e-mail/fax to IISER TVM. Original addendum issued by IISER TVM duly signed should be submitted along with the tender documents.

- 1.10 No other conditions shall be accepted thereafter and the Tenderer shall give a declaration accepting all the conditions given in the Tender.
- 1.11 Envelope -1 of the tender comprising the Eligibility Criteria will be first opened on 24.10.2014, 15.30 hrs in the presence of tenderers / authorized representatives.
- 1.12. The detailed documents furnished by the tenderers will be evaluated to ensure that they meet the Minimum Eligibility Criteria.
- 1.13. Bidders who meet minimum eligibility criteria will be further technically evaluated only if their bidding capacity is equal to or more than the estimated cost of work put to tender.

Bidding capacity = $(A \times N \times 2) - B$

Where,

A= maximum value of construction works executed in any one year during last five years taking into account the completed as well as works in progress.

B= Value of existing commitments and ongoing works to be completed in the next 'N' years.

N= Number of years prescribed for completion of the subject contract (N minimum = 1)

The information regarding initial bidding capacity shall be submitted in the format given in Appendix B.

- 1.14. The bidders satisfying the Minimum Eligibility Criteria and clause 1.13 above will be technically evaluated as per the method indicated hereafter.
- 1.15. After the technical evaluation the list of technically qualified agencies will be prepared. Envelope – 2 containing the price bids of the technically qualified bidders alone will be opened at the notified time, date and place in the presence

of technically qualified bidders or their authorized representatives. Only authorized representative can participate.

- 1.16. The Tender shall remain open for acceptance for a period of 120 days, from the date of opening of Technical bids.
- 1.17. The competent authority does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
- 1.18. Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- 1.19. Tenderers are advised to inspect site of work at his own cost and examine the site and its surrounding and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or effect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining all materials at his own cost, tools and plants, water, electricity access, facilities for workers and all other services require for executing the work unless otherwise specifically provided for in the contract documents. submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and conditions and local conditions and other factors having a bearing on the execution of the work.
- 1.20. Incomplete tender documents are liable to be rejected.
- 1.21. Tenders received late on account of any reason whatsoever will not be entertained.
- 1.22. Registrar, Indian Institute of Science Education and Research, Thiruvananthapuram shall be the "Accepting Authority" hereinafter referred to as such for the purpose of this contract.
- 1.23. IISER is exempted from paying/collecting service tax for services provided to or by the Institute as per Government of India (Ministry of finance), Department of

Revenue Notification No. 25/2012-Service Tax dated 20.06.2012 read with Circular No. 172/7/2013- Service Tax dated 19.09.2013.

- 1.24. Any change in the constitution of the contractor's/bidders firm, where it is a partnership firm, as declared in the prequalification documents submitted by the bidders at the time of submission of prequalification documents, should be disclosed to IISER TVM at any time between the submission of tender and the signing of the contract.
- 1.25. For any further information, the office of the Project Engineer-cum-Estate Officer, IISER, Thiruvananthapuram (0471-2924811/12) may be contacted.

REGISTRAR

LETTER OF TRANSMITTAL

From

.....
.....
.....

To

**THE REGISTRAR
INDIAN INSTITUTE OF SCIENCE EDUCATION & RESEARCH (IISER)
THIRUVANANTHAPURAM**

Sub: SUBMISSION OF TENDER DOCUMENTS FOR THE WORK- “CONSTRUCTION OF CIVIL STRUCTURES AND OTHER INFRASTRUCTURE FACILITIES FOR RESIDENTIAL AREA UNDER PHASE I OF IISER CAMPUS AT VITHURA, THIRUVANANTHAPURAM-BALANCE WORKS”

Sir,

Having examined the details given in press notification and the tender document for the above work, I/we hereby submit the tender documents and other relevant information.

1. I/We hereby certify that all the statements made and information supplied in the enclosed forms and accompanying statements are true and correct.
2. I/We have furnished all information and details necessary for eligibility criteria and have no further pertinent information to supply.
3. I/We submit the requisite certified solvency certificate and authorize the Registrar, IISER, Thiruvananthapuram – 695 016 to approach the Bank issuing the solvency certificate to confirm the correctness thereof. I/We also authorize the Registrar, IISER Thiruvananthapuram to approach individuals, employers, firms and corporation to verify our competence and general reputation.
4. I/We submit the following certificates in support of our suitability, technical know-how & capability for having successfully completed the following works

Name of Work:

Certificate from

- 1.
- 2.
- 3.

- 1.
- 2.
- 3.

Enclosures:

Seal of applicant
Date of submission

Signature(s) of applicant(s)

To,

.....,
.....,
.....

Sub: NIT NO:IISER-T/W(C)/350/08/14-15 dated 21.08.2014 for the work-“ Construction of Civil Structures and other Infrastructure facilities for Residential Area of Package III under Phase I for IISER Campus at Vithura, Thiruvananthapuram-Balance Works”

Dear Sir,

It is here by declared that IISER TVM is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of IISER TVM.

Yours faithfully

Registrar

To,

The Registrar,
Indian Institute of Science Education and Research
Thiruvananthapuram.

Sub: Submission of Tender for the work- “CONSTRUCTION OF CIVIL STRUCTURES AND OTHER INFRASTRUCTURE FACILITIES FOR RESIDENTIAL AREA UNDER PHASE I OF IISER CAMPUS AT VITHURA, THIRUVANANTHAPURAM-BALANCE WORKS”

(NIT NO:IISER-TW(C)/350/08/14-15 dated 21.08.2014)

Dear Sir,

I/We acknowledge that IISER TVM is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by IISER TVM. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, IISER TVM shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

**To be signed by the bidder and the signatory competent / authorised
to sign the relevant contract on behalf of IISER TVM**

INTEGRITY AGREEMENT

This Integrity Agreement is made at on this day of
20.....

BETWEEN

IISER TVM represented through its Registrar, (Hereinafter referred as the
'Principal/Owner', which expression shall unless repugnant to the
meaning or context hereof include its successors and permitted assigns)

AND

.....
(Name and Address of the Individual/firm/Company)

through (Hereinafter referred to
as the (Details of duly authorized signatory)

"Bidder/Contractor" and which expression shall unless repugnant to the
meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No.
.....) (hereinafter referred to as **"Tender/Bid"**) and intends
to award, under laid down organizational procedure, contract for
.....

.....
(Name of work)
hereinafter referred to as the **"Contract"**.

AND WHEREAS the Principal/Owner values full compliance with all
relevant laws of the land, rules, regulations, economic use of resources and
of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have
agreed to enter into this Integrity Agreement (hereinafter referred to as
"Integrity Pact" or **"Pact"**), the terms and conditions of which shall also be
read as integral part and parcel of the Tender/Bid documents and Contract
between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1: Commitment of the Principal/Owner

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
 - (c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / IISER TVM all suspected acts of **fraud or corruption or Coercion or Collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/ Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid

in a tender but not both. Further, in cases where an agent participates in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice **means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.**
- 5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- 1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The

imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. **Such exclusion may be forever or for a limited period as decided by the Principal/Owner.**

- 2) **Forfeiture of EMD/Performance Guarantee/Security Deposit:** If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3) **Criminal Liability:** If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

4) Article 4: Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
- 3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/ sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

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

Article 7- Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the **Headquarters of the** Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this **Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.**

Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....
(For and on behalf of Principal/Owner)

.....
(For and on behalf of Bidder/Contractor)

WITNESSES:

1.
(signature, name and address)

2.
(signature, name and address)

Place:

Dated :



**INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH
THIRUVANANTHAPURAM**

**“CONSTRUCTION OF CIVIL STRUCTURES AND OTHER INFRASTRUCTURE
FACILITIES OF PACKAGE III UNDER PHASE I FOR IISER CAMPUS AT VITHURA,
THIRUVANANTHAPURAM”**

NIT NUMBER: IISER-T/W(C)/350/08/14-15 DATED 21.08.2014

SECTION - II

TENDER FORM – ITEM RATE TENDER & CONTRACT FOR WORKS

TENDER FORM

ITEM RATE TENDER & CONTRACT FOR WORKS

Name of the Work :- “CONSTRUCTION OF CIVIL STRUCTURES AND OTHER
INFRASTRUCTURE FACILITIES FOR RESIDENTIAL AREA UNDER
PHASE I OF IISER CAMPUS AT VITHURA,
THIRUVANANTHAPURAM-BALANCE WORKS”

- (1) To be submitted before 15.00 hours on 24.10.2014 to the office of the Registrar, Indian Institute of Science Education & Research, CET Campus, Engineering College (P.O),Thiruvananthapuram-695016.
- (2) To be opened at 15.30 hours on 24.10.2014 in the office of the Registrar, Indian Institute of Science Education & Research, CET Campus, Thiruvananthapuram

Issued to.....
(contractor)

Signature of officer issuing the documents

Date of issue.....

TENDER

I/We have read and examined the notice inviting tender, Eligibility Criteria, Technical Specifications, Tender drawings, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Tender Schedule & 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, within the time specified in Schedule 'F', schedule of quantities and in accordance with and in all respects with the specifications, 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 in respect in accordance with, such conditions so far as applicable.

We agree to keep the tender open for one hundred and twenty (120) days from the date of its opening of technical bids and not to make any modifications in its terms and conditions.

A sum of Rs.73.30Lakhs (Rupees Seventy Three Lakhs Thirty Thousand Only) is hereby forwarded in the form of demand draft of a scheduled bank/bank guarantee issued by a scheduled bank, as Earnest money deposit. If I/we fail to furnish the prescribed performance guarantee within prescribed period, I/we agree that the said Registrar, IISER TVM or his successors in 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 Registrar, IISER TVM 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.

Further, I/We agree that in case of forfeiture of earnest money or both Earnest Money & Performance Guarantee as aforesaid, I/We shall be debarred from participation in the event of re-tendering of the work.

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

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

Date

Signature of Contractor
Postal Address

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 a sum of Rs

(Rupees.....
.....
.....)

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

- (a)
- (b)
- (c)

Registrar
IISER Thiruvananthapuram

Dated.....



**INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH
THIRUVANANTHAPURAM**

**“CONSTRUCTION OF CIVIL STRUCTURES AND OTHER INFRASTRUCTURE
FACILITIES FOR RESIDENTIAL AREA UNDER PHASE I OF IISER CAMPUS AT
VITHURA, THIRUVANANTHAPURAM-BALANCE WORKS”**

NIT NUMBER:IISER-T/W(C)/350/08/14-15 DATED 21.08.2014

SECTION - III

GENERAL CONDITIONS OF CONTRACT

CONSTRUCTION OF CIVIL STRUCTURES AND OTHER INFRASTRUCTURE FACILITIES FOR RESIDENTIAL AREA UNDER PHASE I OF IISER CAMPUS AT VITHURA, THIRUVANANTHAPURAM-BALANCE WORKS

GENERAL RULES AND DIRECTIONS

1. All the work proposed for execution by contract will be notified in a form of invitation to tender pasted in public places and signed by the officer inviting tender or by publication in newspapers as the case may be.

This form will state the work to be carried out, as well as 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 and performance guarantee 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 identification by the officer inviting tender shall also be open for inspection by the contractor at the office of the officer inviting tender during office hours.

- 2.1 The tenderer must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of tendering and for entering into a contract and must examine the Drawings, inspect the site of the work and acquaint himself with all the information about the local conditions, means of access to the work, nature of the work and all matters pertaining thereto.
- 2.2 Access to the Site will be given during the Tender period by appointment on application to IISER TVM. The tenderer shall familiarize with the location, size and condition of the areas available for his use as working areas and all other site information related to this Tender.
- 2.3 The Employer will not be responsible and will not reimburse any expenses which may be incurred, or losses to person or property suffered by the tenderer in connection with visits to and examination of the site and in the preparation of his tender for submission.
- 2.4 The tenderers should note that information, if any, as regards to the site and local conditions, as contained in these tender documents has been given merely to assist the tenderers and is not deemed to be complete.

- 2.5 The tenderers should note and bear in mind that the Employer shall bear no responsibility for the lack of acquaintance of the site and other conditions or any information relating thereto, on their part. The consequences of the lack of any knowledge, as aforesaid, on the part of the tenderers shall be at their risk and cost and no charges or claims whatsoever consequent upon the lack of any information, knowledge or understanding shall be entertained or be payable by the Employer either during tender stage or thereafter.
- 2.6 The rates quoted in the tender shall include all charges for clearing of site before commencement as well as after scaffolding, centering, boxing, staging, planking, timbering and pumping out water including bailing, fencing, hoarding, plant and equipment, storage sheds, watching and lighting, by night as well as day including Sundays and Holidays, temporary plumbing and electric supply, protection of the public and safety of adjacent roads, streets, cellars, vaults, ovens, pavements, walls, houses, buildings and all other erections, matters or things and the Contractor shall take down and remove any or all such centering, scaffolding, staging, planking, timbering, strutting, shoring etc., as occasion shall require or when ordered so to do, and fully reinstate and make good all matters and things disturbed during the execution of work and to the satisfaction of the Engineer-in-charge. The rates quoted shall be deemed to be for the finished work to be measured at site. The rates shall also be firm and shall not be subject to exchange variations, labour conditions, fluctuations in octroi, local taxes, railway freights or any conditions whatsoever unless otherwise mentioned elsewhere in the Tender documents. Tenderers must include in their rates, Sales tax, Excise duty, Octroi, Sales tax on works contract / VAT and any other tax and duty or other levy levied by the Central Government or any State Government or any local authority (except service tax) if applicable and prevalent during the entire contract period. No claim in respect of sales tax, excise duty, octroi or other taxes, duties or levies whether existing or levied in future shall be entertained by the Employer, unless otherwise mentioned elsewhere in the tender document.
- 2.7 The Contractor shall not be entitled to any compensation for any loss suffered by him on account of delays, in commencing or executing the work, whatever the cause of delays may be, including delays arising out of modifications to the work entrusted to him or in any sub-contract connected therewith or delays in awarding contracts for other trades of the project or in commencement of completion of such works or in procuring Government controlled or other building materials or in obtaining water and power connections for construction purposes or for

any claim in respect thereof. The Employer does not accept liability for any sum towards loss of overheads & profits of the contractor besides the tender amount, subject to such variations as are provided for herein.

- 3.0 The Tenderers shall before tendering carefully examine the Tender Documents including the Information & Instructions to Tenderers, General Conditions of Contract, Special Conditions of Contract, General Particulars & Requirements to Specifications, Detailed Specification, Drawings and other matters referred to therein, the Schedules and the Bill of Quantities, and if there should be or appear to be any ambiguity in / or discrepancy between any of these documents and other aspects upon the Drawings, he shall immediately refer the matter for clarifications.

Time is the essence of the contract and the works must be completed within the time schedule as indicated in the tender. Any tender which disagrees with the time schedule of construction and stipulates a longer period is liable to be rejected.

- 4.0 i) The tenderer must use only the forms issued by the Employer to fill the rates.
- ii) Each page of the tender documents should be signed by the person or persons submitting the tender in token of his/their having acquainted himself/themselves with the General Conditions of Contract, Specifications, Special Conditions, etc., as laid down. Any tender with any of the documents not signed are liable to be rejected.
- iii) The tender submitted on behalf of a firm shall be signed by all the partners of the firm or by a person who has the necessary authority on behalf of the firm to enter into the proposed contract. Otherwise, the tender may be rejected by the Employer.
- iv) Tender shall contain full address, Telephone Nos., Fax No. for serving notices/addendums required to be served to the Tenderer in connection with the Tender, statutory registration nos such as PAN, TIN, Service tax registration No, etc.
- 5.0 i) All rates shall be quoted in the BOQ. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures and words and the amount in figures only, in such a way that interpolation is not possible.

- ii) Use of correcting fluid anywhere in the tender document is not permitted. Such tender is liable for rejection.
- iii) The Tender Form and the documents attached to it shall not be detached one from the other, and no alteration or mutilation (other than filling in all the blank spaces) shall be made in any of the documents attached here to.
- iv) Rates should be quoted both in figures and words in columns specified. All erasures and alterations made while filling the tender must be attested by initials of the tenderer. Overwriting of figures is not permitted and failure to comply with either of these conditions may render the tender void at the Employer's option.
- v) Rates quoted by the tenderer 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 to the amount worked out by the tenderer shall be taken as correct. If the amount of an item is not worked out by the tenderer or it does not correspond with the rate written either in figures or words, then the rate quoted by the tenderer in words shall be taken as correct. Where the rates quoted by the tenderer in figures and in words tally but the amount is not worked out correctly the rate quoted by the tenderer will be taken as correct and not the amount. In the event no rate has been quoted for any item(s), leaving space both in figure(s), word(s) and amount blank, it will be presumed that the contractor has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly.
- v) In the case of any tender where unit rate of any item/items appears unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.
- vi) All documents of the tender are to be read in conjunction with each other and rates quoted accordingly by the tenderer.

6.0 Project planning and quality control procedures to be adopted, construction methodology and QA manual are to be submitted along with the tender.

- 7.0 No Tender will be considered which is not accompanied by a sum of **Rs. 73.30 Lakhs/- (Rupees Seventy Three Lakhs Thirty Thousand Only)** as Earnest Money Deposit (EMD) in the form of Demand Draft/ Bank guarantee drawn in favour of Indian Institute of Science Education & Research payable at Thiruvananthapuram. In the event of the Tenderer withdrawing his Tender before the expiry of 120 days from the date fixed for receiving the Tenders or such other extended dates as agreed to, the Earnest Money will be forfeited. The Demand Draft for the Earnest Money Deposit will be returned without any interest to the unsuccessful Tenderers within six months after the date fixed for receiving tenders. In case of successful Tenderer, the Earnest Money Deposit shall be adjusted against Security Deposit. In case the successful Tenderer fails to commence the work awarded to him, the Earnest Money Deposit (EMD) shall be forfeited by the Indian Institute of Science Education & Research, Thiruvananthapuram.
- 8.0 The Tenderer (whether or not he submits a tender) shall treat the details of the documents as secret and confidential and shall sign a declaration under Official Secrets Act 1923. In case a tenderer does not submit his tender, he shall return the blank Tender documents and drawings to IISER TVM.
- 9.0 In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1932.
- 10.0 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.
- 11.0 The contractor, whose tender is accepted, will be required to furnish Performance guarantee of 5% (five percent) of the tendered amount within the period specified in schedule 'F'. This guarantee shall be in the form of deposits of any scheduled bank/banker's cheque of any scheduled bank/demand draft of any scheduled bank/fixed deposit receipts or guarantee bonds of any scheduled bank.

Security deposit shall be collected by deductions from the running bills of contractor. EMD deposited at the time of tenders shall be treated as part

of the Security Deposit. The Security Deposit shall also be accepted in the form of fixed deposit receipt or guarantee bonds of any scheduled bank.

- 12.0 The Employer does not bind himself to accept the lowest or any tender and reserves to itself the right to accept or reject any or all the tenders, either in whole or in part, without assigning any reasons for doing so. The Employer also has the right to re-invite the tender at his sole discretion.
- 13.0 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 Engineer-in-Charge may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said act.
- 14.0 The employer reserves the right , without being liable for any damages or obligations to inform the bidder to
- a) Amend the scope and value of contract to the bidder.
 - b) Reject any or all the applications without assigning any reason.

CONDITIONS OF CONTRACT

Definitions:

- 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 Director, Indian Institute Of Science Education and Research Thiruvananthapuram and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, 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 the 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 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 **Director**, Indian Institute of Science Education and Research Thiruvananthapuram means his successors also.
 - v) The **Registrar**, Indian Institute of Science Education and Research Thiruvananthapuram means his successors also.
 - vi) The **Engineer-in-Charge** means Engineering officer authorised by Director IISER TVM who shall supervise and be in-charge of work and who shall act on behalf of the Director, IISER TVM for execution of contract.
 - vii) The **Project Management Consultant (PMC)** means an agency appointed by the client and so notified, who will be responsible for Project Management on behalf of IISER TVM.
 - viii) **IISER TVM** means Indian Institute of Science Education and Research Thiruvananthapuram or his authorized representative.
 - ix) **Accepting Authority** shall mean the authority mentioned in Schedule 'F'.

- x) **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 Government, 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 IISER Thiruvananthapuram of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to IISER Thiruvananthapuram's faulty design of works.
 - xi) **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.
 - xii) **Schedule(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 Delhi schedule of rates mentioned in Schedule 'F' hereunder, with the amendments thereto issued up to the date of receipt of the tender.
 - xiii) **Department/ Employer/ IISER TVM/ Client** means Indian Institute of Science Education and Research Thiruvananthapuram (IISER Thiruvananthapuram).
 - xiv) **Specifications** means the specifications contained in tender documents, CPWD specifications 2009 Vol I & II with up to date correction slips, CPWD specifications for internal Electrical works – 2013, external electrical services- 2007, DG set & Wet riser, sprinkler specification-2006, Substation works Part IV 2013, Indian standard specification, technical specifications as applicable.
 - xv) **Tendered Value** means the value of the entire work as stipulated in the letter of award.
 - xvi) **Consultant** means Consultant appointed by the Indian Institute of Science Education and Research Thiruvananthapuram.
 - xvii) **Date of commencement of work: The date** of commencement of work shall be the date of start as specified in schedule "F" or the first date of handing over the site, whichever is later, in accordance with the phasing if any, as indicated in the tender documents.
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 or 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 specifications. 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 this 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, equipment 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 shall, unless otherwise stated, 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 the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.
8. The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being followed 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 schedules of quantities, the specifications and or the drawings, the following order of preference shall be observed.
 - (i) Description of schedule of Quantities
 - (ii) Technical specification and Special Condition, if any.
 - (iii) Drawings
 - (iv) C.P.W.D. Specification
 - (v) Indian Standard Specifications of B.I.S.
 - 8.2. If there are varying or conflicting provision made in any one document forming part of the contract, the Accepting Authority shall be 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 the description, quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the contract 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. (i) The successful tenderer/ contractor, on acceptance of his tender by the

Accepting Authority, shall within 15 Days from the date of issue of Letter of acceptance, sign the contract consisting of the notice inviting tender, all the documents including drawings if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.

(ii) No payment for the work done will be made unless contract is signed by the contractor.

TECHNICAL EVALUATION CRITERIA

1. The bidders qualifying the minimum eligibility criteria as per clause 1.7 and bidding capacity as per clause 1.13 of the Notice Inviting Tender will be evaluated in the following manner.

a) Financial strength (Form T-1&T-1B)	-	Maximum 20 marks
b) Experience in similar nature of work during last five years (Form T-2&T-3)	-	Maximum 20 marks
c) Performance of work (Form T-4)-Time over run	-	Maximum 20 marks
d) Performance of work (Form T-4)-Quality	-	Maximum 15 marks
e) Personal & establishment (Form T-5&T-6)	-	Maximum 10 marks
f) Plant & equipment (Form T-7)	-	Maximum 15 marks

Total	100 marks
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To become eligible for shortlisting, the bidder must secure at least fifty percent marks in each attribute and sixty percentage marks in aggregate.

IISER TVM reserves the right to restrict the list of such qualified contractors to any number deemed suitable by it.

2. Even though any bidder may satisfy the above requirements, he would be liable for disqualification if he has
- a) made misleading or false representation or deliberately suppressed the information in the form, statements and enclosures required in the eligibility criteria document.
 - b) Record of poor performance such as abandoning work, not properly completing the contract, or financial failures/weaknesses, etc.

3. Scoring criteria for evaluation of the performance of contractors for pre-eligibility.

Attributes		Evaluation				
(a)	Financial strength (20 Marks) (i) Average annual turnover 16 marks (ii) Solvency certificate 4 marks	(i) 60% marks for minimum eligibility criteria (ii) 100% marks for twice the minimum eligibility criteria or more In between (i) & (ii)- on pro-rata basis				
(b)	Experience in similar (20 marks) Class of works	(i) 60% marks for minimum eligibility criteria (ii) 100% marks for twice the minimum eligibility criteria or more In between (i) & (ii)- on pro-rata basis				
(c)	Performance on works (20 marks) (time over run)					
	Parameter	Calculation for points	Score			Maximum marks
		If TOR =	1.00	2.00	3.00	>3.50
	(i) without levy of compensation		20	15	10	10
	(ii) with levy of compensation		20	5	0	-5
	(iii) Levy of compensation not decided		20	10	0	0
TOR = AT/ST, where AT = Actual Time; ST = Stipulated Time. Note: Marks for value in between the stages indicated above is to be determined by straight line variation basis.						
(d)	Performance of Works (Quality)		(15 marks)			
	Score:					
	(i) Very Good & above					15
	(ii) Good					10
	(iii) Fair					5
	(iv) Poor					0
(e)	Personnel & establishment		(Maximum 10 marks)			
	1) Graduate Engineers		3 marks for each			
	2) Diploma holder Engineers		2 marks for each upto Max. 4 marks			
	3) Supervisory/ Foreman		1 mark for each upto Max. 3 marks			
(f)	Plant & Equipment	Max. 15 marks				
	(i) Hopper Mixer	1 mark for each up to Max. 2 marks				
	(ii)Truck/Tippers/Transit mixer	1 mark for each up to Max. 2 marks				
	(iii)Steel shuttering	2 marks for each 800 Sqm up to Max. 4 marks				
	(iv)Tower Crane	2 marks for each up to Max. 4 marks				
	(v)Building Hoist	1 mark for each up to Max. 2 marks				

	(vi)Excavator	1 mark for each up to Max. 2 marks
	(vii)Batch Mix Plant	2 marks for each up to Max. 4 marks
	(viii)Tendrom Roller	1 mark for each up to Max. 2 marks
	(ix)Vibration Compactor	1 mark for each up to Max. 2 marks
	(x)Paver Finisher	2 marks for each up to Max. 4 marks
	(xi)Hot Mix Plant	2 marks for each up to Max. 4 marks
	(xii) Special Equipment	(Marks to be fixed as per requirement)

4. Details/documents to be furnished

- 4.1 (a) Annual financial statement for the last five years indicating Gross annual turnover. Audited Balance Sheets should support these Profit and Loss Accounts duly certified by a Chartered Accountant, as submitted by the applicant to the Income Tax Department.(Form 'T-1')
(b) Solvency Certificate from the Bankers(Form 'T-1B')
- 4.2 Experience in executing works (Highlighting experience in similar works)
 - (a) List of all similar works successfully completed during the last five years (Form 'T-2').
 - (b) List of projects under execution (Form 'T-3')
- 4.3 Performance report of works issued by an officer not below the rank of Executive Engineer or equivalent. (To be furnished separately in sealed cover for each work completed or in progress)(Form 'T-4').
- 4.4 Details in respect of structure of organization (in Form 'T-5')
- 4.5 Details of Technical & Administrative Personnel (Form 'T-6')
- 4.6 List of construction plant and equipment including steel shuttering, centering and scaffolding planned to be used in carrying out the work (in Form 'T-7').
- 4.7 Certificate regarding satisfying the eligibility criteria (Appendix A)
- 4.8 Information regarding initial bidding capacity (Appendix B)

CERTIFICATE REGARDING SATISFYING THE ELIGIBILITY CRITERIA

I/We have read and understood the stipulations regarding the eligibility criteria for submitting tender for the subject work and confirm that our firm satisfies the basic eligibility criteria.

The documents/details in support of the same are enclosed in the required formats.

Date

Signature of the Bidder

APPENDIX B

INFORMATION REGARDING INITIAL BIDDING CAPACITY

The information to be filled in by the Bidder in the following pages will be used for purposes of Pre-qualification as provided above.

1.1 Constitution or legal status of Bidder (Attach Copy)

Place of registration:

Principal place of business:

(Power of attorney of signatory of Bid)

1.2 Value of work executed during the last five years (in Rs. Lacs)

<i>Particular</i>	<i>Year</i>	<i>Value</i>
Total value of Work Executed in the last five years **	2009-10	
	2010-11	
	2011-12	
	2012-13	
	2013-14	

** Immediately preceding the financial year in which bids are received. Attach certificate from Chartered accountant.

1.3 Works for which bids have been submitted and works which are yet to be completed as on the date of this bid calculated as per **clause 1.13 of NIT**

(A) Existing commitments and on-going works: (format for **clause 1.13 of NIT**)

<i>Description Of work</i>	<i>Place & state</i>	<i>Contract No. & Date</i>	<i>Name & Address of Client</i>	<i>Value of Contract (Rs. Lacs)</i>	<i>Stipulated period of completion</i>	<i>Value of work remaining to be completed</i>	<i>Anticipated date of completion (Rs.)</i>	<i>Remarks Information regarding the litigation if any</i>

(B) Works for which bids already submitted (format for **clause 1.13 of NIT**)

<i>Description of work</i>	<i>Place & State</i>	<i>Name and Address of Client</i>	<i>Value of contract Rs in Lakhs</i>	<i>Stipulated period of completion</i>	<i>Date when decision is expected</i>	<i>Remarks if any</i>

FINANCIAL INFORMATION

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

i) **Gross Annual Turnover on construction works** for last five years ending 31.03.2014

ii) **Profit / Loss** for last five years ending 31.03.2014

Financial arrangements for carrying out the proposed work.

Solvency certificate from Bankers of the bidder in the prescribed Form "T-1 B".

Signature of Chartered
Accountant with Seal

Signature of Bidder

FORM OF BANKERS' CERTIFICATE FROM A SCHEDULED BANK
(To be furnished in a sealed cover)

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

(Signature)

For the Bank

NOTE (1) Bankers certificates should be on letter head of the Bank, in a sealed cover addressed to bidding authority.

(2) Incase of partnership firm, certificate should include names of all partners as recorded with the bank.

DETAILS OF ALL WORKS OF SIMILAR NATURE COMPLETED
DURING THE LAST FIVE YEARS

Sl.No	Name of Project	Location	Client	Date of commencement	Stipulated date of Completion	Actual date of Completion	Covered Area in Sq.M	Height of the Building	Cost of Project (in Rs Lakhs)	Litigation/ arbitration cases pending/in progress with details*	Name & address /telephone number of officer to whom reference may be made	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)

*indicate gross amount claimed and amount awarded by the arbitrator.

Note:-

1. Only those works which meet eligibility criteria to be included.
2. For every work included in this form, Form 'T-4' must be enclosed failing which the work shall not be considered for eligibility criteria.

Signature of Bidder

PROJECTS UNDER EXECUTION

Sl.No	Name of Work/ Project & location	Owner of sponsoring Organization	Cost of Work	Date of Commencement As per contract	Stipulated Date of completion	Uptodate Percentage Progress of work	Slow Progress, If any, & reasons thereof	Name & address/ Telephone No. of officer to whom reference may be made	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

Certified that the above list of works is complete .No work has been left out and that the information given is correct to the best of our knowledge and belief.

Signature of Bidder

PERFORMANCE REPORT OF WORKS
REFERRED TO IN FORM "T-2"

(To be issued by an authorized person of the Client in a sealed envelope)

01.	Name of work / Project & Location	
02.	Agreement No.	
2A	Height of Bldg from Ground level	
03.	Tendered Cost	
04.	Executed Cost	
05.	Date of Start	
06.	Date of completion :	
	i) Stipulated date of completion	
	ii) Actual date of completion/Present Progress	
07.	Amount of compensation levied if any for delayed completion/slow progress	
08.	Amount of reduced rate items, if any	
09.	Performance Report :	
	a) Quality of work	Very Good / Good / Fair / Poor
	b) Financial soundness	Very Good / Good / Fair / Poor

	c) Technical Proficiency	Very Good / Good / Fair / Poor
	d) Resourcefulness	Very Good / Good / Fair / Poor
	e) General behavior	Very Good / Good / Fair / Poor

Dated : _____ CLIENT/ Project Consultant-appointed by the client

STRUCTURE & ORGANIZATION

01.	Name & Address of the applicant	
02.	Telephone No. / Telex / Fax No.	
03.	Legal status of the applicant (attach copies of original document defining the legal status)	
	a) An Individual	
	b) A proprietary firm	
	c) A firm in partnership	
	d) A limited company or Corporation	
04.	Particulars of registration with various Government bodies (<i>attach attested photocopy</i>)	
	<u>Organization / Place of Registration,</u> <u>Registration No:</u>	
	1.	
	2.	
	3.	
05.	Names and Titles of Directors & Officers with designation concerned with this work	
06.	Designation of individuals authorized to act for the organization.	
07.	Was the applicant ever required to suspend construction for a period of more than six months continuously after the commencement of construction? If so, give the name of the project and reasons for suspension of work.	
08.	Has the applicant, or any constituent partner in case of partnership firm, ever abandoned away work before its completion? If so, give name of the project and reasons for abandonment.	

09.	Has the applicant, or any constituent partner in case of partnership firm, ever been debarred/ black-listed for Bidding in any organization at any time? If so, give details.	
10.	Has the applicant, or any constituent partner in case of partnership firm, ever been convicted by a Court of Law? If so, give details.	
11.	In which field of Civil Engineering construction the applicant has specialization and interest?	
12.	Any other information considered necessary but not included above.	

Signature of Bidder

**DETAILS OF TECHINCAL & ADMINISTRATIVE
PERSONNEL EMPLOYED with the Firm**

Sl. No	Designation	Total Number	Number Available For this Work	Name	Qualification	Professional experience and details of work carried out	How these would be involved in this work	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Signature of Bidder

DETAILS OF CONSTRUCTION PLANT AND EQUIPMENT PROPOSED
TO BE USED IN CARRYING OUT THE WORK

Sl.No.	Name of Equipment	Nos.	Capacity of Type	Age	Condition	Ownership Status			Current Location	Remarks
						Presently owned	Leased	To be Purchased		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Earth Moving Equipment : 1. Excavator (various sizes) 2. Earth compactor Equipment for concrete work 1. Concrete batching plant 2. Concrete pump 3. Concrete transit mixer 4. Concrete mixer (diesel) 5. Concrete mixer (electrical) 6. Needle vibrator (electrical) 7. Needle vibrator (petrol) 8. Table vibrator (electrical/ petrol)										
Equipment for building work 1. Block making machine 2. Bar bending machine 3. Bar cutting machine 4. Welding generators										

5. Welding transformers									
6. Cube testing machines									
7. M.S. Pipes									
8. Steel Shuttering									
Equipment for transportation :									
1. Tippers									
2. Trucks									
Pneumatic equipment :									
1. Air compressors									
Dewatering equipment									
1. Pump (diesel)									
2. Pump (electric)									
Power equipment :									
1. Diesel generators									
Hoisting Equipments									
1. Tower Crane									
2. Builders Hoist									
Any other Equipments: Like crane, tower lifts etc									

Signature of Bidder

CHECK LIST

Sl No.	Description of items	Tick, if enclosed
1	Pre-Qualification documents as per Appendix A & B along with Form 'T-1 to T- 7'	
2	Power of attorney as required	
3	Certificate of Registration as required	
4	Memorandum of Articles of Association as required	
5	Volume I of the Tender document including all certificates/ documents	
6	Earnest Money Deposit for Rs 1.31 crore	
7	Volume II of the Tender document regarding Technical Specifications	
8	CD containing Tender document	
9	Envelope 2- Volume III of the Tender document regarding Bill of Quantities	
10	Integrity Agreement duly signed	
11	Copies of PAN/TIN/ST Registration	

CLAUSES OF CONTRACT

CLAUSE – I

Performance Guarantee

- (i) 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 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 up to a maximum period as specified in schedule 'F' on written request of the 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 Deposit at call receipt of any Schedule Bank/Banker's Cheque of any Schedule Bank/Demand Draft of any Scheduled Bank/Pay Order of any Scheduled Bank or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the IISER Thiruvananthapuram as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the IISER Thiruvananthapuram to make good the deficit.
- (ii) The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets extended, the contractor shall get the validity of Performance Guarantee extended to cover such extended 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. However, in case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, then 50% of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.
- (iii) The Engineer-in-Charge shall not make a claim under the Performance Guarantee except for amounts to which the Director IISER Thiruvananthapuram 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 Director IISER Thiruvananthapuram 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 serving of notice to this effect by Engineer-in-Charge.

- (iv) In the event of the 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 Director IISER Thiruvananthapuram.

CLAUSE – I A

Recovery of Security Deposit :-

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit IISER TVM at the time of making any payment to him for work done under the contract to deduct a sum at the rate of **2.5% of the gross amount** of each running and final bill till the sum deducted will amount to security deposit of 2.5% of the tendered value of the work. Such deductions will be made and held by IISER TVM by way of Security Deposit unless he/they has/have deposited the amount of Security at the rate mentioned above in cash or in the form of Government Securities or fixed deposit receipts. In case a fixed deposit receipt of any Bank is furnished by the contractor to IISER TVM as part of the security deposit and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to IISER TVM to make good the deficit.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due to or may become due to the contractor by IISER Thiruvananthapuram on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in cash or fixed deposit receipt tendered by the State Bank of India or by Scheduled Banks or Government Securities (if deposited for more than 12 months) endorsed in favour of the Director IISER Thiruvananthapuram, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof.

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 lakh subject to the condition that amount of such bank guarantee, except last one, shall not be less than Rs.5 lakh. Provided further that the validity of bank guarantee shall be in conformity with provisions contained in clause 17, which shall be extended from time to time depending upon extension of contract granted under provisions of clause 2 and clause 5.

In case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, then 50% of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.

CLAUSE -2 - Compensation for Delay :-

If the contractor fails to maintain the required progress in terms of clause 5 or 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 IISER Thiruvananthapuram, on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the authority specified in schedule 'F' (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day/month (as applicable) that the progress remains below that 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 completion has been specified.

(i)	Compensation for Delay of work	@1.5% per month of delay computed on per day basis.
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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 IISER Thiruvananthapuram. In case, the contractor does not achieve a particular milestone 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 milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

CLAUSE– 2A - Incentive for Early Completion:-

In case, the contractor completes the work ahead of updated stipulated date of completion considering the effect of extra work (to be calculated on pro-rata basis as cost of extra work X stipulated period/tendered cost), a bonus @ 1% (one per cent) 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 per cent) 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 2A shall be applicable only when so provided in Schedule 'F'.

CLAUSE– 3 - When Contract can be Determined:-

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

- i). 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 the work is being performed in an inefficient or otherwise improper or unworkman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii). 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.
- iii). 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 completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge.
- iv). If the contractor persistently neglects to carry out his obligations under the contract and / or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take 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.
- v). If the contractor shall offer or give or agree to give to any person in IISER Thiruvananthapuram service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing 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 IISER Thiruvananthapuram.
- vi). If the contractor shall enter into a contract with IISER Thiruvananthapuram 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.
- vii). If the contractor had secured the contract with IISER Thiruvananthapuram as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits breach of Integrity Agreement.
- viii). 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 proceeding for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or compositions or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any 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.
- ix). 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 circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle to make the court to make winding up order.

- x) If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
- xi) If the contractor assigns, transfers, sublets (engagement of labour on a 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 Director IISER Thiruvananthapuram shall have powers:

- a). 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 IISER Thiruvananthapuram.
- b). 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 at the risk and cost of the original contractor. The contractor, whose contract is determined 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 reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

CLAUSE-3A

In case, the work cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work or one month whichever is higher, either party may close the contract. In case contractor wants to close the contract, he shall give notice to the department stating the failure on the part of department. In such eventuality, the Performance Guarantee of the contractor shall be refunded within following time limits :

- (i) If the Tendered value of work is up to Rs. 45 lac : 15 days.

(ii) If the Tendered value of work is more than Rs 45 Lac and up to Rs. 2.5 Crore : 21 days.

(iii) If the Tendered value of work exceeds Rs. 2.5 Crore : 30 days.

If PG is not released within prescribed time limit, then a simple interest @ 0.25% per month shall be payable on PG amount to the contractor from the date of expiry of prescribed time limit.

A compensation for such eventuality, on account of damages etc. shall be payable @ 0.25% of tendered amount subject to maximum limit of Rs. 10 lacs.

CLAUSE- 4 - Contractor liable to pay compensation even if action not taken under clause 3:-

In any case in which any of the powers conferred upon the 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 compensation shall remain unaffected. In the event of the 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, plant, 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 these 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 and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

CLAUSE- 5 - Time and Extension for Delay :-

The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works 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, IISER Thiruvananthapuram shall without prejudice to any other right or remedy available in law, be at 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 IISER Thiruvananthapuram. The chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of 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 (except for special jobs for which a separate programme has been agreed upon) complete the work as per mile stones given in Schedule 'F'.

a) Project Management shall be done by using project management software for works costing up to Rs. 5 Crore.

b) The project management shall be done using M.S. Project software for works costing more than Rs. 5 Crore and up to Rs. 20 Crore.

c) For works costing more than Rs. 20 Crore, project management shall be done using Primavera Software.

PROGRAMME CHART

(i) The Contractor shall prepare an integrated programme chart in MS Project/Primavera software for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfillment of the programme within the stipulated period or earlier and submit the same for approval to the Engineer-in-Charge within ten days of award of the contract. A recovery of Rs. 2500/- (for works costing up to Rs. 20 Crores) / Rs. 5000/- (for works costing more than Rs. 20 Crores) shall be made on per day basis in case of delay in submission of the above programme.

(ii) The programme chart should include the following: a) Descriptive note explaining sequence of the various activities. b) Network (PERT / CPM / BAR CHART). c) Programme for procurement of materials by the contractor. Programme of procurement of machinery / equipments having adequate capacity, commensurate with the quantum of work to be done within the stipulated period, by the contractor. In addition to above to achieve the progress of Work as per programme, the contractor must bring at site adequate shuttering material required for cement concrete and R.C.C. works etc. for three floors within one month from the date of start of work till the completion of RCC work as per requirement of work. The contractor shall submit shuttering schedule adequate to complete structure work within laid down physical milestone.

(iii) If at any time, it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved programme referred above or after rescheduling of milestones, the contractor shall produce a revised programme within 7 (seven) days, showing the modifications to the approved programme to ensure timely completion of the work. The modified schedule of programme shall be approved by the Engineer in Charge. A recovery of Rs. 2500/- (for works costing up to Rs. 20 Crores) / Rs. 5000/- (for works costing more than Rs. 20 Crores) shall be made on per day basis in case of delay

in submission of the modified programme.

(iv) The submission for approval by the Engineer-in-Charge of such programme or such particulars shall not relieve the contractor of any of the duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.

(v) The contractor shall submit the progress report using MS Project/Primavira software with base line programme referred above for the work done during previous month to the Engineer-in-charge on or before 5th day of each month failing which a recovery Rs.2500/- (for works costing up to Rs. 20 Crores) / Rs. 5000/- (for works costing more than Rs. 20 Crores) shall be made on per day basis in case of delay in submission of the monthly progress report.

5.2 If the work(s) be delayed by :-

- i) force majeure, or
- ii) abnormally bad weather, or
- iii) serious loss or damage by fire, or abnormal floods
- iv) civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or.
- v) delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract, or
- vi) non-availability of stores, which are the responsibility of IISER Thiruvananthapuram to supply, or
- vii) non-availability or break down of tools and Plant to be supplied or supplied by IISER Thiruvananthapuram, or
- viii) Any other cause which, in the absolute discretion of 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 Mile stones 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 In any such case the authority as indicated in Schedule 'F' may give a fair and reasonable extension of time and reschedule the mile stones for completion of work. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 3 months or 4 weeks of the date of receipt of such request respectively. Non application by the contractor for extension of time/ rescheduling of the milestones shall not be a bar for giving a fair and reasonable extension/ rescheduling of the milestones by the authority as indicated in Schedule 'F' and this shall be binding on the contractor.

CLAUSE– 6 - Measurements of Work Done :-

Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement, the value in accordance with the contract of work done.

All measurement of all items having financial value shall be entered in Measurement Book and/ or level field book so that a complete record is obtained of all works performed under the contract.

All measurements and levels shall be taken jointly by the Engineer-in-Charge or his authorized representative and by the contractor or his authorized representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer-in-Charge and the contractor or their representatives in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

If for any reason the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-in-Charge or his representative, the Engineer-in-Charge and the IISER Thiruvananthapuram shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Contractor.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the 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 seven 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 measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement 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 seven days inspect the work, and if any work shall be covered up or placed beyond the reach of 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's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the IISER Thiruvananthapuram to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that recording of measurements of any item of work in the measurement book and/ or its 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– 6A - Computerized Measurement Book :-

Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract.

All measurements of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per format of the IISER Thiruvananthapuram so that a complete record is obtained of all the items of works 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 Engineer-in-Charge or his 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 IISER Thiruvananthapuram a computerized measurement book, duly bound, and with its pages machine numbered. 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 pages machine numbered, 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 IISER Thiruvananthapuram. Thereafter, the MB shall be taken in the IISER Thiruvananthapuram Office records, and allotted a number as per the Register of Computerized MB's. This should be done before the corresponding bill is submitted to the IISER Thiruvananthapuram Office for payment. The contractor shall submit two spare copies of such computerized MB's for the purpose of reference and record by the various officers of the IISER Thiruvananthapuram.

The contractor shall also submit to the IISER Thiruvananthapuram 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 IISER Thiruvananthapuram Office and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements.

The contractor shall, without extra charge, provide all 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 the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the 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 seven 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 and/or test checking measurement and shall not cover up and place beyond reach of measurement 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 seven days inspect 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's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the IISER Thiruvananthapuram to check the measurements recorded by contractor and all provisions stipulated herein above shall be applicable to such checking of measurements 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 its 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 - 6B-Payment Terms in respect of HVAC & Electrical works

6B.1 The following percentage of contract rates shall be payable against the stages of work shown herein wherever applicable.

	Stage of work	Machinery & Equipment	All other items
I	After initial inspection (wherever specified) & delivery at site in good condition on pro-rata basis	80%	70%
II	On completion of pro-rata installation	10%	20%
III	On commissioning and completion of successful running in period	10%	10%

6B.2 When the major seasonal test cannot be carried out on commissioning of the installation due to any reason not attributable to the contractor, the installation will be handed over to the Department for beneficial use after completion of successful running in test of 7 days subject to a minimum aggregate of 120 hours. The balance payment shall be released to the contractor on his furnishing a bank guarantee in the specified format from a scheduled bank for an equivalent amount. The bank guarantee shall be valid for a period of 6 months. However it will be extended till the successful completion of the major seasonal test. This bank guarantee shall be independent of the one furnished for performance guarantee.

6B.3 The following shall be considered major seasonal test for the purpose of the above payment terms:-

- | | | |
|-----|--------------------------|---------------------|
| (a) | Air-conditioning system | : Summer or monsoon |
| (b) | Central heating system | : Winter |
| (c) | ETAC | : Summer |
| (d) | Cold room/Walk in cooler | : Summer |

CLAUSE- 7 - Payment on Intermediate Certificate to be Regarded as Advances: -

No payment shall be made for work, estimated to cost Rs. fifty thousand 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. fifty thousand, the interim or running account bills shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of the IISER Thiruvananthapuram 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 taking or causing to be taken, where necessary, the requisite measurements 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 event 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 at such rates as decided by the Engineer-in-Charge. The amount admissible shall be paid by 10th working day after the day of presentation of the bill by the Contractor to the Engineer-in-Charge or his Assistant Engineer together with the account of the material issued by the IISER Thiruvananthapuram, or dismantled materials, if any. In the case of works outside the headquarters of the Engineer-in-Charge, the period of ten working days will be extended to fifteen working days. In case of delay in payment of intermediate bills after 45 days of submission of bill by the contractor provided the bill submitted by the contractor found to be in order, a simple interest @ 7.5% per annum shall be paid to the contractor from the date of expiry of prescribed time limit which will be compounded on yearly basis.

All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring 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 payment, 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 in any respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment 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 IISER Thiruvananthapuram to take action under the terms of this contract for delay in the completion of 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 Assistant Engineer/Representative to the effect that the work has been completed up to the level in question make interim advance payments without detailed measurements for work done (other than foundations, items to be covered under finishing items) up to lintel level (including sunshade etc.) and slab level, each floor working out at 75% of the assessed value. The advance payments so allowed shall be adjusted in the subsequent interim bill by taking detailed measurements thereof.

In case of composite contract if main contractor fails to make the payment to the contractor associated by him within 15 days of receipt of each running account payment, then on the written complaint of contractor associated for such work, Engineer in charge of work shall serve the show cause to the main contractor and if reply of main contractor either not received or found unsatisfactory, Engineer in charge may make the payment directly to the contractor associated for such work as per term & condition of the agreement drawn between main contractor & associate contractor fixed by main contractor. Such payment made to associated contractor shall be recovered by Engineer-in-charge of work from the next R/A bill due to main contractor as the case may be.

CLAUSE- 8 - Completion Certificate and Completion Plans :-

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within thirty 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 with 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 completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for 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 cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution; thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, 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 work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding surplus materials and rubbish etc. and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

CLAUSE- 8A - Contractor to Keep Site Clean :-

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 etc shall be removed and the surface cleaned simultaneously with the completion of these items 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 departmentally or through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days notice in writing to the contractor.

CLAUSE- 8B - Completion Plans (as built drawing) to be Submitted by the Contractor :-

The contractor shall submit completion plan as required vide General Specifications for Electrical works (Part-I Internal) 2005 and (Part-II External) 1994 as applicable within thirty 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.15,000 (Rs. Fifteen Thousand Only) as may be fixed by the Engineer-in-Charge concerned and in this respect the decision of the Engineer-in-Charge shall be final and binding on the contractor.

The contractor shall submit completion plan for water, sewerage and drainage line plan within thirty days of the completion of the work.

In case, the contractor fails to submit the completion plan as aforesaid, , the department will get it done through other agency at his cost and actual expenses incurred plus Rs. 15,000/for the same shall be recovered from the contractor.

CLAUSE- 9 - Payment of Final Bill :-

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 claims 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 the 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 Asstt. Engineer/Representative, complete with account of materials issued by the IISER Thiruvananthapuram and dismantled materials.

- (i) If the Tendered value of work is up to Rs. 45 lac : 2 months
- (ii) If the Tendered value of work is more than 45 Lac and up to Rs. 2.5 Crore : 3 months
- (iii) If the Tendered value of work exceeds Rs. 2.5 Crore : 6 months

In case of delay in payment of final bills after prescribed time limit, a simple interest @ 7.5% per annum shall be paid to the contractor from the date of expiry of prescribed time limit which will be compounded on yearly basis, provided the final bill submitted by the contractor found to be in order.

CLAUSE- 9A - Payment of Contractor's Bills to Banks :-

Payments due to the contractor may, if so desired by him, be made to his bank, registered financial, co-operative or thrift societies or recognized financial institutions instead of direct to him provided that the contractor furnishes to 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 IISER Thiruvananthapuram or his signatures on the bill or other claim preferred against IISER Thiruvananthapuram before settlement by the Engineer-in-Charge of the account or claim by payment to the bank, registered financial, co-operative or thrift societies or recognized financial institutions. While the receipt is 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 wherever possible present his bills duly receipted and discharged through his bank, registered financial, co-operative or thrift societies or recognized financial institutions.

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

CLAUSE 10- Materials Supplied by Department

Materials which Department will supply are shown in Schedule 'B' which also stipulates quantum, place of issue and rate(s) to be charged in respect thereof. The contractor shall be bound to procure them from the Engineer-in-Charge.

As soon as the work is awarded, the contractor shall finalize the programme for the completion of work as per clause 5 of this contract and shall give his estimates of materials required on the basis of drawings/or schedule of quantities of the work. The Contractor shall give in writing his requirement to the Engineer-in-Charge which shall be issued to him keeping in view the progress of work as assessed by the Engineer-in-Charge, in accordance with the agreed phased programme of work indicating monthly requirements of various materials. The contractor shall place his indent in writing for issue of such materials at least 7 days in advance of his requirement.

Such materials shall be supplied for the purpose of the contract only and the value of the materials so supplied at the rates specified in the aforesaid schedule shall be set off or deducted, as and when materials are consumed in items of work (including normal wastage) for which payment is being made to the contractor, from any sum then due or which may therefore become due to the contractor under the contract or otherwise or from the security deposit. At the time of submission of bills, the contractor shall certify that balance of materials supplied is available at site in original good condition.

The contractor shall submit along with every running bill (on account or interim bill) material wise reconciliation statements supported by complete calculations reconciling total issue, total consumption and certified balance (diameter/section-wise in the case of steel) and resulting variations and reasons therefore. Engineer-in-Charge shall (whose decision shall be final and binding on the contractor) be within his rights to follow the procedure of recovery in clause 40 at any stage of the work if reconciliation is not found to be satisfactory.

The contractor shall bear the cost of getting the material issued, loading, transporting to site, unloading, storing under cover as required, cutting assembling and joining the several parts together as necessary. Notwithstanding anything to the contrary contained in any other clause of the contract and all stores/materials so supplied to the contractor or procured with the assistance of the Department shall remain the absolute property of Department and the contractor shall be the trustee of the stores/materials, and the said stores/materials shall not be removed/disposed off from the site of the work on any account and shall be at all times open to inspection by the Engineer-in-Charge or his authorized agent. Any such stores/materials remaining unused shall be returned to the Engineer-in-Charge in as good a condition in which they were originally supplied at a place directed by him, at a place of issue or any other place specified by him as he shall require, but in case it is decided not to take back the stores/materials the contractor shall have no claim for compensation on any account of such stores/materials so supplied to him as aforesaid and not used by him or for any wastage in or damage to in such stores/materials.

On being required to return the stores/materials, the contractor shall hand over the stores/materials on being paid or credited such price as the Engineer-in-Charge shall determine, having due regard to the condition of the stores/materials. The price allowed for credit to the contractor, however, shall be at the prevailing market rate not exceeding the amount charged to him, excluding the storage charge, if any. The decision of the

Engineer-in-Charge shall be final and conclusive. In the event of breach of the aforesaid condition, the contractor shall in addition to throwing himself open to account for contravention of the terms of the licenses or permit and/or for criminal breach of trust, be liable to Department for all advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach. Provided that the contractor shall in no case be entitled to any compensation or damages on account of any delay in supply or non-supply thereof all or any such materials and stores provided further that the contractor shall be bound to execute the entire work if the materials are supplied by the Department within the original scheduled time for completion of the work plus 50% thereof or schedule time plus 6 months whichever is more if the time of completion of work exceeds 12 months, but if a part of the materials only has been supplied within the aforesaid period, then the contractor shall be bound to do so much of the work as may be possible with the materials and stores supplied in the aforesaid period. For the completion of the rest of the work, the contractor shall be entitled to such extension of time as may be determined by the Engineer-in-Charge whose decision in this regard shall be final and binding on the contractor.

The contractor shall see that only the required quantities of materials are got issued. Any such material remaining unused and in perfectly good/original condition at the time of completion or determination of the contract shall be returned to the Engineer-in-Charge at the stores from which it was issued or at a place directed by him by a notice in writing. The contractor shall not be entitled for loading, transporting, unloading and stacking of such unused material except for the extra lead, if any involved, beyond the original place of issue.

CLAUSE- 10A - Materials to be Provided by the Contractor :-

The contractor shall, at his own expense, provide all materials, required for the works other than those which are stipulated to be supplied by the IISER Thiruvananthapuram.

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 these approved in advance. All such materials to be provided by the contractor shall be in conformity with the 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 thirty 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 are 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 specification, 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 samples of materials to be tested or analyzed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or 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 require for collecting, and preparing the required number of samples for such 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 representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles, or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are 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 any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to require other proper materials to be substitute thereof and in case of default, the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution 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 with the all necessary testing equipments as specified in schedule "F".

CLAUSE- 10 B –

(i) Secured Advance on Non-Perishable Materials: -

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 up to 90% of the assessed value of any materials which are in the opinion of the Engineer-in-Charge non-perishable, non-fragile and non-combustible 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.

(ii) Mobilization Advances :-

- (i) 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. Such advance shall be paid 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.

Before any installment of advance is released, the contractor shall execute a Bank Guarantee Bond from Scheduled Bank for the amount equal to 110% of the amount of advance and valid for the contract period. This (Bank Guarantee from Scheduled Bank for the amount equal to 110% of the balance amount of advance) shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery.

Provided always that provision of Clause 10 B shall be applicable only when so provided in 'Schedule F'.

(iii) Plant Machinery & Shuttering Material Advance:-

- (ii) 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. 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 Valuer 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 amounts of advance shall be paid after the plant and equipment is brought to site and balance twenty five per cent on successfully commissioning the same. However, total amount of advance for plant machinery and shuttering material shall be limited to 5% of the tendered value for the work.

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

1. Leasing company which gives certificate of agreeing to lease equipment to the contractor.
2. Engineer-in-Charge, and
3. 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 working order and are maintained in working order; (c) hypothecated to the IISER Thiruvananthapuram 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.

Interest and Recovery:-

(iii) The mobilization advance and plant and machinery advance in (i) & (ii) above bear simple interest at the rate of 10 per cent 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 shall be made by the deduction from the contractors bills commencing after first ten per cent of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time eighty per cent 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.

(iv) 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 in the discretion of Engineer-in-charge.

CLAUSE 10-C - Payment on Account of Increase in Prices / Wages due to Statutory Order(s) :-

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 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), Government 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 -Payment due to Variation in Prices of Materials after receipt of tender

If after submission of the tender, the price of materials specified in Schedule F increases/decreases beyond the base price(s) as indicated in Schedule F 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 updated stipulated date of completion considering the effect of extra work (to be calculated on pro-rata basis as cost of extra work multiplied by stipulated period/tendered cost).

The increase/decrease in prices of cement, steel reinforcement and structural steel shall be determined by the Price indices issued by the Director General, CPWD. For other items provided in the Schedule 'F', this 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. Base price for cement, steel reinforcement and structural steel shall be as issued under the authority of Director General CPWD applicable for Delhi including Noida, Gurgaon, Faridabad & Ghaziabad and for other places as issued under the authority of Zonal Chief Engineer, CPWD and base price of other materials issued by concerned Zonal chief Engineer and as indicated in Schedule 'F'. In case, price index of a particular material is not issued by Ministry of Commerce and Industry, then the price index 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 formula given below for individual material:

Adjustment for component of individual material

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

where

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

P = Base Price of material as issued under authority of DG, CPWD or concerned Zonal Chief Engineer and as indicated in Schedule "F".

For Projects and Original Works

Q = Quantity of material brought at site for bonafide use in the works since previous bill excluding any such quantity consumed in the deviated quantity of items beyond deviation limit and extra /substituted item, paid/to be paid at rates derived on the basis of market rate under clause 12.2.

For Maintenance Works

Q = Quantity of material brought at site for bonafide use in the works since previous bill including any such quantity consumed in the deviated quantity of items beyond deviation limit paid at agreement rate and extra /substituted item being scheduled items, but excluding non schedule extra /substituted item paid/to be paid at market rate under clause 12.2.

Note:

(i) The date wise record of ready mix concrete shall be kept in a register and the cement consumption for the same shall be calculated accordingly.

(ii) If built-up steel items are brought at site from workshop, then the variation shall be paid for the structural steel up to the period when the built up item/finished product is brought at site.

Clo = Price index for cement, steel reinforcement bars and structural steel as issued by the

DG, CPWD and corresponding to the time of base price of respective material indicated in Schedule 'F'. For other items, if any, provided in Schedule 'F', All India Wholesale Price Index for the material as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce and corresponding to the time of base price of respective material indicated in Schedule 'F'.

CI = Price index for cement, steel reinforcement bars and structural steel as issued under the authority of DG, CPWD for period under consideration. For other items, if any, provided in Schedule 'F', All India Wholesale Price Index for the material for period under consideration as published by 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 without 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.

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

(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.

(iii) Cement mentioned wherever in this clause includes Cement component used in RMC brought at site from outside approved RMC plants, if any

CLAUSE- 10 CC - Payment due to Increase / Decrease in Prices / Wages after Receipt of Tender for Works (Excluding materials covered under Clause 10CA)

If the prices of materials (not being materials supplied or services rendered at fixed prices by the department in accordance with clause 10 thereof) and/or wages of labour required for execution of the work increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contract shall accordingly be varied, subject to the condition that that such compensation for escalation in prices and wages shall be available only for the work done during the stipulated period of the contract including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2. However, for the work done during the justified period extended as above, the compensation as detailed below will be limited to prices/wages prevailing at the time of updated stipulated date of completion considering the effect of extra work (to be calculated on pro-rata basis as cost of extra work x stipulated period/tendered cost). No such compensation shall be payable for a work for which the stipulated period of completion is equal to or less than the time as specified in Schedule F. Such compensation for escalation in the prices of materials and labour, when due, shall be worked out based on the following provisions:

- (i) **The base date for working out such escalation shall be the last stipulated date of receipt of tenders including extensions, if any.**
The cost of work on which escalation will be payable shall be reckoned as below :-
- (a) **Gross value of work done up to this quarter : (A)**
(b) **Gross value of work done up to the last quarter : (B)**
(c) **Gross value of work done since previous quarter(A-B) : (C)**
- (d) **Full assessed value of Secured Advance (excluding materials Covered under Clause 10 CA) fresh paid in this quarter : (D)**

- (e) Full assessed value of Secured Advance (excluding materials Covered under Clause 10 CA) recovered in this quarter : (E)
- (f) Full assessed value of Secured Advance for which escalation is payable In this quarter (D-E) : (F)
- (g) Advance payment made during this quarter : (G)
- (h) Advance payment recovered during this quarter : (H)
- (i) Advance payment for which escalation is payable in this quarter (G-H):(I)
- (j) Extra items/deviated quantities of items paid as per Clause 12 based of Prevailing market rates during this quarter : (J)

$$\text{Then, } M = C + F + I - J$$

$$W = 0.85 M$$

(iii) Components for materials (except cement, reinforcement bars, structural steel or other materials covered under clause 10 CA) labour, P.O.L., etc. shall be pre-determined for every work and incorporated in the conditions of contract attached to the tender papers included in Schedule 'F'. The decision of the Engineer-in-Charge in working out such percentage shall be binding on the contractors.

(iv) The compensation for escalation for other materials (excluding cement, reinforcement bars, structural steel or other materials covered under clause 10 CA) and P.O.L. shall be worked as per the formula given below:

(a) Adjustment for civil component (except cement, structural steel, reinforcement bars and other materials covered under clause 10CA) / electrical component of construction '

$$V_m = W \times \frac{X_m}{100} - \frac{M_I - M_{I0}}{M_{I0}}$$

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

W = Cost of work done worked out as indicated in sub-para (ii) of Clause 10CC.

X_m = Component of 'materials' (except cement, structural steel, reinforcement bars and other materials covered under clause 10CA) expressed as percent of the total value of work.

M_I = All India Wholesale Price Index for civil component/electrical component* of construction material as worked out on the basis of All India Wholesale Price Index for Individual Commodities/ Group Items for the period under consideration as published by Economic Advisor to Govt. of India, Ministry of Industry & Commerce and applying weightages to the Individual Commodities/Group Items. (In respect of the justified period extended under the provisions of clause 5 of the contract without 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.)

M_{I0} = All India Wholesale Price Index for civil component/electrical component* of construction material as worked out on the basis of All India Wholesale Price Index for

Individual Commodities/Group Items valid on the last stipulated date of receipt of tender including extension, if any, as published by the Economic Advisor to Govt. of India, Ministry of Industry & Commerce and applying weightages to the Individual Commodities/Group items.

*Note: relevant component only will be applicable.

(b) Adjustment for component of 'POL'

$$V_f = W \times \frac{Z}{100} \times \frac{FI - F_{lo}}{F_{lo}}$$

V_f = Variation in cost of Fuel, Oil & Lubricant i.e. increase or decrease in the amount in rupees to be paid or recovered.

W = Cost of Work done worked out as indicated in sub-para (ii) of Clause 10CC.

Z = Component of Fuel, Oil & Lubricant expressed as percent of the total value of work.

FI = All India Wholesale Price Index for Fuel, Oil & Lubricant for the period under consideration as published by Economic Advisor to Govt. of India, Ministry of Industry & Commerce, New Delhi. (In respect of the justified period extended under the provisions of clause 5 of the contract without 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.)

F_{lo} = All India Wholesale Price Index for Fuel, Oil & Lubricant valid on the last stipulated date of receipt of tender including extension, if any.

(v) The following principles shall be followed while working out the indices mentioned in para (iv) above.

(a) The compensation for escalation shall be worked out at quarterly intervals and shall be with respect to the cost of work done as per bills paid during the three calendar months of the said quarter. The dates of preparation of bills as finally entered in the Measurement Book by the Assistant Engineer/ date of submission of bill finally by the contractor to the department in case of computerised measurement books shall be the guiding factor to decide the bills relevant to the quarterly interval. The first such payment shall be made at the end of three months after the month (excluding the month in which tender was accepted) and thereafter at three months' interval. At the time of completion of the work, the last period for payment might become less than 3 months, depending on the actual date of completion.

(b) The index (MI/FI etc.) relevant to any quarter/period for which such compensation is paid shall be the arithmetical average of the indices relevant to the three calendar months. If the period up to date of completion after the quarter covered by the last such installment of payment, is less than three months, the index MI and FI shall be the average of the indices for the months falling within that period.

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

$$VL = W \times \frac{Y}{100} \times \frac{LI - Llo}{Llo}$$

VL= Variation in labour cost i.e. amount of increase or decrease in rupees to be paid or recovered.

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

Y= Component of labour expressed as a percentage of the total value of the work.

LI= Minimum wage in rupees of an unskilled adult male mazdoor, fixed under any law, statutory rule or order as applicable on the last date of the quarter previous to the one under consideration. (In respect of the justified period extended under the provisions of Clause 5 of the contract without any action under Clause 2, the minimum wage prevailing on the last date of quarter previous to the quarter pertaining to stipulated date of completion of the minimum wage prevailing on the last date of the quarter previous to the one under consideration, whichever is less, shall be considered.)

Llo= Minimum daily wage in rupees of an unskilled adult male mazdoor, fixed under any law, statutory rule or order as on the last stipulated date of receipt of tender including extension, if any.

(vii) The following principles will be followed while working out the compensation as per Sub-para (vi) above.

- (a) The minimum wage of an unskilled male mazdoor mentioned in sub-para (vi) above shall be the higher of the wage notified by Government of India, Ministry of Labour and that notified by the local administration both relevant to the place of work and the period of reckoning.
- (b) The escalation for labour also shall be paid at the same quarterly intervals when escalation due to increase in cost of materials and/or P.O.L. is paid under this clause. If such revision of minimum wages takes place during any such quarterly intervals, the escalation compensation shall be payable at revised rates only for work done in subsequent quarters.
- (c) Irrespective of variations in minimum wages of any category of labour, for the purpose of this clause, the variation in the rate for an unskilled adult male mazdoor alone shall form the basis for working out the escalation compensation payable on the labour component.

(viii) In the event the price of materials and/or wages of labour required for execution of the work decrease/s, there shall be a downward adjustment of the cost of work so that such price of materials and/or wages of labour shall be deductible from the cost of work under this contract and in this regard the formula herein before stated under this Clause 10CC shall mutatis mutandis apply, provided that :

(a) no such adjustment for the decrease in the price of materials and/or wages of labour aforementioned would be made in case of contract in which the stipulated period of completion of the work is equal to or less than the time as specified in Schedule 'F'.

(b) the Engineer-in-Charge shall otherwise be entitled to lay down the procedure by which the provision of this sub-clause shall be implemented from time to time and the decision of the Engineer-in-Charge in this behalf shall be final & binding on the contractor.

(ix) Provided always that:-

(a) Where provisions of clause 10CC are applicable, provisions of clause 10C will not be applicable but provisions of clause 10CA will be applicable.

(b) Where provisions of clause 10CC are not applicable, provisions of clause 10C and 10CA will become applicable.

CLAUSE- 10D - Dismantled material IISER-Thiruvananthapuram Property :-

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

CLAUSE- 11 - Work to be Executed in Accordance with Specifications, Drawings, Orders etc.:-

The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform 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 specifications 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 supervision 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 - Deviations/Variations Extent and Pricing :-

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 of 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 and 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.

The completion cost of any agreement for Maintenance works including works of up gradation, aesthetic, special repair, addition/ alteration shall not exceed 1.25 times of Tendered amount.

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.

Deviation, Extra Item and pricing

12.2

A. For Project and original works:

In the case of extra item(s) (items that are completely new, and are in addition to the Pricing items contained in the contract), 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 prescribed time limit 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.

B. For Maintenance works including works of up gradation, aesthetic, special repair, addition/ alteration:

In the case of Extra Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plus cost index (at the time of tender) plus/minus percentage above/ below quoted contract amount.

Payment of Extra items in case of non-schedule items (Non-DSR items) shall be made as per the prevailing market rate.

12.3 Deviation, Substituted items, pricing

A. For Project and original works:

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

a) 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).

(b) 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).

B. For Maintenance works including works of up gradation, aesthetic, special repair, addition/ alteration:

- In the case of Substitute Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plus cost index (at the time of tender) plus/minus percentage above/ below quoted contract amount. Payment of Substitute in case of non-schedule items (Non-DSR items) shall be made as per the prevailing market rate.

Deviation, Deviated quantities, pricing:

A. For Project and original works:

In the case of contract items, substituted items, contract cum substituted items, which Quantities, exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of Pricing 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 prescribed time limit of 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.

B. For Maintenance works including works of up gradation, aesthetic, special repair, addition/ alteration:

In the case of contract items, which exceed the limits laid down in schedule F, the contractor shall be paid rates specified in the schedule of quantities.

The prescribed time limits for finalising rates for Extra Item(s), Substitute Item(s) and Deviated Quantities of contract items are as under:

- (i) If the Tendered value of work is up to Rs. 45 lac : 30 days.
- (ii) If the Tendered value of work is more than Rs. 45 Lac and up to Rs. 2.5 Crore : 45 days
- (iii) If the Tendered value of work exceeds Rs. 2.5 Crore : 60 days.

12.3 A. For Project and original works:

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.

B. For Maintenance works including works of up gradation, aesthetic, special repair, addition/ alteration:

In case of decrease in the rates prevailing in the market of items for the work in excess of the limits laid down in Schedule F, 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 up to 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 Director IISER Thiruvananthapuram 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 :

- (i) For buildings, compound walls, plinth level or 1.2 metres (4 feet) above ground level, whichever is lower excluding items of flooring and D.P.C. but including base concrete, below the floors.
- (ii) For abutments, piers, retaining walls of culverts and bridges, walls of water reservoirs, the bed of floor level.
- (iii) For retaining walls where floor level is not determinate, 1.2 metres above the average ground level or bed level.
- (i) For the reservoirs/tank (other than overhead reservoir/tanks): All works up to 1.2 metres above the ground level.
- (v) For Basement: All works up to 1.2m above ground level or up to floor 1 level whichever is lower.
- (vi) For Roads, all items of excavation & filling 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 - Foreclosure of Contract due to Abandonment or Reduction in Scope of Work :-

If at any time after acceptance of the tender, Engineer in charge 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 or 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 utilised on the work to the full extent in view of the foreclosure:-

- i). 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.
- ii). IISER Thiruvananthapuram 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 IISER Thiruvananthapuram 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 IISER Thiruvananthapuram, 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.
- iii). If any materials supplied by IISER Thiruvananthapuram are rendered surplus, the same except normal wastage shall be returned by the contractor to IISER Thiruvananthapuram 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 IISER Thiruvananthapuram stores, if so required by IISER Thiruvananthapuram, shall be paid.
- iv). Reasonable compensation for transfer of Tools & Plants from site to contractor's permanent stores or to his other works, whichever is less. If Tools & Plants are not transported to either of the said places, no cost of transportation shall be payable.
- (v). 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 conditions.

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 IISER Thiruvananthapuram as per item (ii) above. Provided always that against any payments due to the contractor on this account or otherwise, the Engineer-in-Charge shall be entitled to recover or be credited with any outstanding balance 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 IISER Thiruvananthapuram from the contractor under the terms of the contract.

A compensation for such eventuality, on account of damages etc. shall be payable @ 0.5% of cost of work remaining incomplete on date of closure i.e. total stipulated cost of the work less the cost of work actually executed under the contract shall be payable.

CLAUSE- 14 - Carrying out part work at risk & cost of contractor

If contractor:

- (i) 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
- (ii) 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 IISER Thiruvananthapuram, 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 IISER Thiruvananthapuram 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 department 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 IISER Thiruvananthapuram in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by Government as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to IISER Thiruvananthapuram 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 - Suspension of work

- i). 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 :-
 - a). On account of any default on the part of the contractor or
 - b). For proper execution of the works or part thereof for reasons other than the default of the contractor, or
 - c). 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.

- ii). If the suspension is ordered for reasons (b) and (c) in sub-para (i) above :-
- a). 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 :
 - b). 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.
- iii). 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 IISER Thiruvananthapuram or where it affects whole of the works, as an abandonment of the works by IISER Thiruvananthapuram, shall within ten 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 IISER Thiruvananthapuram, 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 provide 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.

CLAUSE -15 A-

The contractor shall not be entitled to claim any compensation from Government for the loss suffered by him on account of delay by Government in the supply of materials in schedule 'B' where such delay is covered by the difficulties relating to the supply of wagons, force majeure or any reasonable cause beyond the control of the Government.

This clause 15 A will not be applicable for works where no material is stipulated

CLAUSE- 16 - Action in case Work not Done as per Specifications :-

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 IISER Thiruvananthapuram or any organization engaged by the IISER Thiruvananthapuram for Quality Assurance and Chief Technical Examiner's Office of The Central Vigilance Commission of India, and the contractor shall, at all times, during the usual working hours and at all other times 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 authorised subordinates In charge of the work or to the in charge of Quality Assurance or his subordinate officers or the officers of the organization engaged by the IISER Thiruvananthapuram for Quality Assurance or 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 interior 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 the 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 authority **specified in Schedule 'F'** 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 - Contractor Liable for Damages, Defects during Maintenance Period:-

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 grassland, 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 of if any defect, shrinkage or other faults appear in the work within twelve months (6 months in the case of any work costing Rs. 10,00,000/- 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 cause the same to be made good by other workman 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 Rs. Ten lacs 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 the case of road work if 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 deposit 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 Electrical & Mechanical 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 - Contractor to Supply Tools & Plants etc. :-

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's stores), machinery, tools & plants as specified in Schedule 'F' In addition to this, appliances, implements, other plants, 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 specification 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 - Recovery of Compensation paid to Workmen :-

In every case in which by virtue of the provisions sub-section (1) of section 12, of the Workmen's Compensation Act, 1923, IISER Thiruvananthapuram is obliged to pay compensation to a workman employed by the contractor, in execution of the works, IISER Thiruvananthapuram will recover from the contractor, for the amount of the compensation so paid ; and, without prejudice to the rights of the IISER

Thiruvananthapuram under sub-section (2) of Section 12, of the said Act, IISER Thiruvananthapuram 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 IISER Thiruvananthapuram to the contractor whether under this contract or otherwise. IISER Thiruvananthapuram 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 IISER Thiruvananthapuram full security for all costs for which IISER Thiruvananthapuram might become liable in consequence of contesting such claim.

CLAUSE- 18 B - Ensuring Payment and Amenities to Workers if Contractor fails :-

In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, IISER Thiruvananthapuram is obliged to pay any amounts 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. Contractor's Labour Regulations, or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by IISER Contractors, IISER Thiruvananthapuram will recover from the contractor, the amount of wages so paid or the amount of expenditure so incurred, and without prejudice to the rights of the IISER Thiruvananthapuram under sub-Section (2) of Section 20, and sub-Section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, IISER Thiruvananthapuram 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 IISER Thiruvananthapuram to the contractor whether under this contract or otherwise IISER Thiruvananthapuram 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 IISER Thiruvananthapuram full security for all costs for which IISER Thiruvananthapuram might become liable in contesting such claim.

CLAUSE- 19 - Labour Laws to be Complied by the Contractor :-

The contractor shall obtain a valid license under the Contract Labour (Regulation & Abolition) 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 & Regulation) Act, 1986.

The contractor shall also comply with the provisions of the building & other Construction Workers (Regulation and Conditions of Services) 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 fourteen years shall be employed on the work.

CLAUSE-19B - Payment of Wages :-

- i). 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.
- ii). 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.
- iii). 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 from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorisedly 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.
- iv).
 - a). 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.
 - b). 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 labours and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-Charge concerned.

In the case of Union Territory of Delhi, however, as the all inclusive minimum daily wages fixed under Notification of the Delhi Administration No.F.12 (162) MWO / DAB / 43884-91, dated 31-12-1979 as amended from time to time are inclusive of wages for the weekly day of rest, the question of extra payment for weekly holiday would not arise.

- v). 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 there under from time to time.
- vi). The contractor shall indemnify and keep indemnified Government 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 his right to claim indemnity from his sub-contractors.
- vii). 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.
- viii). 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 workmen 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 commissions or otherwise.
- ix). 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 -19C-

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 -19D-

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.

- (1) The number of labourers employed by him on the work,
- (2) Their working hours,
- (3) The wages paid to them.
- (4) 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

- (5) 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 IISER Thiruvananthapuram, 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 works for the performances 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 from time to time for the protection of health and sanitary arrangements for worker employed by Central Public Works Department and its contractors.

CLAUSE -19F-

Leave and pay during leave shall be regulated as follows:

1. Leave:

- (i) In the case of delivery- maternity leave not exceeding 8 weeks, 4 weeks up to and including the day of delivery and 4 weeks following that day.
- (ii) In the case of miscarriage - up to 3 weeks from the date of miscarriage.

2. Pay:

- (i) 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.
- (ii) In the case of miscarriage- leave pay at the rate of average daily earnings calculated on the total wages earned on the days when full time wages was done during a period of three months immediately preceding the date of such miscarriage.

3. 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.

4. The contractor shall maintain a register of Maternity (Benefit) in the Prescribed Form as shown in appendix – 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 filling 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 IISER Thiruvananthapuram a sum not exceeding Rs.200/- for every default, breach or furnishing, making, submitting, filling such materially incorrect statements and in the event of the contractor(s) 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 percent 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 reconstructed 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 -19H-

The contractor(s) shall at his/ their own cost provide his/ their labour with a sufficient number of huts (hereinafter referred to as the camp) of the following specifications on a suitable plot of land to be approved by the Engineer-in-Charge.

- I) a) The minimum height of each hut at the eaves level shall be 2.10m (7ft.) and the floor area to be provided will be at the rate of 2.7 sq. m. (30 sq. ft.) for each member of the worker's family staying with the labourer.
- b) The contractor(s) shall in addition construct suitable cooking places having a minimum area of 1.80m x 1.50m (6' x 5') adjacent to the hut for each family.
- c) The contractor(s) shall also construct temporary latrines and urinals for the use of the labourers each on the scale of not less than four per each one hundred of the total strength, separate latrines and urinals being provided for women.

- d) The contractor(s) shall construct sufficient number of bathing and washing places, one unit for every 25 persons residing in the camp. These bathing and washing places shall be suitably screened.
- II) a) All the huts shall have walls of sun-dried or burnt-bricks laid in mud mortar or other suitable local materials as may be approved by the Engineer-in-Charge. In case of sun-dried bricks, the walls should be plastered with mud gobi on both sides. The floor may be kutcha but plastered with mud gobi and shall be at least 15cm (6") above the surrounding ground. The roofs shall be laid with thatch or any other materials as may be approved by the Engineer-in-Charge and the contractor shall ensure that throughout the period of their occupation, the roofs remain water-tight.
- b) The contractor(s) shall provide each hut with proper ventilation.
 - c) All doors, windows, and ventilators shall be provided with suitable leaves for security purposes.
 - d) There shall be kept an open space of at least 7.2m (8 yards) between the rows of huts which may be reduced to 6m (20 ft.) according to the availability of site with the approval of the Engineer-in-Charge. Back to back construction will be allowed.
- III) **Water Supply** – The contractor(s) shall provide adequate supply of water for the use of labourers. The provisions shall not be less than two gallons of pure and wholesome water per head per day for drinking purpose and three gallons of clean water per head per day for bathing and washing purpose. Where piped water supply is available, supply shall be at stand posts and where the supply is from wells or river, tanks which may be of metal or masonry, shall be provided. The contractor(s) shall also at his/their own cost make arrangements for laying pipe lines for water supply to his/their labour camp from the existing mains wherever available, and shall pay all fees and charges therefore.
- IV) The site selected for the camp shall be high ground, removed from jungle.
- V) **Disposal of Excreta** – The contractor(s) shall make necessary arrangements for the disposal of excreta from the latrines by trenching or incineration which shall be according to the requirements laid down by the Local Health Authorities. If trenching or incineration is not allowed, the contractor(s) shall make arrangements for the removal of the excreta through the Municipal Committee/authority and inform it about the number of labourers employed so that arrangements may be made by such Committee/authority for the removal of the excreta. All charges on this account shall be borne by the contractor and paid direct by him to the Municipality/authority. The contractor shall provide one sweeper for every eight seats in case of dry system.
- Vi) **Drainage** – The contractor(s) shall provide efficient arrangements for draining away Sullage water so as to keep the camp neat and tidy.
- VII) The contractor(s) shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers.

VIII) **Sanitation** – The contractor(s) shall make arrangements for conservancy and sanitation in the labour camps according to the rules of the Local Public Health and Medical Authorities.

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 contractor's 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 anybody unauthorizedly during construction, and is handed over to the Engineer-in-Charge with vacant possession of complete building. If such building though 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 up to 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 -19 K -

Employment of Skilled / Semi Skilled Workers –

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 such 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 certified 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 within two days of written notice from Engineer-in-Charge. Failure on the part of 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 tradesmen per day. Decision of Engineer-in-Charge as to whether particular tradesmen possess requisite skill and amount of compensation in case of default shall be final and binding.

Provided always, that the provisions of this Clause shall not be applicable for works with estimated cost put to tender being less than Rs. 5 crores.

CLAUSE -19L - Registration with EPFO and ESIC

The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor shall be reimbursed by the Engineer-in-charge to the contractor on actual basis.

CLAUSE - 20- Minimum Wages Act to be complied with:

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

CLAUSE -21-Work not to be sublet. Action in case of insolvency

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 persons in the employ of IISER Thiruvananthapuram 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 Director IISER Thiruvananthapuram shall have power to adopt the courses specified in Clause 3 hereof in the interest of IISER Thiruvananthapuram 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 IISER Thiruvananthapuram without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

CLAUSE -23- Changes in Firm's Constitution to be Intimated

Where the Contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before 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 questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion, or abandonment thereof shall be dealt with as mentioned hereinafter:

- (i) 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 on 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 accepting authority in writing for written instruction or decision. Thereupon, the accepting authority shall give his written instructions or decision within a period of one month from the receipt of the contractor's letter.

If the accepting authority fails to give his instructions or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decisions of the accepting authority, the contractor may, within 15 days of the receipt of accepting authority's decision, appeal to the Director, IISER who shall afford an opportunity to the contractor to be heard, if the later so desires, and to offer evidence in support of his appeal. The Director shall give his decision within 30 days of receipt of contractor's appeal.

If the contractor is dissatisfied with the decision of the Director, the contractor may within 30 days from the receipt of the Director's decision, appeal before the Dispute Redressal Committee (DRC) along with a list of disputes with amounts claimed in respect of each such dispute and giving reference to the rejection of his disputes by the Director. The Dispute Redressal Committee (DRC) shall give his decision within a period of 90 days from the receipt of Contractor's appeal. The constitution of Dispute Redressal Committee (DRC) shall be as indicated in Schedule 'F'.

If the Dispute Redressal Committee (DRC) fails to give his decision within the aforesaid period or any party is dissatisfied with the decision of Dispute Redressal Committee (DRC), then either party may within a period of 30 days from the receipt of the decision of Dispute Redressal Committee (DRC), give notice to the Director, IISER for appointment of arbitrator on the prescribed proforma as per Appendix XV failing which the said decision shall be final, binding and conclusive and not referable to adjudication by the arbitrator.

- (ii) Except where the decision has become final, binding and conclusive in terms of sub-para (i) above, disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by the Director. 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 be entitled to 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 a 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 of the appeal.

It is also a term of this contract that no person, other than a person appointed by the Director as aforesaid, should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

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 that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the Department 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 or any statutory modifications or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases the arbitrator shall give reasons for the award, however the Arbitrator shall also have the power to make Interim Award.

It is also a term of the contract that if any fees are payable to the arbitrator, these shall be borne 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 he 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 Thiruvananthapuram. 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.

Whether the claim is referred to the Accepting Authority/Director as the case may be, the Contractor shall proceed to execute and complete the works with all due diligence pending settlement of the said dispute or differences.

CLAUSE -26 - Contractor to Indemnify IISER Thiruvananthapuram against Patent Rights

The Contractor shall fully indemnify and keep indemnified the Director IISER Thiruvananthapuram 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 IISER Thiruvananthapuram in respect of any such matters as aforesaid, the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise there from, provided that the contractor shall not be liable to indemnify the Director IISER Thiruvananthapuram 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 in this behalf.

CLAUSE- 27 - Lump sum Provisions in Tender

When the estimate on which a tender is made includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-Charge payable of measurement, the Engineer-in-Charge may at his discretion pay the lump sum amount entered in the estimate, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of the clause.

CLAUSE -28- Action Where no Specifications are Specified

In 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 Standard Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per Manufacturer's 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-With-Holding and Lien in Respect of Sums Due from Contractor:

- (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 IISER Thiruvananthapuram 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 IISER Thiruvananthapuram 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 finalisation 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 IISER Thiruvananthapuram 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 IISER Thiruvananthapuram or any contracting person through the Engineer-in-Charge pending finalisation 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 IISER Thiruvananthapuram will be kept withheld or retained as such by the Engineer-in-Charge or IISER Thiruvananthapuram till the claim arising out of or under the contract is determined by the arbitrator (if the contract is governed 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 IISER Thiruvananthapuram 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) IISER Thiruvananthapuram 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 overpayment and it shall be lawful for IISER Thiruvananthapuram 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 IISER Thiruvananthapuram to the contractor, without any interest thereon whatsoever.

Provided that the IISER Thiruvananthapuram 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 Engineer-in-Charge or the Director IISER Thiruvananthapuram on the one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by the Engineer-in-Charge or the Director IISER Thiruvananthapuram.

CLAUSE -29A - Lien in Respect of Claims in other Contracts

Any sum of money due and payable to the contractor (including security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or the IISER Thiruvananthapuram or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or IISER Thiruvananthapuram 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 IISER Thiruvananthapuram 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 IISER Thiruvananthapuram will be kept withheld or retained as such by the Engineer-in-Charge or IISER Thiruvananthapuram 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-Unfiltered Water Supply

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.

CLAUSE -31 - Departmental Water Supply, if Available

Water if available may be supplied to the contractor by the department subject to the following conditions:-

- (i) The water charges @ 1% shall be recovered on gross amount of the work done.
- (ii) The contractor(s) shall make his/their own arrangement of water connection and laying of pipelines from existing main of source of supply.
- (iii) The Department do not guarantee to maintain uninterrupted supply of water and it will be incumbent on the contractor(s) to make alternative arrangements for water at his/ their own cost in the event of any temporary break down in the IISER Thiruvananthapuram water main so that the progress of his/their work is not held up for want of water. No claim of damage or refund of water charges will be entertained on account of such break down.

CLAUSE -32- Alternate Water Arrangements

- i) Where there is no piped water supply arrangement and the water is taken by the contractor from the wells or hand pump constructed by the IISER Thiruvananthapuram, no charge shall be recovered from the contractor on that account. The contractor shall, however, draw water at such hours of the day that it does not interfere with the normal use for which the hand pumps and wells are intended. He will also be responsible for all damage and abnormal repairs arising out of his use, the cost of which shall be recoverable from him. The Engineer-in-Charge shall be the final authority to determine the cost recoverable from the contractor on this account and his decision shall be binding on the contractor.
- ii) The contractor shall be allowed to construct temporary wells in IISER Thiruvananthapuram land for taking water for construction purposes only after he has

got permission of the Engineer-in-Charge in writing. No charges shall be recovered from the contractor on this account, but the contractor shall be required to provide necessary safety arrangements to avoid any accidents or damage to adjacent buildings, roads and service lines. He shall be responsible for any accidents or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.

CLAUSE -33-Return of Surplus Materials

Notwithstanding anything contained to the contrary in this contract, where any materials for the execution of the contract are procured with the assistance of IISER Thiruvananthapuram either by issue from IISER Thiruvananthapuram stocks or purchase made under orders or permits or licenses issued by IISER Thiruvananthapuram, the contractor shall hold the said materials economically and solely for the purpose of the contract and not dispose of them without the written permission of the IISER Thiruvananthapuram and return, if required by the Engineer-in-Charge, all surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination for any reason whatsoever on being paid or credited such price as the Engineer-in-Charge shall determine having due regard to the condition of the materials. The price allowed to the contractor however shall not exceed the amount charged to him excluding the element of storage charges. The decision of the Engineer-in-Charge shall be final and conclusive. In the event of breach of the aforesaid condition, the contractor shall in addition to throwing himself open to action for contravention of the terms of the license or permit and/or for criminal breach of trust, be liable to IISER Thiruvananthapuram for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.

CLAUSE -34-Employment of Technical Staff and Employees

Contractors Superintendence, Supervision, Technical Staff & Employees

(i) The contractor shall provide all necessary superintendence during execution of the work and all 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 Special Condition of contract. 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 in case 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 and other technical representative(s) 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.

All the provisions applicable to the principal technical representative under the Clause will also be applicable to other technical representative(s). The principal technical representative and other technical representative(s) shall be present at the site of work for supervision at all times when any construction activity is in progress and also present himself/themselves, as required, to the Engineer-in-Charge and/or his designated representative to take instructions. Instructions given to the principal technical representative or other technical representative(s) shall be deemed to have the same force as if these have been given to the contractor. The principal technical representative and other technical representative(s) shall be actually available at site fully during all stages of execution of work, during recording/checking/test checking of measurements of works and whenever so required by the Engineer-in-Charge and shall also note down instructions conveyed by the Engineer-in-Charge or his designated representative(s) in the site order book and shall affix his/their signature in token of noting down the instructions and in token of acceptance of measurements, checked measurements/test checked measurements. The representative(s) shall not look after any other work. Substitutes, duly approved by Engineer-in-Charge of the work in similar manner as aforesaid shall be provided in event of absence of any of the representative(s) by more than two days.

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 (non-refundable) 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 book shall be final and binding on the contractor. Further if the contractor fails to appoint suitable technical Principal technical representatives and/or other technical representative(s) and if such appointed persons are not effectively present or 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) (in the form of copy of Form-16 or CPF deduction issued to the Engineers employed by him) along with every on account bill/ final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

ii) 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 misconduct 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 -35- Levy/Taxes Payable by Contractor

- i) Sales Tax/VAT (except service tax), building and other construction worker welfare cess or any other cess/ tax in respect of this contract shall be payable by the contractor and Government shall not entertain any claim whatsoever in this respect. However, in respect of service tax on Contract, 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.
- ii) The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.
- iii) If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the IISER Thiruvananthapuram 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 IISER Thiruvananthapuram 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 -36- Conditions for Reimbursement of Levy/ Taxes if levied after receipt of Tenders

- i) All tendered rates shall be inclusive of all taxes and levies (except service tax) payable under respective statutes. However, pursuant to the Constitution (46th Amendment Act, 1982), if any further tax or levy 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, the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the Director IISER Thiruvananthapuram (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 authorized representative of the IISER Thiruvananthapuram 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, pursuant to the Constitution (Forty Sixth Amendment) Act 1982, 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 -37 - Termination of Contract on Death of Contractor

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

CLAUSE-38 -If Relative Working in IISER THIRUVANANTHAPURAM then the Contractor not Allowed to Tender

The contractor shall not be permitted to tender for works in the IISER Thiruvananthapuram responsible for award and execution of contracts in which his near relative is posted as Accountant or as an Officer in any capacity between the grades of the Engineer-in-Charge 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 Officer in IISER or in the Ministry of HRD. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this IISER Thiruvananthapuram. **If however the contractor is registered in any other department, he shall be debarred from tendering in IISER THIRUVANANTHAPURAM of this condition.**

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

CLAUSE -39- No Gazetted Engineer to Work as Contractor within One Year of Retirement.

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 years 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 -40-Return of material & recovery for excess material issued.

- (i) After completion of the work and also at any intermediate stage in the event of non-reconciliation of materials issued, consumed and in balance – (see Clause 10), theoretical quantity of materials issued by the Department for use in the work shall be calculated on the basis and method given hereunder:-
 - (a) Quantity of cement & bitumen shall be calculated on the basis of quantity of cement & bitumen required for different items of work as shown in the Schedule of Rates mentioned in Schedule 'F'. In case any item is executed for which standard constants for the consumption of cement or bitumen are not available in the above mentioned schedule/statement or cannot be derived from the same shall be calculated on the basis of standard formula to be laid down by the Engineer-in-Charge.
 - (b) Theoretical quantity of steel reinforcement or structural steel sections shall be taken as the quantity required as per design or as authorized by Engineer-in-Charge, including authorized lappages, chairs etc. plus 3% wastage due to cutting into pieces, such theoretical quantity being determined and compared with the actual issues each diameter wise, section wise and categoriwise separately.
 - (c) Theoretical quantity of G.I. & C.I. or other pipes, conduits, wires and cables, pig lead and G.I./M.S. sheets shall be taken as quantity actually required and measured plus 5% for wastage due to cutting into pieces

- (except in the case of G.I./M.S. sheets it shall be 10%), such determination & comparison being made diameter wise & categoriwise.
- (d) For any other material as per actual requirements.

- (ii) Over the theoretical quantities of materials so computed a variation shall be allowed as specified in Schedule 'F'. The difference in the net quantities of material actually issued to the contractor and the theoretical quantities including such authorized variation, if not returned by the contractor or if not fully reconciled to the satisfaction of the Engineer-in-Charge within fifteen days of the issue of written notice by the Engineer-in-Charge to this effect shall be recovered at the rates specified in Schedule 'F', without prejudice to the provision of the relevant conditions regarding return of materials governing the contract. Decision of Engineer-in-Charge in regard to theoretical quantities of materials, which should have been actually used as per the Annexure of the standard schedule of rates and recovery at rates specified in Schedule 'F', shall be final & binding on the contractor.

For non scheduled items, the decision of the Engineer-in-Charge regarding theoretical quantities of materials which should have been actually used shall be final and binding on the contractor.

- (iii) The said action under this clause is without prejudice to the right of the Department to take action against the contractor under any other conditions of contract for not doing the work according to the prescribed specifications.

CLAUSE -41- Compensation During Warlike Situations

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 up to the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by Engineer-in-Charge up to Rs.5000/- and by the Director IISER Thiruvananthapuram concerned for a higher amount. 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 -42 - Apprentices Act Provisions to be Complied with

The contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Engineer-in-Charge 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 -43 - Release of Security Deposit after Labour Clearance.

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 said 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, or 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.

SAFETY CODE

1. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra Mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to 1 ($\frac{1}{4}$ horizontal and 1 vertical).
2. Scaffolding of staging more than 3.6 m (12 ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured atleast 90 cm (3 ft.) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
3. Working Platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12 ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm (3 ft.).
5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m (30 ft) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. (11 $\frac{1}{2}$ ") for ladder upto and including 3 metre (10 ft.) in length. For longer ladders this width should be increased atleast $\frac{1}{4}$ " for each additional 30 cm.(1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which maybe awarded in any such suit, action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.
6. Excavation and trenching- All trenches 1.2 m (4 ft,) or more in depth, shall at all times be supplied with atleast one ladder for each 30 metre (100 ft) in length or fraction thereof. Ladder shall extend from bottom of the trench to atleast 90 cm. (3 ft) above the surface of the ground. The sides of the trenches, which are 1.5 m (5 ft) or more in depth shall be stepped back to give suitable slope or securely

held by timber bracing, so as to avoid the danger of sides collapsing. The excavated material shall not be placed within 1.5 m (5 ft) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.

7. Demolition. - Before any demolition work is commenced and also during the progress of the work,
 - i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - ii) No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
 - iii) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned. The following safety equipment shall invariably be provided.
 - i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - ii) Those engaged in whitewashing and mixing or stacking of cement bags or any material, which is injurious to the eyes, shall be provided with protective goggles.
 - iii) Those engaged in welding works shall be provided with welder's protective eye shields.
 - iv) Stonebreakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - v) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated atleast for an hour before the workers are allowed to get into manholes and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition , the contractor shall ensure that the following safety measures are adhered to:-
 - a) Entry for workers into the line shall not be allowed except under supervision of the Engineer in Charge or any other higher officer.
 - b) Atleast 5 to 6 manholes upstream and downstream should be kept open for atleast 2 to 3 hours before any man is allowed to enter into the manhole for working inside.

- c) Before entry presence of toxic gases should be tested by inserting wet lead acetate paper, which changes colour in the presence of such gases and gives indication of their presence.
- d) Presence of oxygen should be verified by lowering a detector lamp into the manhole. In case, no oxygen is found inside the sewer line, worker should be send only with oxygen kit.
- e) Safety belt with rope should be provided to the workers. While working inside the manhole such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
- f) The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever for the cleaning works are undertaken during night or day.
- g) No smoking or open flames shall be allowed near the blocked manhole being cleaned.
- h) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
- i) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time upto which worker may be allowed to work continuously inside the manhole.
- j) Gas masks with Oxygen cylinder should be kept at site for use in emergency.
- k) Air blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The motors for these, shall be vapour proof and of totally enclosed type. Non-sparking gas engines also could be used but they should be placed at least 2 metres away from the opening and on the leeward side, protected from wind so that they will not be the source of friction on any inflammable gas that might be present.
- l) The workers engaged for cleaning the manholes/sewers should be properly trained before allowing working in the manhole.
- m) The worker shall be provided with Gumboots or non-sparking shoes bump helmets and gloves non-sparking tools and safety lights and gas masks and portable air-blowers (when necessary). They must be supplied with barrier cream for anointing the limits before working inside the sewer lines.
- n) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
- o) If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.

- p) The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.
- vi) The contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Whenever men above the age of 18 years are employed on the work of lead painting, the following precautions should be taken: -
 - a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.

Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.

- b) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.
- 9. The Contractor shall not employ women and men below the age of 18 years on the work of painting with product containing lead in any form. Whenever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use:
 - i) White lead, sulphate of lead or product containing these pigments, shall not be used in painting operation except in the form of pastes or paint ready for use.
 - ii) Measures shall be taken, wherever required in order to prevent danger arising from the application of paint in the form of spray.
 - iii) Measures shall be taken, wherever practicable to prevent danger arising out of from dust caused by dry rubbing down and scrapping.
 - iv) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work
 - v) Overall shall be worn by working painters during the whole of working period.
 - vi) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
 - vii) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man appointed by the competent authority of CLIENT
 - viii) CLIENT may require, when necessary, medical examination of workers.
 - ix) Instructions with regard to special hygienic precautions, to be taken in the painting trade, shall be distributed to working painters.

10. When the work is done near any place where there is risk of drowning, all necessary equipment should be provided & kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
11. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions: -
 - i) (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.

(b) Every rope used in hoisting or lowering materials or as means of suspension shall be of durable quality and adequate strength, and free from patent defects.
 - (ii) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
 - (iii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley blocks used in hoisting or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear, referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - (iv) In case of CLIENT machines, the safe working load shall be notified by the Electrical Engineer-in-Charge. As regard contractor's machines the contractors shall notify the safe working load of the machines to the Engineer-in-Charge whenever he brings any machinery to the site of work and get it verified by the Electrical Engineer concerned.
12. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energised, insulating mats, wearing apparel, such as gloves, sleeves and boots, as may be necessary, should be provided. The worker should not wear any rings, watches and carry keys or other materials, which are good conductors of electricity.
13. All scaffolds ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

14. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
15. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by Labour Officer or the Engineer-in-Charge or their representatives.
16. Notwithstanding the above clauses from (1) to (15) there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.
17. The Contractor shall prepare necessary Safety Manual duly considering the above and also the Safety Manual of the Project Management Consultant and get it approved by the Client for compliance.

MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS EMPLOYED BY CONTRACTORS

1. APPLICATION

These rules shall apply to all buildings and construction works in which twenty or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the contract work is in progress.

2. DEFINITION

Work place means a place where twenty or more workers are ordinarily employed in connection with construction work, on any day during the period, during which the contract work is in progress.

3. FIRST-AID FACILITIES

- i) At every work place there shall be provided and maintained, so as to be easily accessible during working hours, first aid boxes at the rate of not less than one box for 150-contract labour or part thereof ordinarily employed.
- ii) The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipment: -
 - a) For work places in which the number of contract labour employed does not exceed 50- Each first-aid box shall contain the following equipment: -
 - 1. 6 small sterilised dressings.
 - 2. 3 medium size sterilised dressings.
 - 3. 3 large size sterilised dressings.
 - 4. 3 large sterilised burn dressings.
 - 5. 1 (30 ml.) bottle containing a two percent alcoholic solution of iodine
 - 6. 1 (30ml) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 - 7. 1 snakebite lancet.
 - 8. 1 (30gms.) bottle of potassium permanganate crystals.
 - 9. 1 pair scissors.
 - 10. 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institute, Government of India or his Client.
 - 11. 1 Bottle containing 100 tablets (each of 5 gms.) of aspirin.
 - 12. Ointment for burns.
 - 13. A bottle of suitable surgical antiseptic solution

- b) For workplaces in which the number of contract labour exceeds 50- Each first-aid- box shall contain the following equipment.
1. 12 small sterilized dressing.
 2. 6 medium size sterilised dressings.
 3. 6 large size sterilised dressings.
 4. 6 large size sterilised burn dressings.
 5. 6 (15-gms.) packets sterilised cotton wool.
 6. 1 (60 ml.) bottle containing two percent alcoholic solution iodine.
 7. 1 (60-ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 8. 1 roll of adhesive plaster.
 9. 1 snake bite lancet.
 10. 1 (30 gms.) bottle of potassium permanganate crystals.
 11. 1 pair of scissors.
 12. 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institute/ Government of India or Client of India.
 13. A bottle containing 100 tablets (each of 5 gms.) of aspirin.
 14. Ointment for burns.
 15. A bottle of suitable surgical antiseptic solution.
- iii) Adequate arrangements shall be made for immediate procurement of the equipment when necessary.
- iv) Nothing except the prescribed contents shall be kept in the First-aid box.
- v) The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours at the work place.
- vi) A person in charge of the first-aid box shall be a person trained in First-Aid treatment, at the work places where the number of contract labour employed is 150 or more.
- vii) In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works, First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
- viii) Where work places are situated in places, which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

4. DRINKING WATER

- i) In every work place, there shall be provided and maintained, at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.
- ii) Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.
- iii) Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or other source of pollution. Where water has to be drawn from an existing well, which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it or for drinking. All such wells shall be entirely closed in and be provided with a trap door, which shall be dust and waterproof.
- iv) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5. WASHING FACILITIES

- i) In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of contract labour employed therein.
- ii) Separate and adequate cleaning facilities shall be provided for the use of male and female workers.
- iii) Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition.

6. LATRINES AND URINALS

- i) Latrines shall be provided in every work place on the following scale namely:-
 - (a) Where female are employed there shall be at least one latrine for every 25 females.
 - (b) Where males are employed, there shall be at least one latrine for every 25 males.

Provided that where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females as the case may be upto the first 100, and one for every 50 thereafter.

- ii) Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.

- iii) Construction of latrines: The inside walls shall be constructed of masonry or some suitable heat-resisting nonabsorbent materials and shall be cement washed inside and outside at least once a year. Latrines shall not be of a standard lower than bore-hole system.
- iv) a) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women only" as the case may be.
b) The notice shall also bear the figure of a man or a woman, as the case may be.
- v) There shall be at least one urinal for upto 50 number of male workers and one for upto 50 number of female workers employed at a time, provided that where the number of male or female workers, as the case may be, exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females, upto the first 500 and one for every 100 or part thereafter.
- vi) a) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
b) Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities.
- vii) Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- viii) Disposal of excreta: - Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately excreta may be disposed off by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (When it will turn to manure).
- ix) The contractor shall at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of night soil and other conservancy work in respect of the contractor's workmen or employees on the site. The contractor shall be responsible for payment of any charges, which may be levied by Municipal or Cantonment Authority for execution of such on his behalf.

7. PROVISION OF SHELTER DURING REST

At every place there shall be provided, free of cost, four suitable sheds, two for meals and the other two for rest separately for the use of men and women labour. The height of each shelter shall not be less than 3 metres (10 ft.) from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 sq. m. (6 sq. ft.) per head.

Provided that the Engineer-in-Charge may permit subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

8. CRECHES

- i) At every work place, at which 20 or more women worker are ordinarily employed, there shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One room shall be used as a playroom for the children and the other as their bedroom. The rooms shall be constructed with specifications as per clause 19 H (ii) a, b & c.
- ii) The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.
- iii) The contractor shall supply adequate number of toys and games in the playroom and sufficient number of cots and beddings in the bedroom.
- iv) The contractor shall provide one ayah to look after the children in the crèche when the number of women workers does not exceed 50 and two when the number of women workers exceeds 50.
- v) The use of the rooms earmarked as crèches shall be restricted to children, their attendants and mothers of the children.

9. CANTEENS

- i) In every work place where the work regarding the employment of contract labour is likely to continue for six months and where in contract labour numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the contractor for the use of such contract labour.
- ii) The contractor shall maintain the canteen in an efficient manner.
- iii) The canteen shall consist of atleast a dining hall, kitchen, storeroom, pantry and washing places, separately for workers and utensils.
- iv) The canteen shall be sufficiently lighted at all times when any person has access to it.
- v) The floor shall be made of smooth and impervious materials and inside walls shall be lime-washed or colour washed atleast once in each year. Provided that the inside walls of the kitchen shall be lime-washed every 4 months.
- vi) The premises of the canteen shall be maintained in a clean and sanitary condition.
- vii) Wastewater shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.

- viii) Suitable arrangements shall be made for the collection and disposal of garbage.
- ix) The dining hall shall accommodate at a time 30 percent of the contract labour working at a time.
- x) The floor area of the dining hall, excluding the area occupied by the service counter and any furniture, except tables and chairs, shall not be less than one square metre (10 sft.) per diner to be accommodated as prescribed in sub-Rule 9.
- xi)
 - a) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their number.
 - b) Washing places for women shall be separate and screened to secure privacy.
- xii) Sufficient tables' stools, chair or benches shall be available for the number of diners to be accommodated as prescribed in sub-Rule 9
- xiii) a)
 - 1. There shall be provided and maintained, sufficient utensils, crockery, furniture and any other equipment's, necessary for the efficient running of the canteen.
 - 2. The furniture utensils and other equipment shall be maintained in a clean and hygienic condition.
- b)
 - 1. Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.
 - 2. A service counter, if provided, shall have top of smooth and impervious material.
 - 3. Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipment's.
- xiv) The foodstuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.
- xv) The charges for foodstuffs, beverages and any other items served in the canteen shall be based on 'No profit, No loss' and shall be conspicuously displayed in the canteen.
- xvi) In arriving at the price of food stuffs, and other articles served in the canteen, the following items shall not be taken into consideration as expenditure namely:
 - a) The rent of land and building.

- b) The depreciation and maintenance charge for the building and equipment's provided for the canteen.
 - c) The cost of purchase, repairs and replacement of equipment's including furniture, crockery, cutlery and utensils.
 - d) The water charges and other charges incurred for lighting and ventilation.
 - e) The interest and amounts spent on the provision and maintenance of equipment's provided for the canteen.
- xvii) The accounts pertaining to the canteen shall be audited once every 12 months by registered accountants and auditors.

10. ANTI-MALARIAL PRECAUTIONS

The contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineer-in-Charge including the filling-up of any borrow pits which may have been dug by him.

11. The above rules shall be incorporated in the contracts and in notices inviting tenders and shall form an integral part of the contracts.

12. AMENDMENTS

CLIENT may, from time to time, add to or amend these rules and issue directions it may consider necessary for the purpose of removing any difficulty, which may arise in the administration thereof.

CONTRACTOR'S LABOUR REGULATIONS

1. SHORT TITLE

These regulations may be called the Contractors Labour Regulations.

2. DEFINITIONS

i) **Workman** means, any person employed by CLIENT or its contractor directly or indirectly, through a subcontractor, with or without the knowledge of the CLIENT, to do any skilled, semiskilled or unskilled, manual, supervisory, technical or clerical work, for hire or reward, whether the terms of employment are expressed or implied, but does not include any person: -

- a) Who is employed mainly in a managerial or administrative capacity; or,
- b) Who, being employed in a supervisory capacity draws wages exceeding five hundred rupees per mensem or exercises either by the nature of the duties attached to the office or by reason of powers vested in him, functions mainly of managerial nature; or,
- c) Who is an out worker, that is to say, person to whom any article or materials are given out by or on behalf of the principal employers to be made up cleaned, washed, altered, ornamental finished, repaired adopted or otherwise processed for sale for the purpose of the trade or business of the principal employers and the process is to be carried out either in the home of the out worker or in same other premises, not being premises under the control and management of the principal employer.

No person below the of 14 years shall be employed to act as a workman

- ii) **Fair Wages** means wages whether for time or piecework fixed and notified under the provision of the Minimum Wages Act from time to time.
- iii) **Contractors** shall include every person who undertakes to produce a given result other than a mere supply of goods or articles of manufacture through contract labour or who supplies contract labour for any work and includes a subcontractor.
- iv) **Wages** shall have the same meaning as defined in the Payment of Wages Act.

3. WORKING HOURS

- i) Normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.

- ii) When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week he shall be paid over time for the extra hours put in by him at double the ordinary rate of wages.
- iii)
 - a) Every worker shall be given a weekly holiday normally on a Sunday, in accordance with the provisions of Minimum Wages (Central) Rules 1960, as amended from time to time, irrespective of whether such worker is governed by the Minimum Wages Act or not.
 - b) Where the minimum wages prescribed by the Government, under the Minimum Wages Act, are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages, at the rate applicable to the next preceding day, provided he has worked under the same contractor for a continuous period of not less than 6 days.
 - a) Where a contractor is permitted by the Engineer-in-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substituted holiday to him for the whole day, on one of the five days, immediately before or after the normal weekly holiday, and pay wages to such worker for the work performed on the normal weekly holiday at the overtime rate.

4. DISPLAY OF NOTICE REGARDING WAGES ETC.

The contractor shall, before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain, in a clear and legible condition in conspicuous places on the work, notices in English and in local Indian languages spoken by the majority of the workers, giving the minimum rates of the wages fixed under Minimum Wages Act, the actual wages being paid, the hours of work for which such wage are earned, wages periods, dates of payments of wages and other relevant information as per Appendix 'III'.

5. PAYMENT OF WAGES.

- i) The contractor shall fix wage periods in respect of which wages shall be payable.
- ii) No wage period shall exceed one month.
- iii) The wages of every person employed as contract labour in an establishment or by a contractor, where less than one thousand such persons are employed, shall be paid before the expiry of seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.
- iv) Where the employment of any worker is terminated by or on behalf of the contractor the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.
- v) All payment of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.

- vi) Wages due to every worker shall be paid to him direct or to other person authorised by him in this behalf.
- vii) All wages shall be paid in current coin or currency or in both.
- viii) Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the Payment of Wages Act 1956.
- ix) A notice showing the wages period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the contractor to the Engineer-in-Charge under acknowledgement.
- x) It shall be the duty of the contractor to ensure the disbursement of wages in presence of authorised representative of the Engineer-in-Charge who will be required to be present at the place and time of the disbursement of wages by the contractor to workmen.
- xi) The contractor shall obtain from the junior engineer or any other authorised representative of the Engineer-in-Charge, as the case may be, a certificate under his signature at the end of the entries in the "Register of Wages" or the "Wage-cum-Muster Roll", as the case may be, in the following form: -

"Certified that the amount shown in the column No.....has been paid to the workman concerned in my presence on.....at....."

6. FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES

- (i) The wages of a worker shall be paid to him without any deduction of any kind except the following: -
 - (a) Fines
 - (b) Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
 - (c) Deductions for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money or any other deductions which he is required to account, where such damage or loss is directly attributable to his neglect or default.
 - (d) Deduction for recovery of advances or for adjustment of overpayment of wages, advances granted shall be entered in a register.
 - (e) Any other deduction, which the Central Government may from time to time, allows.

- (ii) No fines should be imposed on any worker save in respect of such acts and omissions on his part as have been approved of by the Chief Labour Commissioner.

Note:- An approved list of Acts and Omission for which fines can be imposed is enclosed at Appendix-X.

- (iii) No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- (iv) The total amount of fine, which may be imposed, in any one-wage period, on a worker, shall not exceed an amount equal to three paise in a rupee of the total wages, payable to him in respect of that wage period.
- (v) No fine imposed on any worker shall be recovered from him by instalment, or after the expiry of sixty days from the date on which it was imposed.
- (vi) Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

7. LABOUR RECORDS

- (i) The contractor shall maintain a **Register of Persons employed** on work on contract in Form XIII of the CL (R&A) Central Rules 1971 (Appendix IV)
- (ii) The contractor shall maintain a **Muster Roll** register in respect of all workmen employed by him on the work under Contract in Form XVI of the CL (R&A) Rules 1971 (Appendix V)
- (iii) The contractor shall maintain a **Wage Register** in respect of all workmen employed by him on the work under contract in Form XVII of the CL (R&A) Rules 1971 (Appendix VI)
- (iv) **Register of accident** – The contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:
 - a) Full Particulars of the labourers who met with accident.
 - b) Rate of wages.
 - c) sex
 - d) Age
 - e) Nature of accident and cause of accident
 - f) Time and date of accident
 - g) Date and time when admitted in hospital
 - h) Date of discharge from the hospital
 - i) Period of treatment and result of treatment

- j) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
- k) Claim required to be paid under Workmen's Compensation Act.
- l) Date of payment of compensation
- m) Amount paid with details of the person to whom the same was paid
- n) Authority by whom the compensation was assessed
- o) Remarks.

- v) The contractor shall maintain a **Register of Fines** in the Form XII of the CL (R&A) Rules 1971 (Appendix XI)

The contractor shall display in a good condition and in a conspicuous place of work the approved list of acts and omission for which fines can be imposed (Appendix X)

- vi) The contractor shall maintain a **Register of deductions for damage or loss** in Form XX of the CL (R&A) Rules 1971 (Appendix XII).
- vii) The contractor shall maintain a **Register of Advances** in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIII).
- i) The contractor shall maintain a **Register of Overtime** in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIV).

8. ATTENDANCE CARD-CUM WAGE SLIP

- i) The contractor shall issue an **Attendance card cum wage slip** to each workman employed by him in the specimen form at (Appendix-VII).
- ii) The card shall be valid for each wage period.
- iii) The contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work.
- iv) The card shall remain in possession of the worker during the wage period under reference.
- v) The contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.
- vi) The contractor shall obtain the signature or thumb impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself.

9. EMPLOYMENT CARD

The contractor shall issue an **Employment Card** in the Form XIV of CL (R&A) Central Rules 1971 to each worker within three days of the employment of the worker (Appendix-VIII).

10. SERVICE CERTIFICATE

On termination of employment for any reason whatsoever the contractor shall issue to the workman whose services have been terminated, a Service Certificate in the Form XV of the CL (R&A) Central Rules 1971 (Appendix-IX).

11. PRESERVATION OF LABOUR RECORDS

All records required to be maintained under Regulations Nos. 6 & 7 shall be preserved in original for a period of three years from the date of last entries made in them and shall be made available for inspection by the Engineer-in-Charge or Labour Officer or any other officers authorised by the Ministry of Health and Family Welfare in this behalf.

12. POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY

The labour officer or any person authorised by the Central Government on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observance of Fair Wage Clauses and provisions of these Regulations. He shall investigate into any complaint regarding the default made by the contractor or subcontractor in regard to such provision.

13. REPORT OF LABOUR OFFICER

The Labour Officer or other persons authorised as aforesaid shall submit a report of result of his investigation or enquiry to the Engineer in charge concerned indicating the extent, if any, to which the default has been committed with a note that necessary deductions from the contractor's bill be made and the wages and other dues be paid to the labourers concerned. In case an appeal is made by the contractor under Clause 13 of these regulations, actual payment to labourers will be made by the Engineer in charge after superintending engineer has given his decision on such appeal.

- i) Engineer in charge shall arrange payments to the labour concerned within 45 days from the receipt of the report form or the superintending engineer as the case may be the Labour Officer

14. APPEAL AGAINST THE DECISION OF LABOUR OFFICER

Any person aggrieved by the decision and recommendations of the Labour Officer or other person so authorised may appeal against such decision to the Engineer-in-Charge concerned within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the PMC but subject to such appeal, the decision of the officer shall be final and binding upon the contractor.

15. PROHIBITION REGARDING REPRESENTATION THROUGH LAWYER

- i) A workman shall be entitled to be represented in any investigation or enquiry under these regulations by: -
 - a) An officer of a registered trade union of which he is a member.
 - b) An officer of a federation of trade unions to which the trade union referred to in Clause (a) is affiliated.
 - c) Where the employer is not a member of any registered trade union, by an officer of a registered trade union, connected with the industry in which the worker is employed or by any other workman employed in the industry in which the worker is employed.
- ii) An employer shall be entitled to be represented in any investigation or enquiry under these regulations by:-
 - a) An officer of an association of employers of which he is a member.
 - b) An officer of a federation of associations of employers to which association referred to in Clause (a) is affiliated.
 - c) Where the employer is not a member of any association of employers, by an officer of association of employer connected with the industry, in which the employer is engaged or by any other employer, engaged in the industry in which the employer is engaged.
- iii) No party shall be entitled to be represented by a legal practitioner in any investigation inquiry under these regulations.

16. INSPECTION OF BOOKS AND SLIPS

The contractor shall allow inspection of all the prescribed labour records to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labour Officer or any other person, authorised by the Central Government on his behalf.

17. SUBMISSION OF RETURNS

The contractor shall submit periodical returns as may be specified from time to time.

18. AMENDMENTS

The Central Government may from time to time add to or amend the regulations and on any question as to the application/interpretation or effect of those regulations the decision of the EIC concerned shall be final.

Appendix 'I'

REGISTER OF MATERNITY BENEFITS (Clause 19F)

Name and address of the contractor_____

Name and Location of the work_____

Name of the Employee	Father's/ husband's name	Nature of Employment	Period of actual employment	Date on which notice of confinement given
1	2	3	4	5

Date on which maternity leave commenced and ended				
Date of Delivery/ Miscarriage	In case of delivery		In case of miscarriage	
	Commenced	Ended	Commenced	Ended
6	7	8	9	10

Leave pay paid to the employee				Remarks
In case of delivery		In case of miscarriage		
Rate of leave pay	Amount paid	Rate of leave pay	Amount paid	
11	12	13	14	15

**SPECIMEN FORM OF THE REGISTER, REGARDING
MATERNITY BENEFIT ADMISSIBLE TO THE CONTRACTOR'S LABOUR**

Name and address of the contractor_____

Name and location of the work_____

1. Name of the woman and her husband's name.
2. Designation
3. Date of appointment.
4. Date with months and years in which she is employed.
5. Date of discharge / dismissal, if any.
6. Date of production of certificates in respect of pregnancy.
7. Date on which the woman informs about the expected delivery.
8. Date of delivery / miscarriage / death.
9. Date of production of certificates in respect of delivery / miscarriage.
10. Date with the amount of maternity/ death benefit paid in advance of expected delivery.
11. Date with amount of subsequent payment of maternity benefit.
12. Name of the person nominated by the woman to receive the payment of the maternity benefit after her death.
13. If the woman dies, the date of death, the name of the person to whom maternity benefit amount was paid, the month thereof and the date of payment.
14. Signature of the contractor authenticating entries in the register.
15. Remarks column for the use of inspecting officer.

LABOUR BOARD

Name of work:_____

Name of Contractor:_____

Address of Contractor:_____

Name and address of CLIENT. _____

Name of CLIENT Labour Officer :_____

Address of CLIENT Labour Officer:_____

Name of Labour Enforcement Officer:_____

Address of Labour Enforcement Officer:_____

Sl.No	Category	Minimum wage Fixed	Actual wage paid	Number Present	Remarks

Weekly holiday_____

Wage period _____

Date of payment of Wages_____

Working hours_____

Rest interval_____

Appendix 'IV'

Form-XIII (See Rule 75)

Register of Workmen Employed by Contractor

Name and address of contractor_____

Name and address of establishment under which contract is carried on_____

Nature and location of Work_____

Name and address of Principal Employer_____

1	2	3	4	5	6	7	8	9	10	11	12
Sl. No.	Name and surname of Workman	Age and Sex	Father's/ Husband's Name	Nature of employment / designation.	Permanent home address of the workman (Village and Tehsil, Taluka and District)	Local Address	Date of commencement of employment	Signature or thumb impression of the workman	Date of Termination of employment.	Reasons For terminations.	Remarks

Appendix 'V'

Form-XVI (See Rule 78(2)(a))

Muster Roll

Name and address of the contractor _____

Name and address of establishment under which contract is carried on _____

Nature and location of work _____

Name and address of Principal Employer _____

For the month of fortnight _____

Sl. No.	Name of workman	Sex	Father's/ Husband's name	Dates					Remarks
1	2	3	4	5					6
				1	2	3	4	5	

Form –XVII (See Rule 78(2)(a))**Register of Wages**

Name and address of the contractor_____

Name and address of establishment under which
contract is carried on_____

Nature and location of work_____

Name and address of Principal Employer_____

Wages period_____ Monthly/fortnightly

Sl.No.	Name of workman	Serial No.in the register of workman	Designation/ Nature of work done	No. of days worked	Units of work done	Daily rate of wages/piece rate	Basic Wages
1	2	3	4	5	6	7	8

Dearness allowances	Overtime	Other cash payments(In di- cate nature)	Total	Deductions if any, (indicate nature)	Nett amount paid	Signature or thumb impression of the	Initial of contractor or his representative
9	10	11	12	13	14	15	16

Appendix 'VII'
(Observe)

Wage Card No. _____
Wage Card

Name and address of the contractor _____ Date of issue _____

Name and location of work _____ Designation _____

Name of Workman _____ Month/fortnight-----

--

Rate of Wages _____

DATE																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Morni																																
Eveni																																
Initial																																

Rate _____
Amount _____

Received from _____ the sum of Rs. _____ on account of my wages.

Signature

The wage card is valid for one month from the date of issue

Form-XIX
(See rule 78(2)(b))

Wages Slip

Name and address of the contractor_____

Name and Father's/Husband's name of workman_____

Nature and location of work_____

For the Week/Fortnight/Month ending_____

1. No. of days worked _____

2. No. of units worked in case of piece rate workers_____

3. Rate of daily wages/piece rate_____

4. Amount of overtime wages_____

5. Gross wages payable_____

6. Deduction, if any_____

7. Net amount of wages paid_____

Initials of the Contractors or his representative

Form-XIV
(See rule 76)

Employment Card

Name and address of the contractor_____

Name and address of establishment under which contract is carried
on_____

Nature of work and location of work_____

Name and address of Principal Employer_____

1. Name of Workman_____

2. SI No. in the register of workman employed_____

3. Nature of employment/designation_____

4. Wage rate (with particulars of unit in case of piece work)_____

5. Wages period_____

6. Tenure of employment_____

7. Remarks_____

Signature of contractor

Form-XV (See Rule 77)

Service Certificate

Name and address of the contractor_____

Nature and location of work_____

Name and Address of workman_____

Age or date of birth_____

Identification marks_____

Father's/Husband's name_____

Name and address of establishment in under which contract is carried on_____

Name and address of Principal Employer_____

Sl.No.	Total period for which employed		Nature of work done	Rate of Wages (with particulars of unit in case of piece work)	Remarks
	From	To			
1	2	3	4	5	6

Signature

LIST OF ACTS AND OMISSIONS FOR WHICH FINES CAN BE IMPOSED

In accordance with rule 7 (v) of the CLIENT Contractor's Labour Regulations to be displayed prominently at the site of work both in English and local Language.

1. Willful insubordination or disobedience, whether along or in combination with other.
2. Theft fraud or dishonestly in connection with the contractors beside a business or property of CLIENT.
3. Taking or giving bribes or any illegal gratifications.
4. Habitual late attendance.
5. Drunkenness fighting ,riotous or disorderly or indifferent behaviour.
6. Habitual negligence.
7. Smoking near or around the area where combustible or other materials are locked.
8. Habitual indiscipline.
9. Causing damage to work in the progress or to property of the CLIENT or of the contractor.
10. Sleeping on duty.
11. Malingering or slowing down work.
12. Giving of false information regarding name, age, father's name etc.
13. Habitual loss of wage cards supplied by the employers.
14. Unauthorized use of employer's property of manufacturing or making of unauthorized particles at the work place.
15. Bad workmanship in construction and maintenance by skilled workers which is not approved by the CLIENT and for which the contractors are compelled to undertake rectification.
16. Making false complaints and/or misleading statements.
17. Engaging on trade within the premises of the establishments.
18. Any unauthorized divulgence of business affairs of the employees.
19. Collection or canvassing for the collection of any money within the premises of an establishment unless authorized by the employer.
20. Holding meeting inside the premises without previous sanction of the employers.
21. Threatening or intimidating any workman or employer during the working hours within the premises.

Form-XII (See Rule 78(2)(d))

Register of Fines

Name and address of the contractor_____

Name and address of establishment in under which contract is carried on_____

Nature and location of work_____

Name and address of Principal Employer_____

Sl.No.	Name of workman	Father's/Husband's name	Designation/nature of employment	Act/Omission For which fine imposed	Date of Offence
1	2	3	4	5	6

Whether workman Showed cause against fine	Name of person in whose presence employees explanation was heard	Wage period and wages payable	Amount of fine imposed	Date on which fine realized	Remarks.
7	8	9	10	11	12

Appendix 'XII'

Form-XX(See Rule 78(2)(d))

Register of Deduction for Damage or Loss

Name and address of the contractor_____

Name and address of establishment in under which contract is carried on_____

Nature and location of work_____

Name and address of Principal Employer_____

Sl.No.	Name of workman	Father's/Husband's name	Designation/nature of employment	Particulars of damage or loss	Date of damage or loss
1	2	3	4	5	6

Whether workman showed cause against deduction	Name of person in whose presence employees explanation was heard	Amount of deduction imposed	No. of installments	Date of recovery		Remarks
				First installment	Last installment	
7	8	9	10	11	12	13

Register of Advances

Name and address of the contractor_____

Name and address of establishment in under which contract is carried on_____

Nature and location of work_____

Name and address of Principal Employer_____

Sl. No.	Name of workman	Father's/Husband's name	Designation nature of employment	Wage period and wages payable	Date and Amount of Advance given	Purpose(s) for which Advance made	Number of Installments by which advance to be repaid	Date and amount of each installments repaid	Date on which last Installments was repaid	Remarks
1	2	3	4	5	6	7	8	9	10	11

Form-XXIII (See Rule 78(2)(e))

Register of Overtime

Name and address of the contractor _____

Name and address of establishment in under which contract is carried on

Nature and location of work _____

Name and address of Principal Employer _____

Sl.No.	Name of workman	Father's/husband's name	Sex	Designation /nature of employment	Date on which Overtime worked	Total overtime worked or production in case of piece rated	Normal rate of wages	Overtime rate of wages	Overtime earnings	Rate on which overtime wages paid	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

APPENDIX XV
Notice for appointment of Arbitrator
[Refer Clause 25]

To
The Director
Indian Institute of Science Education & Research
Trivandrum

Dear Sir,

In terms of clause 25 of the agreement, particulars of which are given below, I/we hereby give notice to you to appoint an arbitrator for settlement of disputes mentioned below:

1. Name of applicant
2. Whether applicant is Individual/Prop. Firm/Partnership Firm/Ltd. Co.
3. Full address of the applicant
4. Name of the work and contract number in which arbitration sought
5. Name of the Division which entered into contract
6. Contract amount in the work
7. Date of contract
8. Date of contract Date of initiation of work
9. Stipulated date of completion of work
10. Actual date of completion of work (if completed)
11. Total number of claims made
12. Total amount claimed
13. Date of intimation of final bill (if work is completed)
14. Date of payment of final bill (if work is completed)
15. Amount of final bill (if work is completed)
16. Date of request made to accepting authority
17. Date of receipt of accepting authority's decision
18. Date of appeal to you
19. Date of receipt of your decision.

Specimen signatures of the applicant
(only the person/authority who signed the contract should sign)

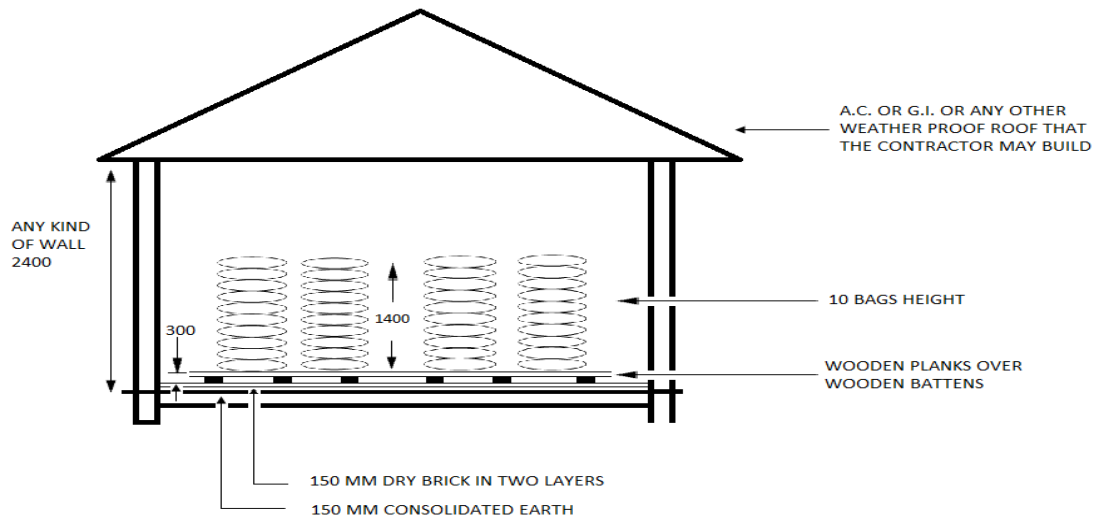
I/We certify that the information given above is true to the best of my/our knowledge.
I/We enclose following documents.

1. Statement of claims with amount of claims.
- 2.
- 3.
- 4.

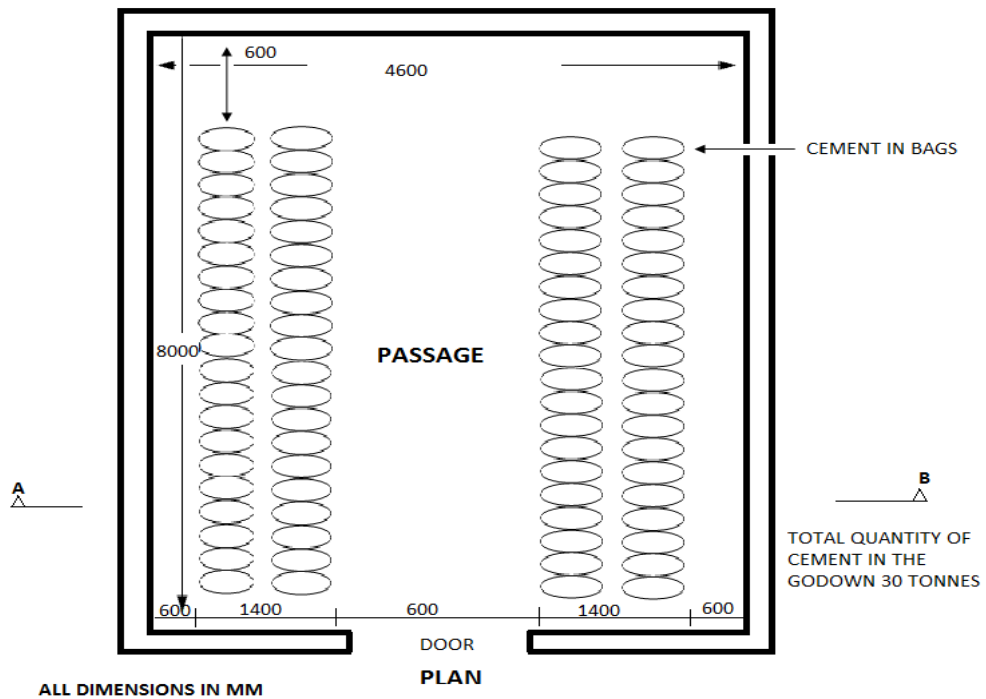
Yours faithfully,
(Signatures)

Copy in duplicate to:
1. Project Manager

SKETCH OF CEMENT GODOWN



SECTION AB



Formats

DRAFT GUARATNEE BOND FOR EARNEST MONEY DEPOSIT

(To be used by Approved Schedule Banks)

1. In consideration of Director, IISER TVM having agreed to accept from(hereinafter called the said tenderer) a Bank Guarantee in Lieu of Earnest Money Deposit in Cash, under the terms and conditions contained in the Notice Inviting Tender (hereinafter referred to as N.I.T) for the work of bearing No.....and dated (hereinafter referred to as “the said works”), for Rs..... (Rupeesonly) in words. We the BANK (hereinafter called the said Bank) do hereby undertake to pay to Director, IISER TVM the sum of Rs..... (RUPEESONLY) (in words), by reason of the said tenderer’s failure to enter into an agreement of contract on institutions of acceptance of his tender and/or to convene the contract works and or failure to deposit the Security Deposti within the stipulated period as per the terms and conditions relating to and/or governing the contract and/or specified in the N.I.T.

- 2.We, (indicate the name of Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from Director, IISER TVM stating that the amount claimed is required to meet the recoveries due or likely to be due from the said tenderers. Any such demand made on the Bank shall be conclusive as regards 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.....

- 3.We undertake to pay to Director, IISER TVM any money so demanded notwithstanding any dispute or disputes raised by the tenderer in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be valid discharge of our liability for payment thereunder and the tenderers 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 and effect during the period that would be taken for entering into the Agreement of contract and that it shall continue to be enforceable till all the dues of Director, IISER TVM under the terms and conditions of NIT for the work have been fully paid and its claims satisfied or discharged or till Director, IISER TVM certified that the terms and conditions of the N.I.T have been fully and properly carried out by the said tenderers and accordingly discharges this guarantee unless a demand or a claim we shall be discharged from all liability under this guarantee thereafter.

5. We, Bank further agree with the Director, IISER TVM that the Director, IISER TVM shall have the fullest liberty without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the N.I.T and/or terms and conditions governing the contract or to extend the time of validity of the offer from the said tenderer from time to time or to postpone for any time or from time to time any of the powers exercisable by the Director, IISER TVM against the said tenderer and to forbear or enforce any of the terms and conditions of the NIT and we shall not be relieved from our liability hereunder by reason of any such variation, or extension being granted to the said tenderer or for any forbearance act or omission on part of the Director, IISER TVM or any indulgence by the Director, IISER TVM to the said tenderer or by any such matter or thing whatsoever which under the law relating to surety/guarantee 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 tenderers.

7. We,

.....
..... (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Director, IISER TVM in writing.

8. This Guarantee shall be valid upto unless extended on demand by Director, IISER TVM. Notwithstanding any thing mentioned above, our liability against this Guarantee is restricted to Rs. (RUPEES ONLY)
..... and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this Guarantee, all our liabilities under this Guarantee shall stand discharged.

Dated the day of
.....20.....
..... (indicate the name of Bank)

DRAFT GUARATNEE BOND FOR PERFORMANCE GUARANTEE

In consideration of the Director, IISER TVM having offered to accept the terms and conditions of the proposed agreement between and (hereinafter called "the said Contractor(s)") for the work..... (hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs..... (Rupees only) as performance guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

We, (hereinafter referred to as "the Bank") hereby
(indicate the name of the Bank)
undertake to pay to the Director, IISER TVM an amount not exceeding Rs.
(Rupees..... only) on demand by the Department.

2. We, do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the Director, IISER TVM stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards 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 the Director, IISER TVM 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 being absolute and unequivocal.

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

4. We, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Director, IISER TVM under or virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-charge on behalf of the Director, IISER TVM certified 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 Director, IISER TVM that the Director, IISER TVM shall have the fullest liberty without our consent and without affecting in any manner our obligation 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 Director, IISER TVM 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 Director, IISER TVM or any indulgence by the Director, IISER TVM 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 guarantee except with the previous consent of the Director, IISER TVM in writing.
8. This guarantee shall be valid upto unless extended on demand by the Director, IISER TVM. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated the day of for (indicate the name of the Bank)

DRAFT BANK GUARANTEE BOND FOR SECURITY DEPOSIT

1. In consideration of the Director, IISER TVM having agreed to accept from (hereinafter called "the said Contractor(s)") from the demand, under the terms and conditions of an Agreement No..... dated made between and for the work (hereinafter called "the said Agreement") of Security Deposit for the due fulfillment by the said Contractor(s) of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs.....(RUPEESONLY). We(indicate the name of the Bank)(hereinafter referred to as the Bank") at the request of Contractor(s) do hereby undertake to pay to the Director, IISER TVM an amount not exceeding Rs..... (RUPEES ONLY) on demand by Director, IISER TVM.

2. We, (indicate the name of the Bank) do hereby undertake to pay amounts due and payable under this guarantee without any demure merely on a demand from the Director, IISER TVM stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor (s). Any such demand made on the Bank shall be conclusive as regards to 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.....

3. We undertake to pay to the Director, IISER TVM 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 being absolute and unequivocal.

The payment so made by us under this bond shall be valid discharge of our liability for payment thereunder 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 and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Director, IISER TVM under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharges or till Engineer-in-charge on behalf of the Director, IISER TVM certified 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,

.....
..... (indicate the name of the Bank)
further agree with Director, IISER TVM that the Director, IISER TVM shall have the fullest liberty without our consent and without affecting 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 exerciseably by the Director, IISER TVM 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 or omission on the part of the Director, IISER TVM or any indulgence by the Director, IISER TVM 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 Director, IISER TVM in writing.

8. "This Guarantee shall be valid upto
unless extended on demand by Director, IISER TVM. Notwithstanding anything mentioned above, our liability against this Guarantee is restricted to Rs. (RUPEES
..... ONLY) and unless a claim in writing is lodged withus within six months of the date of expiry or the extended date of expiry of this Guarantee, all our liabilities under this Guarantee shall stand discharged.

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

Note:-

Before a Bank Guarantee is accepted, an affidavit duly sworn in before a first class magistrate, may also be taken from the Contractor that he would keep the validity of the Bank guarantee intact by getting it suitably extended from time to time, at his own initiative, upto a period of twelve months for any other maintenance period prescribed in the agreement after the recorded date of completion of the work as directed by the Engineer-in-charge and indemnifies the Director, IISER TVM against any losses arising out of non encashment of Bank guarantee. Such an undertaking may be taken on a non-judicial stamp paper, as required, in the enclosed proforma.

GUARANTEE TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER SUPPLY AND SANITARY INSTALLATIONS

The agreement made this..... Day of Two thousand and between S/O..... (hereinafter called the GUARANTOR of the one part) and the (herein after called the Client of the other part). WHEREAS THIS agreement is supplementary to the contract. (Herein after called the Contract) dated.....and made between the GUARANTOR OF THE ONE PART AND the Client of the other part, whereby the contractor interalia, undertook to render the work in the said contract recited structurally stable workmanship and use of sound materials.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain structurally stable and guarantee against faulty workmanship, finishing, manufacturing defects of materials and leakages etc.

NOW THE GUARANTOR hereby guarantee that work executed by him will remain structurally stable, after the expiry of maintenance period prescribed in the contract for the minimum life of ten years, to be reckoned format the date after the expiry of maintenance period prescribed in the contract.

The decision of the Engineer- in- charge with regard to nature and cause of defects shall be final.

During the period of guarantee the guarantor shall make good all defects to the satisfaction of the Engineer- in- charge calling upon him to rectify the defects, failing which the work shall be got done by the Client by some other contractor at the guarantor's cost and risk. The decision of the Engineer –in- charge as to the cost payable by the Guarantor shall be final and binding.

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

IN WITNESS WEHREOF those presents have been executed by the obligator. And by for and on behalf of the Client on the day, month and year first above written.

Signed sealed and delivery by OBLIGATOR in the presence of:

- 1.
- 2.

SIGNED FOR AND ON BEHALF OF ----- BY.....
in the present of:

- 1.
- 2.

**GUARANTEE BOND TO BE EXECUTED BY THE
CONTRACTOR FOR WATER PROOFING TREATMENT
FOR BASEMENT/TERRACE/TOILETS.**

The agreement made this _____ day of _____ two thousand and _____ between _____ S/o _____ (hereinafter called the GUARANTOR of the one part) and the _____ (hereinafter called the Client of the other part).

WHEREAS this agreement is supplementary to a contract. (Herein after called the Contract)

dated _____ and made between the GUARANTOR OF THE ONE PART AND the Client of the other part, whereby the contractor interalia, undertook to render the structures in the said contractor of the work in the said contract recited completely water and leak proof.

THE GUARANTOR hereby guarantee that the 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 expiry of maintenance period prescribed in the contract. Provided that the guarantor will not be responsible for leakage caused by earthquake or structural defects.

The decision of the Engineer in charge with regard to cause of leakage shall be *final*. During the period of guarantee the guarantor shall make good all defects and in case of any defects being found render the structure water proof to the satisfaction of the Engineer in charge at his cost and shall commence the work for such rectification within seven days from the date of issue of notice from the Engineer in charge calling upon him to rectify the defects, failing which the work shall be got done by the Client through some other contractor at the guarantor's cost and risk. The decision of the *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 Principal and his successor against all loss, damage, cost of expenses or otherwise which may be incurred by him by reason of any of any default on the part of the GUARANTOR in performance *and observance* of this supplementary agreement.

As to the amount of loss and/or cost incurred by the Client on the decision of the Engineer in charge will be final and binding on the parties.

IN WITNESS WHEREOF those presents have been executed by the obligator _____ and by _____ by for and on behalf of _____ on the day, month and year first above written.

Signed sealed and delivered by OBLIGATOR in presence of:

1. _____ 2. _____

SIGNED FOR AND ON BEHALF OF _____ BY _____ In presence of:

1. _____ 2. _____

(To be furnished in Rs. 100 Non Judicial Stamp Paper)

CONTRACT AGREEMENT

This Agreement is made at _____ on the _____ day of _____ 2014 between _____ Indian institute of Science Education & Research, Thiruvananthapuram acting through _____ having its office at CET Campus, Engineering College P.O., Thiruvananthapuram (hereinafter called "Client" which expression shall, unless repugnant to the context or meaning thereof be deemed to mean and include its successors, legal representatives and assigns) of the **First Part.**

and

M/s

_____,
a Company incorporated under the Companies Act 1956 having Head Office at _____,
(hereinafter called the "Contractor" which expression unless repugnant to the context shall mean and include its successors-in-interest assigns etc.) of the **Second Part.**

Whereas the client is desirous that certain works should be executed, for Construction of Shopping center & Health center for IISER Campus at Vithura, Thiruvananthapuram hereinafter called the "The Project" and has accepted a Bid submitted by the contractor for the execution and completion of such works as well as guarantee of such works and the remedying of defects therein. NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.

2. The following documents shall be deemed to form and be read and construed as part of this agreement Viz.

a) Volume – I

- Conditions of Contract

b) Volume- II

- Technical Specifications

c) Volume – III

- Bill of Quantities

d) Volume – IV

- Tender Drawings

e) All correspondence till award of contract i.e. addendum, LOA etc.

3. In consideration of the payment to be made by the Client to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Client to execute and complete the Project by _____ and remedy and defects therein in conformity in all respects with the provisions of the Contract.
4. The Client hereby covenants to pay the Contractor in consideration of the execution and completion of the Project and the remedying of defects therein, the total Contract Price of Rs. _____ (Rs. _____ only) being the sum stated in the Letter of Award (LOA) subject to such additions thereto or deductions there from as may be made under the provisions of the Contract at the times and in the manner prescribed by the Contract.

5. OBLIGATION OF THE CONTRACTOR

The Contractor shall ensure full compliance with tax laws of India with regard to this Contract and shall be solely responsible for the same. The contractor shall keep the Client fully indemnified against liability of tax, interest, penalty etc, of the Contractor in respect thereof, which may arise.

IN WITNESS HEREOF the parties hereto have caused their respective common seals to be hereunto affixed / (or have hereunto set their respective hands and seals) the day and year first above written.

For and on behalf of the Contractor

For and on behalf of the Client

Signature of the authorized official

Signature of the authorized official

Name of the Contractor

Stamp / Seal of the Contractor

SIGNED, SEALED AND DELIVERED

By the said

By the Said

of

on behalf of the client in presence

Witness _____

Witness _____

Name _____

Name _____

Address _____

Address _____

PROFORMA OF SCHEDULES

(Operative Schedules)

SCHEDULE 'A'

Schedule of quantities/Bill of Quantities (BOQ)

**Attached as Volume III of
contract document**

SCHEDULE 'B'

Sl. No	Description of item	Approximate Quantity	Rates at which the material will be charged to the contractor	Permissible wastage	Place of issue
<u>PART-A</u>					
1	Vitrified tiles (600x600-fabia) (BOQ item No.A.7.1(a))	6597.64Sqm	1214.50	2.50%	IISER Store at IISER Campus, Vithura
2	Hollow Block (400x200x200mm)(BOQ item No.A.2.13)	133000.00Nos	40.00	5.00%	IISER Store at IISER Campus, Vithura
3	Antiskid floor tiles(300x300-Qudro beige) (BOQ item No.A.7.3)	1090.00 Sqm	430.00	2.50%	IISER Store at IISER Campus, Vithura
4	Ceramic wall tiles(600x300)(BOQ item No.A.7.4)	4380.00 Sqm	414.00	2.50%	IISER Store at IISER Campus, Vithura
5	Synthetic Mesh (BOQ Item A.9.14)	900.00 Sqm	65.00	5.00%	IISER Store at IISER Campus, Vithura
6	Ceramic floor tiles(600x600) –caramel shade(BOQ item No.A.7.3)	870.00 Sqm	503.70	2.50%	IISER Store at IISER Campus, Vithura
7	Vitrified Tile(600 x	90.00 Sqm	1214.50	2.50%	IISER Store at IISER Campus,

	600)- terracota(BO Q item A.7.1(a))				Vithura
8	TMT bar-Fe 500(20mm)(BOQ item A.3.10)	11 tonne	47000.00	3.00%	IISER Store at IISER Campus, Vithura
9	TMT bar-Fe 500(16mm)(BOQ item A.3.10)	6 tonne	47000.00	3.00%	IISER Store at IISER Campus, Vithura
10	TMT bar-Fe 500(25mm)(BOQ item A.3.10)	7.2 tonne	47000.00	3.00%	IISER Store at IISER Campus, Vithura
11	Flush Door(Americ an Walnut Colour)(BOQ item A.5.2(a))				
(a)	Width-0.605 depth-2.05	38.44 Sqm	2346.00	0.00%	IISER Store at IISER Campus, Vithura
(b)	Width-0.805 depth-2.05	57.75 Sqm	2346.00	0.00%	IISER Store at IISER Campus, Vithura
(c)	Width-0.706 depth-2.05	5.79 Sqm	2346.00	0.00%	IISER Store at IISER Campus, Vithura
(d)	Width-0.905 depth-2.05	33.39 Sqm	2346.00	0.00%	IISER Store at IISER Campus, Vithura
12	Stainless steel kitchen sink-with drain board 510 x 1040mm bowl depth 200mm(BOQ item A.13.4(a))	17.00 Each	5865.00	0.00%	IISER Store at IISER Campus, Vithura
13	UPVC trap('P' or 'S')(BOQ item A.13.31)	73.00 Each	120.00	0.00%	IISER Store at IISER Campus, Vithura
14	UPVC trap 110 X	81.00 Each	103.00	0.00%	IISER Store at IISER Campus,

	75(BOQ item A.13.31)				Vithura
15	Flat back washbasin 550 x 400(BOQ item A.13.3)	2.00 Each	759.00	0.00%	IISER Store at IISER Campus, Vithura
16	Flat back washbasin 630 x 450(BOQ item A.13.3)	2.00 Each	1000.50	0.00%	IISER Store at IISER Campus, Vithura
17	UPVC vent cowl(BOQ item A.13.30)	30.00 Each	37.95	0.00%	IISER Store at IISER Campus, Vithura
<u>PART-B</u>					
1	1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable - Red	2595 metre	15.00	5%	IISER Store at IISER Campus, Vithura
2	1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable - Yellow	3405 metre	15.00	5%	IISER Store at IISER Campus, Vithura
3	1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable - Blue	2865 metre	15.00	5%	IISER Store at IISER Campus, Vithura
4	1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor	3574 metre	15.00	5%	IISER Store at IISER Campus, Vithura

	cable - Black				
5	1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable - Green	5194 metre	15.00	5%	IISER Store at IISER Campus, Vithura
6	10 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor Cable - Green	250 metre	87.00	5%	IISER Store at IISER Campus, Vithura
7	10 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor Cable - Blue	400 metre	87.00	5%	IISER Store at IISER Campus, Vithura
8	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable - Red	235 metre	125.00	5%	IISER Store at IISER Campus, Vithura
9	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable - Yellow	135 metre	125.00	5%	IISER Store at IISER Campus, Vithura
10	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor	235 metre	125.00	5%	IISER Store at IISER Campus, Vithura

	cable - Blue				
11	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable - Black	235 metre	125.00	5%	IISER Store at IISER Campus, Vithura
12	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable - Green	235 metre	125.00	5%	IISER Store at IISER Campus, Vithura
13	2 core x 1.5 sq mm shielded and stranded insulated FRLS copper conductor cable	1800 metre	39.00	5%	IISER Store at IISER Campus, Vithura
14	20 mm dia. ISI marked, steel conduit	1500 metre	83.00	5%	IISER Store at IISER Campus, Vithura
15	Modular GI box for 2 module	267 nos	44.00	0%	IISER Store at IISER Campus, Vithura
16	Modular GI box for 3 module	299 nos	49.00	0%	IISER Store at IISER Campus, Vithura
17	Modular GI box for 4 module	395 nos	68.00	0%	IISER Store at IISER Campus, Vithura
18	Modular GI box for 6 module	312 nos	99.00	0%	IISER Store at IISER Campus, Vithura
19	Modular GI box for 8 module	240 nos	103.00	0%	IISER Store at IISER Campus, Vithura
20	Modular GI box for 12 module	220 nos	157.00	0%	IISER Store at IISER Campus, Vithura
21	Modular GI box for 18 module	230 nos	269.00	0%	IISER Store at IISER Campus, Vithura

22	3 pin 6/10/13 amps multistandard modular socket outlet	40 nos	224.00	0%	IISER Store at IISER Campus, Vithura
23	6 amps 3 pin plug top	110 nos	101.00	0%	IISER Store at IISER Campus, Vithura
24	1 x 9W CFL surface mounted bulkhead light fixture (Philips Cat No. FXC 101,WKP 14 / 1X CFL 9W)	81 nos	934.00	0%	IISER Store at IISER Campus, Vithura
25	1 X 28W surface mounted light fixture (Philips Cat No. TCW 097/128 HF)OR Philips TCW 450 TL5 EBT	156 nos	2790.00	0%	IISER Store at IISER Campus, Vithura
26	1 X 14W wall mounted light fixture (Philips Cat No. TCH 207/1XTL5- 14W/830,84 0&865)	70 nos	2,115.00	0%	IISER Store at IISER Campus, Vithura
27	1 X 28W fluorescent surface mounted light fixture (Philips Cat No- TMS 122 / 128 HF)	250 nos	1,713.00	0%	IISER Store at IISER Campus, Vithura
28	1 X 18W CFL based mirror light fixture (Bajaj Cat No. BSP 118 CFL)	220 nos	2,976.00	0%	IISER Store at IISER Campus, Vithura

	Note: 1x11W CFL mirror lamp fitting supplied(Phil ips 1xPLS/4P11 WHF MACP				
30	1 x 150W HPSV street light fixture (Philips Cat No -SGP 438 1 X SON - T 150)	8 nos	6,870.00	0%	IISER Store at IISER Campus, Vithura
31	4+4 way, SPN, double door, MCB DB	5 nos	8,676.00	0%	IISER Store at IISER Campus, Vithura
32	4+6 way, SPN, double door, MCB DB	3 nos	1,872.00	0%	IISER Store at IISER Campus, Vithura
33	4 way (8+12), TPN, vertical type, MCB DB, double door	10 nos	20,232.00	0%	IISER Store at IISER Campus, Vithura
34	8 way (8+24), TPN, vertical type, MCB DB, double door	31 nos	29,455.00	0%	IISER Store at IISER Campus, Vithura
35	3C x 300 sq.mm. 11 KV grade power cable of Stranded, compact circular aluminium conductor, conductor screened with extruded semiconduct or compound, XLPE insulated, insulation	2500 metre	2369.00	5%	IISER Store at IISER Campus, Vithura

	screened with extruded semiconduct or compound in combination with copper tape, (0.3 KA for 1 second), cores laid up, inner sheathed with PVC, galvanised strip armoured earthed and overall PVC sheathed, black cable.				
36	3.5C X 400 sq.mm. cross -linke polyethylene (XPLE) insulated, FRLS PVC outer sheated armored with galvanized round steel wire or steel strip, with Al. conductor suitable for rated voltage of 1100 volts grade cable.	1000 metre	2,011.00	5%	IISER Store at IISER Campus, Vithura
37	3.5C X 300 sq.mm. cross -linke polyethylene (XPLE) insulated, FRLS PVC outer sheated armored with	2220 metre	1,573.00	5%	IISER Store at IISER Campus, Vithura

	galvanized round steel wire or steel strip, with Al. conductor suitable for rated voltage of 1100 volts grade cable.				
38	3.5C X 240 sq.mm. cross -linke polyethylene (XPLE) insulated, FRLS PVC outer sheated armored with galvanized round steel wire or steel strip, with Al. conductor suitable for rated voltage of 1100 volts grade cable.	300 metre	1,291.00	5%	IISER Store at IISER Campus, Vithura
39	3.5C X 150 sq.mm. cross -linke polyethylene (XPLE) insulated, FRLS PVC outer sheated armored with galvanized round steel wire or steel strip, with Al. conductor suitable for rated voltage of 1100 volts grade cable.	250 metre	827.00	5%	IISER Store at IISER Campus, Vithura
40	3.5C X 120 sq.mm. cross -linke polyethylene	250 metre	697.00	5%	IISER Store at IISER Campus, Vithura

	(XPLE) insulated, FRLS PVC outer sheathed armored with galvanized round steel wire or steel strip, with Al. conductor suitable for rated voltage of 1100 volts grade cable.				
41	3.5C X 70 sq.mm. cross-linked polyethylene (XPLE) insulated, FRLS PVC outer sheathed armored with galvanized round steel wire or steel strip, with Al. conductor suitable for rated voltage of 1100 volts grade cable.	200 metre	443.00	5%	IISER Store at IISER Campus, Vithura
42	4C X 25 sq.mm. cross-linked polyethylene (XPLE) insulated, FRLS PVC outer sheathed armored with galvanized round steel wire or steel strip, with Al. conductor suitable for rated voltage	680 metre	243.00	5%	IISER Store at IISER Campus, Vithura

	of 1100 volts grade cable.				
43	4C X 16 sq.mm. cross-linked polyethylene (XPLE) insulated, FRLS PVC outer sheathed armored with galvanized round steel wire or steel strip, with Al. conductor suitable for rated voltage of 1100 volts grade cable.	944 metre	176.00	5%	IISER Store at IISER Campus, Vithura
44	4C X 10 sq.mm. cross-linked polyethylene (XPLE) insulated, FRLS PVC outer sheathed armored with galvanized round steel wire or steel strip, with Al. conductor suitable for rated voltage of 1100 volts grade cable.	2622 metre	162.00	5%	IISER Store at IISER Campus, Vithura
45	100 pair 0.60 mm FRLS PVC insulated stranded copper conductor armored telephone cable	250 metre	1,101.00	5%	IISER Store at IISER Campus, Vithura
46	50 pair 0.60	270 metre	590.00	5%	

	mm FRLS PVC insulated stranded copper conductor armored telephone cable				IISER Store at IISER Campus, Vithura
47	10 pair 0.60 mm FRLS PVC insulated stranded copper conductor armored telephone cable	180 metre	170.00	5%	IISER Store at IISER Campus, Vithura
48	100 pair telephone tag block in 1.6 mm thick MS sheet enclosure with cover	2 nos	3002.00	0%	IISER Store at IISER Campus, Vithura
49	50 pair telephone tag block in 1.6 mm thick MS sheet enclosure with cover	3 nos	1867.00	0%	IISER Store at IISER Campus, Vithura
50	10/5 pair telephone tag block in 1.6 mm thick MS sheet enclosure with cover	3 nos	1,111.00	0%	IISER Store at IISER Campus, Vithura
51	MS perforated cable tray painted with powder coating 300 X 50 X 1.6 mm	74 metre	1,370.00	5%	IISER Store at IISER Campus, Vithura
52	120 mm dia DWC HDPE pipe (OD	9683 metre	258.00	5%	IISER Store at IISER Campus, Vithura

	120mm / ID 104mm)				
53	180 mm dia DWC HDPE pipe (OD 180mm / ID 152mm)	2000 metre	428.00	5%	IISER Store at IISER Campus, Vithura
55	200 mm dia DWC HDPE pipe (OD 200mm / ID 170mm)	30metre	490.00	5%	IISER Store at IISER Campus, Vithura
56	Foundation bolts, nuts,washers for the 8 mtr octagonal pole.	500 nos	1,591.00	0%	IISER Store at IISER Campus, Vithura
57	50 mm X 6 mm copper tape (roll)	120 metre	1,733.00	5%	IISER Store at IISER Campus, Vithura
58	25 mm X 6 mm G.I. strip (1.2 kg/mtr)	1102 metre	97.00	5%	IISER Store at IISER Campus, Vithura
59	32 mm X 6 mm G.I. strip (1.475 kg/mtr)	220 metre	119.00	5%	IISER Store at IISER Campus, Vithura
60	40 mm dia. GI pipe (medium class) for Earthing	10 nos	312.00	0%	IISER Store at IISER Campus, Vithura

SCHEDULE 'C'

Tools and plants to be hired to the contractor **NIL**

SCHEDULE 'D'

Extra schedule for specific requirements/document for the work, if any. **NIL**

SCHEDULE 'E'

Name of work: **"CONSTRUCTION OF CIVIL STRUCTURES AND OTHER INFRASTRUCTURE FACILITIES FOR RESIDENTIAL AREA UNDER PHASE I OF IISER CAMPUS AT VITHURA, THIRUVANANTHAPURAM-BALANCE WORKS"**

Approximate cost of work : **Rs 63.30 Crores**

- | | | |
|----------------------------|---|-------------------------|
| (i) Earnest money | : | Rs 73.30 Lakhs |
| (ii) Performance Guarantee | : | 5% of tendered value. |
| (iii) Security Deposit | : | 2.5% of tendered value. |

SCHEDULE 'F'

(Reference is made to General Conditions of Contract)

GENERAL RULES & DIRECTIONS:

Officer inviting tender: - **Registrar, IISER TVM**

Definitions:

- | | | | |
|---------|---|---|--|
| 2(vi) | Engineer-in-Charge | : | Authorised representative nominated by Registrar, IISER TVM |
| 2(ix) | Accepting Authority | : | Registrar, IISER TVM |
| 2(xi) | Percentage on cost of materials and labour to cover all overheads and profits | : | 15% |
| 2(xii) | Standard schedule of rates | : | CPWD Delhi Schedule of rates - 2013 |
| 2(xiii) | Department | : | IISER TVM |

Clause 1

- | | | |
|------|---|----------------|
| (i) | Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance | 10 days |
| (ii) | Maximum allowable extension beyond the period Provided in (i) above | 05 days |

Clause 2

Authority for fixing compensation
Under Clause 2

**Registrar ,
IISER TVM**

Clause 2A

Whether Clause 2A shall be applicable:

Yes

Clause 5

- (i) Number of days from the date of issue
 of letter of acceptance for reckoning date
 of start

15 days

- (ii) Time Allowed for Completion

<u>SL NO</u>	<u>DESCRIPTION</u>	<u>PERIOD OF COMPLETION</u>
1	<u>PART 1</u>	09 MONTHS
	RESIDENTIAL BLOCK C3	
	RESIDENTIAL BLOCK C1	
	INTERNAL & EXTERNAL SERVICES OF PART 1	
2	<u>PART 2</u>	18 MONTHS
	RESIDENTIAL BLOCK C2	
	RESIDENTIAL BLOCK D1	
	RESIDENTIAL BLOCK D2	
	INTERNAL & EXTERNAL SERVICES, SITE DEVELOPMENT WORKS AND ALL REMAINING SERVICES	

- (iii) Milestone Chart

<u>SL NO</u>	<u>DESCRIPTION OF ACTIVITY</u>	<u>TIME ALLOWED IN MONTHS (FROM DATE OF START)</u>	<u>AMOUNT TO BE WITHHELD IN CASE OF NON ACHIEVEMENT OF MILESTONE</u>
1	<u>PART 1</u>		
a	All structural works of C3 block	3	8 Lakhs
b	All structural works of C1 block	4	8 Lakhs
c	Blockwork and plastering of C3 block	5	12 Lakhs
d	Blockwork and plastering of C1 block	6	12 Lakhs
e	Finishing and handing over including services and site development works of blocks C1 and C3	9	10 Lakhs
2	<u>PART 2</u>		
a	All structural works of C2 block	8	20 Lakhs
b	All structural works of D1 and D2 block	10	30 Lakhs
c	Blockwork and plastering of C2 block	12	15 Lakhs
d	Blockwork and plastering of D1 and D2 block	14	25 Lakhs
e	Finishing and handing over including services and site development works of blocks C2,D1 and D2	18	20 Lakhs

Authority to decide :

- | | | | |
|-------|--|---|----------------------|
| (i) | Extension of time | : | Engineer-in-charge |
| (ii) | Rescheduling of milestones | : | Registrar, IISER TVM |
| (iii) | Shifting of date of start in case of delay in handing over of site | : | Registrar, IISER TVM |

Clause 6, 6A

Clause applicable – 6 or 6A : 6A

Clause 7

Gross value of work to be done after effecting recovery towards advances. If any, since last payment for being eligible to interim payment

Rs.100 lakhs

Clause 10A

List of testing equipment to be provided by the contractor at site laboratory are as per Annexure-I and II

Clause 10B(ii)

Whether Clause 10 B (ii) shall be applicable: **Yes**

Clause 10C

Component of labour expressed as percentage : **25%**
Of value of work

Clause 10CA

Whether Clause 10CA is applicable: **No**

Clause 10CC

Whether Clause 10 CC is applicable: **No**

Component of Cement - Xc 06%
Expressed as percent of total value of work.

Component of Steel - Xs 15%
Expressed as percent of total value of work.

Component of Materials Xm 51%
(except cement & steel)
Expressed as percent of total value of work –

Component of Labour - Y 25%
Expressed as percent of total value or work

Component of P.O.L. - Z 3%
Expressed as percent of total value or work

Clause 11

Specifications to be followed for execution of work: **CPWD/BIS/MoRTH Specifications**

Clause 12

**Deviation Limit beyond which clauses
12.2 & 12.3 shall apply.**

(i)	Foundations	100%
(ii)	Superstructure	30%

Clause 16

Competent authority for deciding reduced rates: **Engineer-in-charge**

Clause 18

List of minimum number of machinery, tools & plants to be deployed at site.

S.No	Equipment / Machinery	Type/ Capacity	No.	Remarks
	Earth work equipment.			
	Excavator & Loader	Poclain	01	
		JCB	02	
	Tipper / Dumper	03 Ton	05	
	Earth Compactor		01	
	Mechanical Earth Rammers		02	
	Pump (diesel)		02	
	Pump (electric)		01	
	Survey Instruments			
	Auto level (with staff & stand)		01	
	Theodolite/ Total station		01	
	Equipment for concrete work			
	Automatic Batching Plant	30 Cum/hr	01	
	Concrete Pump	30 Cum/hr	01	
	Transit mixer	6 cum	02	
	Diesel Mixer with weigh batcher		01	
	Electrical Mixer with weigh batcher		01	

	Needle Vibrator	25 mm needle	02	
		40 mm needle	03	
		60 mm needle	02	
		80 mm needle	01	
	Plate /Table vibrator		02	
	Equipment for hoisting & lifting			
	Tower Crane	20mtr	01	
	Hydra crane/ other cranes		01	
	Builders hoist		04	
	Power equipments			
	Diesel generators	50 KVA capacity	01	
	Jack hammer with compressor		02	
	Hydraulic Jack	100 ton	02	

CLAUSE 25	Constitution of Dispute Redressal Committee	
	Chairman:	Shri. Ravi J Verghis, Former Group Head, Construction & Maintenance Group, VSSC/ISRO, Thiruvananthapuram.
	Member :	Smt. Annamma John, Technical Member, I/C Generation Projects, Kerala State Electricity Board
	Member :	Dean(Planning & Development), IISER TVM or A Professor of IISER TVM to be nominated by Director.

Clause 34 (i)**Minimum Requirement of Technical Representative(s) to be deployed by the contractor and recovery Rate for non engagement**

Sl. No.	Designation (Principal Technical/ Technical representative)	Discipline	Minimum No.	Minimum Qualification of Technical Representative	Minimum Experience	Rate at which recovery shall be made per person per month from the contractor in the event of not fulfilling provision of clause 36 (i)
1	Director/ Project Co-Ordinator	Civil	1	Bachelor's Degree	20	Rs 1,20,000
2	Project Manager	Civil	1	Bachelor's Degree	10	Rs 60,000
4	Project Engineer	Civil	1	Bachelor's Degree / Diploma	7/10	Rs 48,000
5	Project Engineer	Elec.	1	Bachelor's Degree / Diploma	7/10	Rs 48,000
6	Billing Engineer	Civil/Elec t.	1	Bachelor's Degree / Diploma	7/10	Rs 36,000
7	Quality Control/Planning Engineer	Civil	1	Bachelor's Degree / Diploma	7/10	Rs 48,000
8	Safety Engineer	Civil	1	Bachelor's Degree / Diploma	7/10	Rs 48,000
9	Junior Engineer / Supervisor	Civil/ Electrical	5	Bachelor's Degree / Diploma	2/5	Rs.30,000

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

Diploma Holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

Annexure – I

A-List of Equipment for Field Testing Laboratory (Minimum)

1. Balances
 - (i) 7 kg. to 10 kg. capacity, semi-self indicating type – accuracy 10 gm.
 - (ii) 500 gm. Capacity, semi-self indicating type – accuracy 1 gm.
 - (iii) Pan balance- 5 kg. Capacity – accuracy 10 gms.
2. Ovens-electrically operated, thermostatically controlled upto 110°C – sensitivity 1°C.
3. Sieves: as per Is 460-1962.
 - (i) I.S. sieves – 450mm internal dia, of sizes 100mm, 80mm, 63mm, 50mm, 40mm, 25mm, 20mm, 12.5mm, 10mm, 6.3mm, 4.75mm, complete with lid and pan.
 - (ii) I.S. sieves – 200mm internal dia (brass frame) consisting of 2.36mm, 1.18mm, 600 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns, 75 microns, with lid and pan.
4. Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly.
5. Equipment for slump test – Slump cone, steel plate, tamping rod, steel scale, scoop.
6. Dial gauges, 25 mm travel – 0.01 mm/ division least count – 2 nos.
7. 100 tonnes compression testing machine, electrical-cum manually operated.
8. Graduated measuring cylinders 200 ml capacity – 3 Nos.
9. Enamel trays (for efflorescence test for bricks).
 - (i) 300 mm x 250 mm x 40 mm – 2 nos.
 - (ii) Circular plates of 250 mm dia – nos.
10. Cube Mould – as per requirement

Note: The above list is indicative and is bare minimum. However Contractors are advised to provide Laboratory Testing Equipments in required number so that Quality of work does not suffer due to shortage of Equipment.

Annexure – II

B-Field Testing Instruments (Minimum)

1. Steel tapes – 3m
2. Vernier calipers
3. Micrometer screw 25 mm gauge
4. A good quality plumb bob
5. Spirit level, minimum 30 cms long with 3 bubbles for horizontal vertical
6. Wire gauge (circular type) disc
7. Foot rule
8. Long nylon thread
9. Rebound hammer for testing concrete
10. Dynamic penetrometer
11. Magnifying glass
12. Screw driver 30 cms long
13. ball pin hamer, 100 gms
14. Plastic bags for taking samples
15. Moisture meter for timber
16. Earth resistance tests (for Electrical Divisions)
17. Meggar (for Electrical Divisions)

Note: The above list is indicative and is bare minimum. However Contractors are advised to provide Field Testing Equipments in required number so that Quality of work does not suffer due to shortage of Equipment.



**INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH
THIRUVANANTHAPURAM**

**“CONSTRUCTION OF CIVIL STRUCTURES AND OTHER INFRASTRUCTURE
FACILITIES FOR RESIDENTIAL AREA UNDER PHASE I OF IISER CAMPUS AT
VITHURA, THIRUVANANTHAPURAM-BALANCE WORKS”**

NIT NUMBER:IISER-T/W(C)/350/08/14-15 DATED 21.08.2014

SECTION - IV

SPECIAL CONDITIONS OF CONTRACT (SCC)

SPECIAL CONDITIONS OF CONTRACT (SCC)

Definitions and Interpretation

1. In construing these conditions, the specifications, Bill of Quantities and Contract agreement etc the following words and expression shall have the meaning herein assigned to them except where the subject and context otherwise require.
 - (a) "Act of Insolvency" shall mean any Act of Insolvency as defined by the Presidency Towns Insolvency Act or Provincial Insolvency Act or any Act amending such original.
 - (b) "Approved" means approved in writing, including subsequent written information of previous verbal approval and "approval" means approval in writing, including as aforesaid.
 - (c) "As directed" means the direction given by the Engineer In-Charge/ Client / Project Management Consultant.
 - (d) "Bill of Quantities" or "Schedule of items" means the schedule and quantities of items, materials and rates, summaries etc. priced and completed and as finally accepted.
 - (e) "Constructional Plant" means all appliances or things of whatsoever nature required in or about the execution or maintenance of the Works but does not include materials or other things intended to form or forming part of the Works.
 - (f) "Day" means a calendar day of 24 hours (beginning and ending at 00 hrs and 24 hrs respectively) irrespective of number of hours worked or not worked in that day.
 - (g) "Week" means seven calendar days without regard to the number of hours worked or not worked in any day in that week.
 - (h) "Month" means calendar month without regard to the number of days worked or not worked in that month.
 - (i) "Architect / Design Consultant shall mean Architect appointed by the Client for preparation of design and Detailed Engineering as per scope.
 - (j) "Project Management Consultant" or "PMC" means consultant appointed by the Client for construction management of the project.
 - (k) "Engineer-in-Charge" means the officer authorized by the Client to perform duties as mentioned in this document.
 - (l) "Department" or "Client" means IISER TVM.

- (m) "Drawings" means the drawings prepared by the Architect/Consultant and issued by the Project Management Consultant and referred to in the tender and specifications and any modification of such drawings and such other drawings, calculations and technical information of a like nature as may, from time to time, be issued.
- (n) "I. S." means latest revision of 'Indian Standards Specification' issued by Bureau of Indian Standards.
- (o) "Specifications" means the specification included and / or referred to in the Tender document and any modification thereof or addition thereto as may from time to time be issued to the Contractor.
- (p) "In-house "Constructional Plant" means all appliances or things of whatsoever nature required in or about the execution or maintenance of the Works but does not include materials or other things intended to form or forming part of the Works.
- (q) "Materials" means the materials, apparatus, equipment, fittings, fixtures and all such other materials, which are incorporated in the work.
- (r) "Permanent Works" means the permanent works to be executed (including Plant) in accordance with the Contract.
- (s) "Temporary Works" means all temporary works of every kind required in or about the execution and completion or maintenance of the Works and the remedying of any defects therein.
- (t) "Urgent Works" means any urgent works which in the opinion of the Client and or PMC becomes necessary at the time of execution and / or during the progress of work to obviate any risk of accident or failure or to obviate any risk of damage to the structure of services or required to accelerate the progress of the work for which becomes necessary for safety and security or for any other reason the Client and or PMC may find it necessary.
- (u) "Notice in writing" or "written notice" shall mean notice in written, typed or printed characters, sent (unless delivered personally or otherwise proved to have been received) by registered post to the site office/ last known private or business address or registered office of the addressee and shall be deemed to have been received when in the ordinary course of post it would have been delivered.
- (v) Words imparting the singular only also to include the plural and vice versa where the context requires.

The headings, subheadings and marginal notes (if any) and the catch lines and the Annexure hereto are meant only for convenience of reference and shall not be in any way be taken into account in the interpretation of these presents and the Annexure hereto. The Contractor shall have to carry out and complete the works in every respect in accordance with this contract.

2. Languages & Law

The ruling language in which the Contract and related aspects shall be drawn up shall be English only. Law means- law as applicable to site of work.

3. Specification & drawings

The drawings furnished to the Contractor shall be interpreted and identified by figured dimensions and nomenclature as indicated therein. On no occasion the drawings shall be scaled off and transferred to work.

In all cases where enlarged detailed drawings are given for any component of work, these drawings shall take precedence over those incorporated in general drawing to a comparatively smaller scale.

- a) Prior to the execution of the work, the contractor shall check all drawings, specifications and shall immediately report all errors, discrepancies and/or omissions discovered therein and obtain appropriate orders on the same. Any adjustment made by the Contractor without prior approval shall be at his own risk, each description of item in the schedule of quantities shall be read in conjunction with the relevant drawings and the specifications and the Contractor's rate shall be deemed to be for such complete work unless otherwise specified by the Contractor while tendering.
- b) Cost of all shop drawings, or form work drawings and details to be furnished by the Contractor shall be deemed to be included in his tendered rates for the work. Accordingly approval to shop drawings or other fabrication drawings shall not be construed as authorizing award of additional work and as long as these belong to common individual scheme governed by specifications for which the Contractor has already quoted, no extra payment on any account will be admissible for all essential components that are to be necessarily executed to complete the work in all respects.
- c) Prior to submission for approval, the Contractor shall be responsible for thoroughly checking all drawings to ensure that they comply with the intent and requirements of the contract specifications and that they fit with the overall building layout. Drawing found to be inaccurate or otherwise in error will be returned for correction by the Contractor.
- d) The approval of drawing shall not be construed as a complete dimensional check, but will indicate only that the general method of construction and detailing is satisfactory. The Contractor shall be totally responsible for the dimensions and design, safety of the system evolved inclusive of providing interconnected operational accessories adequate enough to accomplish satisfactory completion of work.
- e) In case of difference between drawings and specifications, the specifications shall govern. Anything mentioned in the specification and

not shown in the drawings or shown on the drawings but not mentioned in the specifications shall be like effect as if shown or mentioned in both.

- f) In case of errors, omissions and /or disagreement between drawings and specifications, etc. the following order of precedence shall apply:
 - i. Between the written or shown description or dimensions in the drawings and the corresponding one in the specification, the former shall be taken as correct.
 - ii. Between the written description of the item in the specifications and descriptions in the Bill of Quantities of the same item, the latter shall be adopted.
- g) The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguity or discrepancies in conditions or specifications the same shall be explained and adjusted by Project Management Consultant. In case the Contractor does not agree with the explanation given by the Project Management Consultant then the matter, on his written notice, will be referred to the Client and his decision shall be final and binding to the contractor.
- h) In all cases of omissions and /or doubts or discrepancies in any of the items or specifications, a reference shall be made to the PMC. Elucidation, elaboration or decision of the PMC shall be considered as authentic. The Contractor shall be held responsible for any error that may occur in the work through lack of such reference and precaution.

4. Traffic interference

The Contractor shall conduct his operations so as to interfere as little as possible with the traffic. When interference to traffic is inevitable, notice of such interference shall be given to the Engineer-in-charge well in advance (atleast 2 days). The Contractor shall take all precautionary and other measure, such as providing warning signals, temporary diversions etc., all as directed by the Engineer-in-charge. The Contractor shall exercise full care ensure that no damage is caused by him or his workmen, during the operations, to the existing structures, water supply and power lines etc. The cost of any such damage and risks arising out of this shall be entirely borne by the Contractor.

5. Maintenance Period

The maintenance period for the work shall be twelve months and any defects noticed during the period shall have to be rectified by Contractor at his cost, failing which the action taken for rectification by Engineer-in-charge shall be final.

6. Scope of Contract

The contract comprises the construction, completion, commissioning/handing over remedying the defect of the works and except in so far as the Contract otherwise stipulates the provision of all labour, materials, constructional plant, machinery temporary works and everything whether of a temporary or permanent nature required in and for such construction, completion and maintenance so far as necessary for providing the same as specified in or reasonably to be inferred from the Contract.

7. Drawings

(a) Tender Drawings

The tender drawings furnished by the Design Consultant are for Tender Purpose only and are intended as a guide to the Bidder / Contractor and give general layout of buildings and general information of the structures and general positions of utilities, services and equipments only. Contractor's quoted rate for any item should not be based on any measurement, quantity, and specification from these drawings. Any claim raised by the contractor in this regard shall not be valid in this contract and shall not be accepted by the Client.

(b) Issue and custody of drawings & specifications

The contractor shall be furnished free of cost three copies of all drawings prepared by the Architect/Design consultant and all further drawings issued during the progress of the works. The contractor shall keep one copy of all drawings at the works site and the Client / PMC shall at all reasonable time have access to the same.

Before the issue of the final certificate to the contractor, he shall forthwith return all drawings and specifications.

The drawings shall be provided to the Contractor as per the schedule (prepared at the starting of the works during the progress of work and necessarily updated or revised time to time) mutually agreed by the PMC and the Contractor.

From time to time during the course of contract revised drawings may be issued to the Contractor and the Contractor shall ensure that all superseded drawings are removed from site and stored in a lockable cabinet as directed.

The Contractor shall maintain complete up to date Register of drawings to be maintained at site. All drawings shall be properly filed and indexed for ready reference.

The contractor shall ensure that only the valid up to date drawings are used for setting out, construction and preparation of shop drawings etc.

Detail drawings in all cases shall be worked to in preference to those of a more general nature and figured dimensions were indicated shall be followed in preference to scaled dimensions.

(c) Working Drawings

Working drawings shall mean any of all drawings, required for satisfactory execution of the work except Bar Bending Schedule, shop and fabrication drawings. Three sets of all the working drawings shall be provided to the contractor.

Bar Bending Schedule, shop and fabrication drawings etc. will not be provided. The Contractor shall have to prepare the Bar Bending Schedule, shop and fabrication drawings etc. free of cost, if required for any of the items of work. Five copies of these drawings each including for revision will be submitted to PMC for approval. Before executing the item, shop drawings should be approved by PMC/Engineer-in-charge.

The Contractor shall be entirely responsible for co-ordination of entire work at site including the works carried out and shall ensure that all necessary working drawings are properly prepared & executed by the Contractor.

Review and approval will not extend to means, methods, techniques, sequences or procedures of construction. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

(d) As-Built Drawings (related to working drawings)

“As Built Drawings” shall be provided by Contractor at the time of handing over and shall be prepared by the Contractor at his own cost.

As-built drawings shall be under preparation from the onset of the contract, in order that all minor amendments and discrepancies from the “Working Drawings” are incorporated. To ensure that this requirement is complied with The PMC shall inspect the drawings on his request as the Works proceed. The Contractor shall submit 4 sets of “As Built” drawings along with soft copy in CD. One shall be transparency and others shall be prints.

8. Disruption of Progress

- (a) The Contractor shall give adequate advance notice to the PMC whenever planning or progress of the Works is likely to be delayed or disrupted unless any further drawing or order, including a direction, instruction or approval is received. The notice shall include details of the drawing or order required explaining why and by when it is required and of any delay or disruption likely to be suffered if it is late.

9. Drawings and Instructions

The contractor shall carry out and complete the said work in every respect in accordance with this Contract and with the directions of and to the satisfaction of the PMC/Engineer-in-charge. Drawings and/or written instructions, details,

directions and explanations which are hereafter collectively referred to as “PMC Instructions” in regard to:

- (a) The variation or modification of the design, quality or quantity of items of works or the addition or omissions or substitution of any item.
- (b) Any discrepancy in the drawings or between the bill of quantities and/or drawings and/or specification.
- (c) The removal from the site of any material brought thereon by the contractor and the substitution of any other material thereof.
- (d) The removal and/or re-execution of any works executed by the contractor.
- (e) The dismissal from the works of any persons employed thereupon.
- (f) The opening up for inspection of any work covered up.
- (g) The amending and making good of any defects under clause thereof are collectively referred as “Drawings and instructions”.

The contractor shall forthwith comply with and duly execute any work comprised such as PMC’s instructions provided always that verbal instructions, directions and explanations given to the contractor or his representative upon the works by the PMC, shall, if involving a variation, be confirmed in writing by the contractor within seven days, and if not dissented from in writing within a further seven days by the PMC, such shall be deemed to be PMC instructions within the scope of the contract

10. Authority and Duties of the PMC

The PMC has been duly authorized by the Client to supervise, test, examine, approve or reject any material and / or works, to order, cancel, alter, modify, any of the materials, items of works within the framework of the contract and as per the technical specifications, drawings and schedule of items. The PMC is further authorized to administer the contract, check, correct, modify, certify and recommend for payment or reject any bill or requests for payment for materials, Items or works. The PMC shall obtain prior approval of the Engineer-in-charge wherever required.

The duties of PMC are given in this document elsewhere, however main duties are as under:-

- (a) Monitor and supervise the work.
- (b) Test and examine any materials to be used in the works
- (c) Check the quality of workmanship of the items executed.
- (d) Prepare & issue certificate of payment and recommend the same to the Client.
- (e) Recommend extension of time.
- (f) Process/Obtain approval for execution of extra items/substituted and variation in quantities.

- (g) Ensure compliance with the drawings, technical specifications and various requirement of contract Documents.
- (h) Recommend changes/modifications in design & drawings if essential during construction as per site requirement.

11. Contractor's General Responsibilities

(a) Execution of works:

The Contractor shall, subject to the provisions of the Contract, and with due care and diligence, execute and complete the Works & remedy any defects therein in accordance with the Contract. The Contractor shall provide all labour, including the supervision thereof, materials. Constructional Plant and Machineries and all other things, whether of a temporary or permanent nature, required in and for such execution, completion, maintenance and remedying of any defects, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract.

The contractor is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the bill of quantities and instructions in respect of such additional items and their quantities will be issued in writing by the PMC.

The contractor shall have to use materials from the makes / manufacturers specified in the list of materials of approved brand and/or manufacture contained in the contract documents and as approved by PMC after due consent by Client. Wherever different pattern/ Design/ Quality of materials with same specification/ make as specified in the contract, is available in the market, Project Management Consultant in consultation with Engineer-in-Charge will approve the pattern/ Design/ Quality of the material/ item which shall be final and binding on the contractor.

Project Management Consultant/Engineer-in-charge is empowered to cancel an approval of material if it is found subsequently that approved material once brought at site and tested does not meet the requirement as specified in the contract. In such case approval will be accorded for alternate material.

(b) Adequacy, stability and safety:

The Contractor shall take full responsibility for the adequacy, stability and safety of all site operations and methods of construction.

(c) Temporary works and arrangements:

The Contractor shall furnish to the PMC full particulars of all temporary works necessary for the execution of the works. The PMC may comment on the Contractor's proposals if they consider that modifications should be made. The Contractor shall be solely responsible for the stability and safety of all temporary works. The PMC will indicate the site(s) for such temporary works and the Contractor will have to restrict his requirements to the same. Should it be necessary to shift the temporary works to some other allotted place during the

execution of the works, the Contractor shall do so, when informed by the PMC, at his own cost and without delay or demur. Such shifting of temporary works may be in part or in full.

(d) Initial and Final Clearance of site for temporary works:

The Contractor shall be responsible for the clearance of the site of all scrub, debris, rubbish, etc. to be removed off site to a location approved by the PMC. The structures, services and works required to be demolished and removed shall also be removed off site to a location as mentioned above. The Contractor shall obtain necessary permissions and approvals from the local authorities for such disposals. The demolition shall include digging, excavating and removal of substructures, foundations and buried works. The cost of all this shall be borne by the Contractor.

The above is applicable for all site offices, labour camps, and godowns etc., which are not required after the works are fully completed.

(e) Storage, Cleaning and Dewatering

The Contractor shall at all the times during construction keep the Site clean and free from all debris and unwanted materials on a daily basis as per instructions of the PMC.

Storage of materials shall be in an organized manner and in proper compartments as directed by PMC. Storage on suspended floors shall not be permitted unless specifically approved in writing by the PMC for specific materials in specific locations and in approved manner. PMC shall be furnished with load details, if requested, before seeking approval for storage.

Regular cleaning operations shall be undertaken to remove all dust, debris, waste materials etc. A cleaning schedule shall be maintained.

Contractor shall make his own arrangement for storage of those materials, which can be accommodated at site. Contractor shall be fully responsible for safe custody of the same. Materials shall be considered as "Delivered at Site" only after the physical presence of materials at site are verified by the PMC. Stores elsewhere shall not be eligible for being considered as "Delivered at Site."

Contractor shall be responsible to keep entire site free from water due to water coming from any source at any level and shall protect all materials and works from being damaged by the water from any source. Contractor shall make proper arrangements for drainage prior to use of water for curing, testing, cleaning etc.

Any expenditure incurred by the Contractor in fulfillment of his obligations under this sub-clause shall be deemed to have been included in the Contract Sum.

(f) Coordination of builders work required for services and Installation of equipments:

The Contractor shall co-ordinate the requirements for openings/cutouts/inserts/fixtures for internal and external services installations in accordance with the requirements of the relevant drawings.

The Contractor's attention is also drawn to the fact that all openings/chases, etc. shall be left in the building work as it proceeds and not cut-out subsequently except in so far as may be necessary due to subsequent authorized instructions. The Contractor shall therefore obtain necessary builders work details in such order and in such time as to enable them to be checked and approved by the PMC before the actual construction is planned to take place.

12. Operation & Storage Areas

All operations of the Contractor shall be confined to areas authorized by Engineer-in-charge and the storage of materials shall be over sites specifically indicated by the Engineer-in-charge. The Contractor shall be obliged to keep the premises in hygienic conditions by proper drainage of the areas, provided with suitable approaches, throughout the period of contract. He shall rectify all damages caused to any IISER property within the area thus allotted. He shall be responsible to clear all vegetation at site at his own cost.

13. Transportation of Equipment and materials

It shall be the Contractor's responsibility to transport all equipment and materials to the job site at his own expense. The Contractor shall use only established roadways or construct and use such temporary roadways as may be necessary and approved by the Engineer-in-charge. When it is necessary to cross curbs or sidewalks, protection against damage shall be provided by the Contractor. Any damage caused to roads, curbs, sidewalks etc., shall be repaired by the Contractor at his own expense.

14. Inspection

The work shall be carried out under the directions of the PMC/Engineer-in-charge subject to inspection by the representative appointed by PMC/Engineer-in-charge to ensure strict compliance with the terms, specifications and conditions of the contract. Any failure on the part of the PMC/Engineer-in-charge or his representative during the progress of inspection of work to discover any defective work or to reject materials not upto standards shall not be deemed to have been accepted and should not be construed as waived. Any defects noticed either during the period of construction or after the completion upto a period of 12 months from the date issue of certificate of completion, the Contractor is liable to carry out all repairs/rectifications at his/their own cost to the satisfaction of the Department. Further in the event of the Contractor using substandard/inferior quality of materials which at future date is not susceptible to replacement, for structural reasons or otherwise and if concurrence is given for retention of such structure, the Engineer-in-charge will have necessary authority to recover a proportionate sum decided as per his discretion. In case the structure with the use of substandard or inferior material cannot be retained in the work as per the opinion of the PMC/Engineer-in-charge, portion or portions of such structure/work shall be dismantled and replaced new by the Contractor at his own cost. Partial

or entire occupancy of the premises shall not be construed as the acceptance of the work or materials incorporated in the work. No changes whatsoever to any provision of the specification shall be made without written authorization from the PMC/Engineer-in-charge.

15. Schedule of Quantities

Schedule of probable quantities in respect of the work are liable to alterations, omissions, deductions or additions.

16. Tender Rates

Statutory deductions, where, in pursuant to statutes of appropriate Government, it becomes obligatory to IISER TVM to deduct Sales Tax from the amount payable to Contractor would be deducted as per the relevant sales tax act, applicable for the contracted work, as amended from time to time, as the rates specified under the said act, from the amounts payable to the contractor in respect of such works contract.

The Contractor when called for by the IISER TVM should furnish detailed analysis in support of the rates quoted by him against each item of tender. The IISER TVM reserves the right to utilize the analysis thus supplied in settling any deviations or claims arising on this contract.

17. Watching & Lighting

The Contractor shall throughout the execution and completion of the Works and the remedying of the site and the Works and the remedying of any defects therein have full regard for the safety of all persons entitled to be on the site and keep the site and the Works in an orderly state appropriate to the avoidance of danger to such persons and in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the PMC/Engineer-in-charge, or by any duly constituted authority, for the execution and for the protection of the Work, and/or for the safety and convenience of the public or others and take all reasonable steps to protect the environment on and off the site and to avoid damage or nuisance to person or property of the public or others resulting from pollution, noise and other causes as a consequence of his methods of operation.

18. Care of Works

From the commencement to the certified completion of the whole of works, the contractor shall take full responsibility for the care thereof and of all temporary works and in case any damage loss or injury shall happen to the works or to any part thereof or to any temporary works from any cause whatsoever save and except the expected risks as defined in sub-clauses of Clause 12.

The contractor shall at his own cost repair and make good the same so that on completion, the works shall be in good order and condition and conformity to every respect with the requirements of the contract and PMC's instructions. The contractor shall also be liable for any damage to the works occasioned by him

including his subcontractors in the course of any operations carried out by him for the purpose of completing any outstanding work and complying with his obligations under clause 32 hereof. The contractor shall indemnify the Employer from all risks on this account.

19. Force Majeure

(a) Force Majeure

- i) Any failure or delay in the performance by either party hereto of its obligations under his Contract shall not constitute a breach thereof or give rise to any claims for damages if, and to the extent that it is caused by occurrences beyond the control of the party affected, namely, acts of God, floods, explosions, wars, riots, storms, earthquakes, insurrection, epidemic or other natural disasters. The party so affected shall continue to take all actions reasonably within its power to comply as far as possible with its obligations under this Contract. The affected party shall promptly notify the other party after the occurrence of the relevant event and shall use every reasonable effort to minimize the effects of such event and act in all good faith with due care and diligence.
- ii) In the event of the effect of force majeure continuing beyond the period of One hundred and eighty (180) days, the parties shall mutually decide whether or not to terminate this Contract. In the event of termination of contract the contractor shall be paid for the work done and which has been accepted and certified by the PMC and shall not assert any additional claims against the Client.

20. Contractor's Superintendence

- (a) The contractor shall be solely responsible for the means, methods, techniques sequence and procedure of construction. The Contractor shall be responsible to see the completed work complies accurately with the Contract Document.

The Contractor shall give or provide all necessary superintendence during the execution of the Works.

(b) Contractor's Senior Representative for Execution & Coordination of Works

The Contractor shall have on site all times during working hours throughout the course of the Contract at least one Competent senior representative who shall be empowered to make decisions binding on the Contractor in respect of all matters likely to arise in connection with the execution & coordination of the works at the site and shall keep the PMC informed at all times about the name and designation of such representative. Any direction, explanations, instructions or notices given by the PMC/Client to such representative shall be held to be given to the Contractor. In case of absence of Senior Representative from the site other alternative representative must be available at site with same powers.

The curriculum vitae (CV) of the following key personnel proposed to be deployed at site for the entire duration is also required to be submitted.

- Director/Project Coordinator

- Project Managers
- Construction Engineers
- Project Engineers
- Billing Engineers
- Quality Control Engineers
- Planning Engineers
- Safety Engineer

It may please be noted that the contractor under normal circumstances would not be allowed to replace the key personnel during the execution of the contract. However, for any reasons, due to unavoidable circumstances if it becomes necessary in the interest of the project to replace any one / all the above key personnel the contractor must submit the CV of the new personnel (having similar qualification and experience) to the Engineer-in-charge for approval.

(c) Contractor's Employees

The Contractor shall provide and employ, Engineering staff/Technical Assistants on the site, in connection with the execution/completion of works and remedying any defects therein. The Engineering staff / Technical Assistants shall be appropriately qualified, skilled and experienced in their respective disciplines/trades, for proper supervision, ensuring quality, and output of the work they are required to supervise, and also such skilled, semi-skilled and unskilled labour as are necessary for the proper and timely execution, completion of work and remedying any defects in the works. No child labour shall be employed on the work.

(d) Removal of Contractor's Employees

The Contractor shall on the direction of the PMC/ Engineer-in-Charge immediately dismiss from the works any person employed thereon by him who may, in the opinion of the PMC / Engineer-in-Charge be incompetent or misconduct himself and such person shall not be again employed on the works without the permission of the PMC/Engineer-in-charge.

(e) Unauthorized Persons

No unauthorized persons are allowed on the site. The Contractor shall instruct all such persons to keep out and shall take steps to prevent trespassing. However the contractor will make sure to provide free access at any time for PMC/IISER to the site and other working places.

21. Compliance with Statutes, Regulations, etc.

The contractor shall conform to the provisions of any statute, ordinance, law, act of the legislature relating to the works, and to the regulations and by-laws of any local or other duly constituted authority and of any water, electric supply and other companies and/or authorities with whose systems the structure is proposed to be connected. The Contractor shall keep the Client and PMC indemnified against all fines or penalties or liability of every kind for breach of any such

statutory ordinance, law act of the legislation, regulations, and byelaws as aforesaid.

The contractor shall before making any variations from the drawings or specifications that may be necessitated by so regulations, give to the PMC written notice, specifying the variation proposed to be made and the reasons for making it and apply for instructions thereon. The contractor will not execute any work without written permission from the PMC.

The contractor shall bring to the attention of the PMC all notices required for execution by the said acts, regulations or bye-laws to be given to any authority and pay to such authority, or to any public office all fees that may be properly chargeable in respect of the works, and lodge the receipts with the PMC.

22. Setting out

The contractor shall be responsible for the true and proper setting-out of the Works in relation to original points, lines and levels or reference issued by PMC in drawing or in writing and for the correctness, subject as above mentioned, of the position, levels, dimensions and alignment of all parts of works and for the provision of all necessary instruments, appliances and labour in connection therewith. If, at any time during the progress of the works, and during defects liability period, any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required to do by the PMC and / or Client or his authorised representative shall at his own cost, rectify such error to the satisfaction of the PMC. The checking of any setting out or of any line or level by the PMC shall not in any way relieve the Contractor of his responsibility for the correctness thereof. The Contractor shall carefully protect and preserve the benchmarks; sight-rails, pegs and other things used in setting-out the Works. Any rectification works required should be done by the Contractor at his own cost.

23. Quality of Materials, Workmanship and Tests

- (a) All materials and workmanship shall be the best of the respective kinds described in the Contract and shall be subjected from time to time to mandatory tests at the place of manufacture or fabrication or on the Site or at an approved testing laboratory. The source of supply and / or manufacturing within/ outside India may be inspected by the Client / any representative as nominated by the client.

The contractor shall upon the instruction of the PMC's representative furnish him with documentation to prove that the materials & goods comply with the requirements of contract and for requirement stated above. The PMC may issue instruction in regard to removal of material from site or any work, if these are not in accordance with the contract. The contractor shall provide such assistance instruments, machinery, labour and materials as are normally required for examining, measuring, sampling and testing and material or part of work before incorporation in the works for testing as may be selected and required by the PMC.

Client may carry out Third Party Quality Assurance/Audit by an independent agency/ individual/firm/institute at any time. The agency will be permitted and offered all support related to site inspection by the contractor. Improvements/changes suggested therein will be carried out without any extra cost.

(b) Samples

- i) All samples of adequate numbers, sizes, shades & pattern as per specification shall be supplied by the contractor without any extra charge. Contractor shall submit Samples to the PMC for approval. If certain items proposed to be used are of such nature that samples cannot be presented or prepared at the site, detailed literature / test certificate of the same shall be provided instead to the satisfaction of the PMC and Architect. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalogue numbers and the use for which intended and otherwise as PMC may require to review the submittals for the limited purposes required by paragraph (d) below. The numbers of each Sample to be submitted will be as specified in the Specifications, or as shall be specified by the PMC / EIC. All approved samples shall be properly marked with signature of the PMC/EIC and shall be available at the site for inspection at any time. The sample room will be made and maintained with all the samples approved till the end of warranty period / defect liability period.

ii) Submittal Procedures

- (a) Before submitting each Sample, Contractor shall have determined and verified all materials with respect to intended use, fabrication, shipping, handling, storage, assembling and installation pertaining to the performance of the Work and All information relative to Contractor's sole responsibilities in respect of means, methods, techniques, sequences and procedures of construction and safety precautions and programmes incident thereto.
- (b) Each submittal will bear a specific written indication that Contractor has satisfied Contractor's obligation under the Contract Documents with respect to Contractor's review and approval of that submittal.
- (c) At the time of each submission, contractor shall give PMC specific written notice of such variations if any that the sample submitted may have from the requirements of the contract document, such notice to be separate from the submittal and in addition shall cause a specific notation to be made on each sample submitted for review and approval of each such variation
- iii) Review and Approval: Sample shall be reviewed and approved only to determine if the items covered by the submittals will, after installation or incorporation in the work, conform to the information given in the contract documents and be compatible with the design concept of the completed project functioning as a whole as indicated by the contract documents, drawings.
- iv) Review and approval will not extend to means, methods, techniques, sequences or procedures of construction. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

Contractor shall make corrections required by PMC/EIC and submit as required new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for and by PMC and Architect on previous submittals.

- v) Above referred review and approval Samples shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Document unless Contractor has in writing called PMC's attention to each such variation at the time of submission as specified above and received written approval of each such variation by specific written notation thereof incorporated in or accompanying the Sample approval; nor will any approval by PMC and Architect relieve Contractor from responsibility for complying with the requirements of contract.
- vi) Only when the samples are approved by the PMC, the contractor shall proceed with the procurement and installation of the particular material / equipment. The approved samples shall be signed by the PMC for identification and shall be kept on record at site office until the completion and acceptance of the work and shall be available at the site for inspection / comparison at any time. The contractor shall keep with him a duplicate of such samples to enable him to process the matter.
- vii) For items of works where the samples are to be made at the site, the same procedure shall be followed. All such samples shall be prepared at a place where it can be left undisturbed until the completion of the project.
- viii) The PMC shall communicate the comments/ approval to the Contractor to the samples at his earliest convenience. Any delay that might occur in approving of the samples for reasons of its not meeting with the specifications or other discrepancies, inadequacy in furnishing samples of best qualities from various manufacturers and such other aspects causing delay on the approval of the materials / equipment's etc. shall be to the account of the contractor. In this respect the decision of the PMC/Client shall be the final.
- ix) On delivery of the supplies of materials / equipments for permanent works at the site, the contractor shall specifically arrange to get the supply inspected by the PMC and compared with the approved sample and his specific obtained before using the same in the work.

(c) Cost of Tests

The testing charges shall be borne by the Client as intended by or provided for the Contract or as found necessary by the PMC for ascertaining whether the quality of materials intended to be used by the Contractor in the Works is acceptable, whether any finished or partially finished work is appropriate for the purposes which it was intended to fulfill. However the cost of making samples, transportation etc. shall be borne by the Contractor.

(d) Standards and codes

The Contractor shall at his cost provide one set of approved standards and codes to which the Proposed materials, items and works to be executed shall conform. Such a set shall be handed over to client and PMC for ready reference. All materials, items and works, when submitted for approval shall have reference of Tender Specifications and drawings and of clauses of relevant standard codes for acceptance criteria.

(e) Testing facilities

The Contractor shall, at his own cost, provide testing facilities as per CPWD scale at site as stipulated in the Contract document.

In respect of tests carried out in other approved laboratories, as stipulated in the contract document / as directed by the PMC, the Contractor shall arrange for taking samples, testing etc. The charges/testing fee will be borne by the Client.

- f) The contractor shall prepare Quality Control Manual duly considering the above and the Quality Control document of the PMC and get it approved by the client for compliance.

24. Government Labour Laws

The contractor has to follow strictly the Government labour acts, which are in force at present and all necessary arrangements for labour will have to be made by the Contractor.

25. Obtaining Information related to Execution of work

No claim by the contractor for additional payment will be entertained which in consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the works, nor will any misunderstandings or the obtaining of incorrect information or the failure to obtain information relieve him from any risks or from the entire responsibility for the fulfillment of the contract.

26. Access for Inspection

Persons nominated by client/Architect/Design Consultant/PMC and their respective representatives shall at all reasonable times have free access to work and/ or to the workshops, factories or other places where materials are lying or from which they are being obtained and the Contractor shall extend necessary service to Client, Architect/Design Consultant and PMC and their representatives every facility necessary for checking measurements, inspection and examination and test of the materials and workmanship.

27. Examination of Work before covering up

- (a) No part of the works shall be covered up or put out of view without the approval of the PMC and the contractor shall afford full opportunity for the PMC to examine and measure any work which is about to be covered up or put out of

view and to examine foundations before permanent work is placed thereon. The contractor shall give due notice to the PMC whenever any such work or foundation is or ready or about to be ready for examination and the PMC shall attend the same.

(b) **Uncovering and making openings**

The contractor shall uncover any part or parts of the works or make openings in or through the same as the PMC may from time to time direct and shall reinstate to make good such part or parts to the satisfaction of the PMC. No extra payment will be paid for this.

28. Assignment

The contractor shall not, without the prior consent of the Engineer in charge assign the Contract or any part thereof, or any benefit or interest therein or there under, otherwise than by:

- A change in favour of the Contractor's bankers of any moneys due or to become due under the Contract, or
- Assignment to the Contractor's insurers (in case where the insurers have discharged the Contractor's loss or liability) of the Contractor's right to obtain relief against any other party liable.

The Contractor shall not sub-contract the whole of the Works. The Contractor shall not subcontract any part of the Works without the prior consent of the Client, except where otherwise provided by the Contract. Any such consent shall not relieve the Contractor from any liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any Subcontractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Such Permission may be granted only for the super specialized work etc and the decision of Client shall be final.

29. Claims

The contractor shall send to the PMC / Engineer in charge once in a every month an account giving particulars as complete and fully detailed as required for any claim for additional payments, to which the contractor may consider himself entitled and of all extra or additional / substituted work ordered by the PMC /Client which he has executed during the preceding month subject to provisions under relevant clauses of the contract hereof.

30. Variations

- (a) The PMC with the prior approval of the Competent Authority in determining revised quantity, form or quality shall make and variation in the form, quality or quantity of the works or any part thereof that may necessary and for that purpose or if for any other reason it shall, in his opinion be desirable, he shall with the

prior approval of the Client order the contractor to do and the contractor shall do any of the following, subject to the provisions of other contract conditions.

- i) Increase or decrease the quantity of any work included in the contract
- ii) Omit any such work
- iii) Change the character or quality or kind of any such work
- iv) Change the levels, lines, positions and dimensions of any part of the works.
- v) Execute additional work of any kind necessary for the completion of the works.
- vi) Change any specified sequence or timing of construction of any part of the work.

No such variation shall in any way vitiate or invalidate the contract, but the cost, if any, of all such variations shall be taken in account for payment to the contractor as an addition or adjustment to the amount of the contract sum. Provided that where the issue of instruction to vary the works is necessitated by some default or breach by the contractor or for which he is responsible, any additional cost attributable to such default or breach shall be borne by the contractor.

- b) Orders for variation to be in writing

The contractor shall make no such variations without the concurrence of PMC provided that no concurrence shall be required up to 02% increase/decrease in the quantity.

31. Inspection and Testing

(a) Inspection & Testing during manufacture

The PMC/Client shall be entitled during manufacture to inspect, examine and test on the contractor's premises during working hours the materials and workmanship and check the progress of manufacture of all fabrication materials to be supplied under the contract, and if part of the said materials is being manufactured on other premises the contractor shall obtain for the PMC permission to inspect, examine and test as if the said plant were being manufactured on the contractors premises. Such inspection, examination or testing if made shall not relieve the contractor from any obligation under the contract.

(b) Facilities for Testing at Manufacturer's Works

Where the contract provides for tests on the premises of the contractor or of any sub-contractor the contractor shall provide such assistance, labour, materials, electricity, fuel, stores, apparatus and instruments as may be requisite and as may be reasonably demanded to carry out such tests efficiently.

(c) Certificate of Testing

As and when fabrication materials shall pass the tests referred in this clause, the PMC shall furnish to the contractor a certificate in writing to that effect.

(d) **Rejection**

If as a result of such inspection, examination or test of the works (other than a Test on Completion the PMC shall decide that such material is defective or not in accordance with the contract he shall notify the contractor accordingly stating in writing his objection and reasons thereof. The contractor shall make good the defect or ensure that the material complies with the Contract. Thereafter, if required, the tests shall be repeated under the same terms and conditions till satisfactory results are made available.

(e) **Inspection Reports**

The contractor shall provide the PMC with five copies of reports of all inspection and tests.

32. Virtual Completion Certificate

When the whole of the Works have been substantially and virtually completed and have satisfactorily passed any final test that may be prescribed by the Contract and is fit for occupation / use:-

- (a) The Contractor shall give a notice to that effect to the PMC accompanied by an undertaking to finish any outstanding work during the Defects Liability Period. Such notice and undertaking shall be in writing and shall be deemed to be a request by the Contractor.
- (b) The PMC shall review whether the works are completed in such a condition so as to be put to its proper or other intended final use and / or occupied without any short comings and no major or minor items of works are remaining which in the opinion of the PMC will cause undue difficulties in satisfactory use/ occupation of the Works

33. Defects after completion

(a) **General**

Any defect, shrinkage, settlement or other faults which if appearing within the "Defects Liability Period" arising due to poor quality of materials or workmanship, shall upon the direction in writing of the Client/ Authorized representative of the owner of the Institute, and within such reasonable time as shall be specified therein, be attended and made good by the contractor, at his own cost. In case of default the Client may employ and pay other persons to make good such defects, shrinkage, settlements or other faults and all damages, loss and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor and such damage, loss and expenses shall be recoverable from the bills due or may be deducted from any money that may become due to the contractor, or may in lieu of such amending and making good by the contractor deduct from any sum due to the contractor, the amount to be determined by the Client.

(b) Cost of Execution of Work of Repair, etc.

All such works shall be carried out by the Contractor at his own expense if the necessity thereof shall, in the opinion of the Client, be due to the use of materials or workmanship not in accordance with the Contract, or due to neglect or failure on the part of the Contractor to comply with any obligation, expressed or implied, on the Contractor's part under the Contract.

(c) Contractor's personnel to be at site

During the defects liability period the contractor shall retain at least one of his authorized representative at site along with required tradesmen.

34. Approval and acceptance

(a) Provisional Acceptance

The work shall be deemed to have been provisionally accepted after fulfillment of the following by the Contractor.

- i). Submitting As-Built Drawings, Catalogues, Brochures, and Data Sheets, manuals in the form as directed by PMC to Engineer in Charge
- ii). Obtaining Certificate of Completion from the PMC
- iii). Obtaining approvals from the local authorities as required for occupation and use of the works and handing over such certificates to the Client if such items included in the duties or responsibilities of the Contractor by the contract. Contractor is required to take approval from respective authorities for his own work. However, for building permission etc. approval from local authorities will be the responsibility Architect/Design Consultant.

(b) Certificate of Final Completion

The contract shall not be considered as completed until a Certificate of Final Completion shall have been issued by the Client/ Architect/PMC stating that the Works have been completed to their satisfaction and remedying / rectifying of defects have been satisfactorily performed.

35. Works by Other Agencies

The Client and PMC reserves the right to use premises and any portion of the site for the execution of any work not included in this contract which it may desire to have carried out by other persons simultaneously, and the contractor shall allow the reasonable facilities for the execution of such work, but shall not be required to provide any plant or material for the execution of such work except by special arrangement with the employer. Such work shall be carried out in such manner as not to impede the progress of the works included in the contract and the contractor shall not be responsible for any damage or delay which may happen to or occasioned by such work.

36. Insurance Policies

- (a) Contractor shall take Contractor's All Risk Policy and Third Party Insurance or other insurance policies in the joint name of the Contractor and CLIENT and keep it valid against all loss or damages to the Works, Materials, Equipment, Persons and Properties from whatever cause arising for which he is responsible under the terms of the Contract, other than the expected risks, and in such manner that the Client, Architect, PMC and Contractor are covered for the period as stipulated for entire duration including the Defects Liability Period and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with the obligations.
- (b) In the event of the Insurance Policies are taken and kept valid by the contractor, whenever claims need to be made for any matter or thing in respect of the insurance covers under the Insurance Policies, it shall be the responsibility of the Contractor to lodge such claims and to follow up and obtain the payments for the claims from the Insurance Companies. Should the Client suffers any losses and / or damages in connection with the works and the Contractor is unable or unwilling to get such losses and/or damages recompensed by the insurance companies, the Client shall recover the amounts in respect of such losses and/or damages from the Contractor by way of deductions made from any money that may be payable or that may become payable to the Contractor.
- (c) Irrespective of whether the Insurance Policies referred under sub-clause above are taken by the Contractor or not and whether the Policies are kept valid or not notwithstanding anything stated in the sub-clause as above of this clause, the Contractor shall indemnify the Client from all the compensations and claims that may arise due to loss and damages to the works, materials, equipment, persons and properties on account of Contractor's operations at site during the period and also Defects Liability period and the Contractor shall be responsible, liable and bound to the Client to compensate or make good or replace the loss or damage arising out of any whatsoever as directed by the Client.

37. Dues not paid by the Contractor

The contractor shall pay all dues or fees to Statutory authorities and Electric and Water supply authorities etc. wherever required within due period and indemnify the Client and the PMC from any claims or compensations or penalties or damages arising out of non-payment of any such dues or fees. However, in case some dues or fees are not paid by him / and or claims for compensations or penalties etc. are raised by the Statutory authorities, the Client may deposit the required amount for any or all of the above and recover or deduct the same from any money payable to the contractor by the Client or any other means available to the Client such as bank guarantee.

38. Specifications

The various works indicated in the schedule shall be carried out strictly in accordance with the detailed specification whether actually mentioned or not.

Where specifications are not available in this document, such work shall be carried out strictly in accordance with CPWD specification and if there is no details in CPWD specification book then it shall be executed as per Bureau of Indian Standard specification. In the case there is no such specifications in Bureau of Indian Standards the work shall be carried out in a respects in accordance with the instructions and requirement of the Engineer-in-charge.

39. Urgent Repairs

If, by reason of any accident, or failure, or other event occurring to or in connection with the works, or any part thereof, either during the execution of the works, or during period of Defects Liability any remedial or other work or repair, shall, in the opinion of the Client be urgently necessary for the safety of the Works and the Contractor is unable or unwilling at once to do such work or repair, the Client may employ and pay other persons to carry out such work or repair as the case may be and Client may consider necessary. If the work or repair so done by the other agency is the work which, in the opinion of the PMC/Client the Contractor was liable to do at his own expense under the Contract, all expenses incurred by Other agency in so doing shall be recoverable from the Contractor by the .Client, or may be deducted by the Client from any sum due or which may become due to Contractor.

40. Boreholes & Exploratory Excavation

If, at any time during the execution of the Works, the PMC/Client shall require the Contractor to make boreholes or to carry out exploratory excavation, such requirement shall be ordered in writing and shall be deemed to be an additional item ordered under the provisions unless a provisional sum in respect of such anticipated work shall have been included in the schedule of items.

41. Fossils, Etc.

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the site of the works shall be the property of the DEPARTMENT.

42. Plant Temporary Works & Materials

(a) Plant, etc. Exclusive use for the Works

All Constructional Plant, Temporary Works and materials provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the execution of the Works and the Contractor shall not remove the same or any part thereof except for the purpose of moving it from one part of the Site to another, without the consent, in writing of the PMC, which shall not be unreasonably withheld.

(b) Removal of Plant etc.

Upon completion of the Works, the Contractor shall remove from the Site all the said Constructional Plant and Temporary Works remaining thereon and any unused materials provided by the Contractor, within 10 days of obtaining the completion certificate.

43. Operations and Maintenance Manual

The Contractor shall also provide and submit to the CLIENT two copies in a durable plastic case of the operating and Maintenance Instruction Manuals as may be applicable for the works. The arrangement of these manuals shall be as follows:

- | | |
|------------|--|
| SECTION A: | Index |
| SECTION B: | Full set of Indexed Photographs showing all salient features of the Project. |
| SECTION C: | Description and details of materials, items and fittings and fixtures used for the project along with Catalogues & Addresses of the Suppliers. |
| SECTION D: | Planned maintenance instruction and dates for order replacements. |
| SECTION E: | List of recommended Spare parts of consumables. |
| SECTION F: | List of "As-Built" Drawings (related to Working/Shop drawings) |

Until the Drawings, prints, transparencies and manuals referred to above have been received and approved by the PMC Contract shall not be considered as complete and payment of sum will be withheld until such drawings, etc. have been submitted to and approved by the PMC/Client and the cost of providing such records including proper submission thereof is deemed to be included in the Contract Sum quoted by the Contractor.

44. Reports by Contractor

- (a) The contractor shall maintain daily weather record. Any other inclemency in weather shall be recorded.
- (b) The Contractor shall file daily category-wise labour report. The report shall indicate scheduled requirement against actual strength.
- (c) The Contractor shall prepare Weekly Reports of planned and actual progress of work and subsequent week's scheduled work. These will also include material procurement status. These reports shall be submitted to the PMC & shall be reviewed in Review / Co-ordination Meetings.
- (d) The Contractor shall submit Monthly Progress Report as per format approved by PMC.

- (e) The Contractor, as directed by the PMC/Client shall prepare other Progress Charts and Schedules as may be required.

45. Compliance to Environmental Management Plan during Construction

The contractor shall comply to the following requirements to the protect the environment. Any cost involved in this regard shall be deemed to be included in the quoted rates of various items in the BOQ.

(i) Safety and Hygiene of Workers

Provide required level of sanitation / safety facilities/other amenities such as community toilets, community kitchen, suitable sewage disposal. Potable water required for drinking purpose shall be arranged for construction workers to ensure the health and safety of the workers during construction, with effective provisions for safety equipments or machinery such as:-

All dangerous parts of machinery are well guarded and all precautions for working on machinery are taken.

Maintain hoists and lifts, lifting machines, chains, ropes and other lifting tackles in good condition.

Use of durable and reusable formwork systems to replace timber formwork and ensure that formwork where used is properly maintained.

Ensure that walking surfaces or boards at height are of sound construction and are provided with safety rails and belts. Provide protective equipments such as helmets.

Provide measure to prevent fire. Fire extinguisher and buckets of sand to be provided in fire-prone area and elsewhere.

Provide sufficient and suitable light for working during night.

Ensure that measures to protect workers from materials of construction, transportation, storage and other dangers and health hazards are taken.

Ensure that the construction firm / division / company had sound safety policies.

Comply with the safety procedure, norms and guidelines (as applicable) as outlined in the Contract Document.

Adopt additional best practices and prescribed norms as in NBC 2005.

Contractor shall provide for his labour camp, community kitchen and shall use LPG or Diesel / kerosene oil as fuel. Contractor shall ensure that labourer do not cut trees and use as fuel.

Ensure the use of personnel protective devices by construction workers.

Health surveillance and treatment of workers by qualified doctor supported by one nurse and dispensary may be employed during construction phase.

(ii) Reduce Air Pollution during Construction

Ensure that the vegetation is cleared only from the areas where work will start right away. Much areas where vehicles do not ply. Apply gravel rock to the areas where mulching / paving is impractical.

Ensure that water spraying is carried out by wetting the surface by spraying water on

- (i) Any dusty material.
- (ii) Areas where demolition work is carried out.
- (iii) Any unpaved main-haul road and
- (iv) Areas where excavation or earth moving activities are to be carried out.

Cover and enclose the site by

- (i) Providing hoardings of not less than 3m high along the site boundary, next to a road or other.
- (ii) Public area.
- (iii) Providing dust screen, sheeting or netting to scaffold along the perimeter of a building.
- (iv) Covering stockpiles of dusty material with impervious sheeting.
- (v) Covering dusty load on vehicles by impervious sheeting before they leave the site and
- (vi) Transferring, handling/storing dry loose materials like bulk cement and dry pulverized fly ash inside a totally enclosed system.

Adopt measures to prevent air pollution in the vicinity of the site due to construction activities. There is no standard reference for this. The best practices should be followed (as adopted from international best practice documents and codes).

The contractor shall undertake the responsibility to prevent air pollution (dust and smoke) ensure that there will be adequate water supply/storage for dust suppression, devise and arrange methods of working and carrying out the work in such a manner so as to minimize the impact of dust on the surrounding environment and provide experienced personnel with suitable training to ensure that these methods are implemented. Prior to the commencement of any work, the method of working, plant equipment and air pollution control system to be used on-site should be made available for the inspection and approval of the Engineer-in-Charge to ensure that these are suitable for the project.

Dumpers carrying muck and construction waste shall have to be covered.

(iii) Reduce Noise Pollution during Construction

All construction equipment / machinery shall be good quality which produces less noise and cause minimum pollution to the environment. All equipment shall be maintained timely and periodical servicing shall be carried out.

Contractor shall ensure that no drilling and blasting work is carried out at night time. The construction workers exposed to noise making construction activity shall use personal protective devices like Ear muffs or ear plugs etc.

(iv) Reduction in Waste during Construction

The Contractor shall ensure maximum resource recovery and safe disposal of wastes generated during construction and to reduce the burden on landfill.

Employ measures to segregate the waste on-site into inert, chemical or hazardous wastes. Recycle the unused chemical / hazardous wastes such as oil, paint, batteries and asbestos. The inert waste shall be disposed off to Municipal Corporation / local bodie's dump yard and landfill sites.

Contractor shall ensure that non biodegradable materials like plastic, paints, emulsion, oils etc. are recycled and shall be taken away by a recycler for this purpose.

Contractor shall prepare a waste management plan before start of the work and submit to the Engineer for his approval. The plan shall show the name proposed recycling firms, the expected quantity of waste and tentative timing of disposals.

(iv) Preserve and Protect Landscape during Construction

1. To preserve the existing landscape and protect it from degradation during the process of construction select proper timing for construction activity to minimize the disturbance such as soil pollution due to spilling of the construction material and it's mixing with rainwater. The application of erosion control measures include protection of slopes greater than 10%. Sedimentation Collection System and run-off diversion systems shall be place before the commencement of construction activity. The preservation and protection of the existing vegetation by non-disturbance or damage to specified site areas during construction. A tree survey shall be carried out and data shall be recorded before starting construction activity. The trees that are retained on site are protected during the construction period using the following measures:

Ensure that the damage to roots shall be prevented during trenching, placing backfill, driving or parking heavy equipments. The dumping of trash, oil, paint and

other material is detrimental to plant health. These activities should be restricted to the areas outside of the canopy of the trees.

Ensure that the trees are not used for support, their trunks should not be damaged by cutting and carving by nailing posters and advertisements or in any other way.

Ensure that the lighting of fires or carrying out heat or gas emitting construction activity within the ground covered by canopy of the trees is not permitted.

The young trees of saplings identified for preservation within the construction site must be protected using tree guards of approved specification.

Maintenance activities should be performed, as and when needed, to ensure that vegetation remain healthy.

2. Stage/Divide the construction area into two or more sections to minimize the area of soil that will be exposed at any given time. Staging shall be done to separate undisturbed land from land disturbed by construction activity and material storage. Measures shall be followed for collecting drainage water run-off from construction areas and material storage sites and diverting water flow away from such polluted areas. Temporary drainage channels and perimeter dike/swale shall be constructed to carry the pollutant laden water directly to the treatment device or facility (municipal sewer line). The contractor shall make a plan which shall indicate how the above are accomplished on site well in advance of the commencement of the construction activity for approval of Engineer-in-Charge.
3. Spill prevention and control plans should clearly state measures to stop the source of the spill. Measures to contain the spill and measures to dispose the contaminated material and hazardous wastes. It should also state the designation of personnel trained to prevent and control spills. Hazardous wastes include pesticides, paints, cleaners and petroleum products.
4. A soil erosion and sedimentation control plan should be prepared by the contractor as approved by the Engineer-in-Charge prior to construction and should be applied effectively. Measures for prevention of top soil are given below:

Top soil, which is rich in organic content and essential for new vegetation, shall be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas and external services. It shall be stockpiled to a height of 40 cm in designated areas and reapplied during plantation of the proposed vegetation. The top soil shall be separated from the sub soil debris and stones larger than 50 mm in diameter. The stored top soil may be used as finished grade for planting areas.

Sedimentation basin, a temporary dam or basin at the lowest convenient point of the site shall be constructed for collecting, trapping and storing sediment produced by the construction activities. A flow detention facility shall also be constructed for reducing peak run-off rates. This would also allow most of the sediments to settle before the run-off is directed towards the outfall.

The contractor shall make Contour trenching. Contour trenching is an earth embankment or ridge-and-channel arrangement constructed parallel to the contours, along the face of the slope, at regular intervals on the lengths and slopes greater than 10% (1:10). They are used for reducing run-off velocity, increasing the distance of overland run-off flow. They are also used to hold moisture and minimize sediment loading of surface run-off.

46. Office Accommodation for Contractor, Engineers and other staff / Other facilities

- (i) The Contractor shall provide and maintain necessary office(s), workshops, stores, sanitary facilities, canteens etc. for themselves and their staff at site with the approval of the Engineer-in-Charge. A suitable layout for this shall be made and got approved by the Engineer-in-Charge.
- (ii) All temporary buildings and facilities shall be removed on completion of the project or at any earlier date as directed by the Engineer.

The expenses for obtaining statutory approvals wherever necessary for the above and maintenance of the same as well as running expenses shall be borne by the contractor at no extra cost.

- (iii) The Contractor shall install and maintain telephones/ fax facility with required extensions and computers having latest configuration and internet facility at his own cost and shall pay all the bills for the calls/charges and maintenance.

47. Labour Camp

The Contractor has to make their own arrangements for providing accommodation and other facilities for the labourers nearer to the site.
Accommodation for labourers inside the campus is not permitted.

48. Miscellaneous

(a) Monthly Progress Photographs

The Contractor shall arrange at his own cost to maintain a progress record of the works by taking postcard size colour photographs (preferably digitized photographs) minimum 6 Nos. or more per month or fortnight as directed by the PMC during the constructions stages and after completion and shall supply one set to the CLIENT and one set to the PMC at no extra cost. These photographs shall also be submitted as part of the contractors R.A. Bills. The Contractor will be required to submit monthly reports on the progress of his work as per the format approved by the PMC.

(b) Safety Regulations

Contractor shall be fully responsible for the safety of his Employees/Visitors/Contract Labour/Sub-Contractors Labour. The Contractor shall provide first-aid box readily available at site. The Contractor shall provide all safety measures as per labour safety rules applicable

(c) Labour Laws

The Contractor shall strictly adhere to all labour laws prevailing in the region. The contractor shall make timely payment of wages of his labour and the wages paid to the labour shall be equal to or more than the minimum wage prevailing at the time of payment. The Contractor shall comply with all applicable labour legislation.

(d) By-Laws of Statutory Authorities

The Contractor and his labour shall not violate municipal/sanitation/health or any other byelaws.

(e) Tax Deduction at Source

Taxes and surcharge as applicable, shall be deducted from the amount paid to the Contractor towards the value of the work done.

(f) General Lighting and Securities

The Contractor shall, throughout the execution, completion and remedying of the defects, provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or recommended by the PMC or by any duly constituted authority for the protection, of the works or for the safety and convenience of the public or others.

(g) Technical Examination

The Client shall have the right to cause Audit and Technical Examination of the works . The bills of the contractor including all supporting vouchers, abstracts, etc. to be made as per payments 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, the contractor shall be liable to refund the amount of over payment and it shall be lawful for the CLIENT to recover the same from the security deposit or Performance Security of the contractor or from any dues payable to the contractor. 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 , the amount of such under payment shall be duly paid.

In the case of any audit examination and recovery consequent on the same the contractor shall be given an opportunity to explain his case and the decision of the CLIENT shall be final.

In the case of Technical Audit, consequent on which there is a recovery from the contractor, recovery should be made with orders of the Accepting authority

whose decision shall be final. All action under this clause should be initiated and intimated to the contractor within the period of twelve months from the date of completion.

(h) **Site Order book**

For the purpose of quick communication between PMC and the Contractor / his representative, site order book shall be maintained at site as described below:

Any communication, relating to the works may be conveyed through recording in the site order book. Such a communication from PMC/Engineer in charge to the Contractor shall be deemed to have been adequately served in terms of the contract. The site order book shall have machine numbered pages and shall be carefully maintained and preserved by the PMC/Engineer in Charge.

(i) **Signage**

With prior approval of the Client, the Contractor shall provide at his own cost, a sign board at directed location of overall size 2 meters by 4 meters indicating name of the project, Client, Architect/Design Consultant, Project Management Consultant, Contractor and a three-D view of the project, as approved by the client. The signboard will be illuminated during night.

- (i) No idling charges or compensation shall be paid for idling of the contractor's labour, staff or P&M etc. on any ground or due to any reason whatsoever.
- (ii) Contractor shall mobilize and employ sufficient resources for completion of all the works as indicated in the agreed programme BAR CHART / Network Chart. No additional payment will be made to the contractor for any multiple shift work or other incentive methods contemplated by him in his work schedule even though the time schedule is approved by PMC.
- (iii) Steel conforming to BIS specifications (latest edition) shall be procured from as per approved list by the client by the contractors. The manufacturer has to give a certificate that the material supplied is not a re-rolled product. Relevant vouchers & test certificates will be produced by the contractor. Reinforcement steel, structural steel shall be stored and stacked in such manner so as to facilitate easy identification, removal etc. The contractor shall take proper care to prevent direct contact between the steel and the ground/ water for which he shall provide necessary arrangement at his own cost including ensuring proper drainage of area to prevent water logging as per directions of the PMC. Steel shall also be protected, by applying a coat of neat cement slurry over the bars for which no extra payment shall be made. Test certificates for each consignment of steel shall be furnished and tests to be got carried out from the authorized laboratory as per the directions of PMC, before incorporating the materials in the work.
- (iv) Pre-construction anti-termite treatment shall be carried out in co-ordination with the building work and shall be executed in such a manner that the civil works are not hampered or delayed by the anti-termite treatment. The waterproof treatment shall be of type and specifications as given in the schedule of quantities. The treatment against water-proofing of basement, roofs, water retaining areas and

termite infestation shall be and remain fully effective for a period of not less than 10(Ten) years to be reckoned from the date of expiring of the Defect Liability period, prescribed in the contract. At any time during the said guarantee period if the client or his representative finds any defects in the said treatment or any evidence of re-infestation, dampness, leakage in any part of buildings or structure and notifies the contractor of the same, the contractor shall be liable to rectify the defect or give re-treatment and shall commence the work or such rectification or re-treatment within seven days from the date of issue of such letter to him. If the contractor fails to commence such work within the stipulated period, the the client or his representative may get the same done by another agency at the Contractor's cost and risk and the decision of the Engineer -in-Charge for the cost payable by the contractor shall be final and binding upon him. Re-treatment if required shall be attended to and carried out by the Contractor within seven days of the notice from the client or his representative. Water proofing and anti-termite treatment shall be got done through approved / specialized agencies only with prior approval of the client or his representative. During the execution of work, if any damage shall occur to the treatment already done, either due to rain or any other circumstances, the same shall be rectified and made good to the entire satisfaction of the client or his representative by the contractor at his costs and risks.

- (v) Marine plywood or steel plates of minimum thickness as approved by PMC shall be used for formwork. The shuttering plates shall be cleaned and oiled after every repetition and shall be used. The number of repetitions allowed for plywood and steel shuttering shall be depending upon the condition of shuttering surface after each use and the decision of Engineer-in- Charge/PMC in this regard shall be final and binding on the contractor. No claim whatsoever on this account shall be admissible.
- (vi) **RECORDS OF CONSUMPTION OF CEMENT & STEEL** - For the purpose of keeping a record of cement and steel received at site and consumed in works, the contractor shall maintain records in the form approved by the PMC, showing columns like quantity received and used in work and balance in hand etc. The contractor's representative shall sign this register daily and PMC's representative.
- (vii) In case cement or steel quantity consumed is lesser as compared to the theoretical requirement of the same as per CPWD (as the case may be) specifications/ norms, the work will be devalued and/ or a penal rate (i.e. double the rate at which cement/ steel purchased last) recovery for lesser consumption of cement/ steel shall be made in the item rates of the work done subject to the condition that the tests results fall within the acceptable criteria as per CPWD (as the case may be) specifications otherwise the work shall have to be dismantled and redone by the contractor at no extra cost. In case of cement, if actual consumption is less than 98% of the theoretical consumption, a recovery shall be affected from the contractors dues at the penal rate for the actual quantity which is lower than 98% of theoretical consumption.
- (viii) The contractor shall prepare and finalize a ' Quality Assurance Programme' within 15 days from letter of acceptance PMC shall also carryout quality audit and quality surveillance of systems and procedures of Contractor's quality control

activities. The Quality Assurance Programme of Contractor shall generally cover the following:

- a) Procedure for selection and approval of material sources.
- b) Type, frequency, sampling and procedure of tests at site and laboratories.
- c) Work instruction for various stages of work.
- d) Formats for carrying out various tests.
- e) Checklist for Construction Practices.

The instruction/ approvals given by the PMC to contractor shall hold good if not objected by the client. In case instructions and approvals are given by client, the same shall supersede the instruction of PMC. In all cases decision of the Client shall be final and binding on the contractor.

- (ix) The contractor shall co-operate with other agencies working in the same project, compare plans, specifications and the time schedules and so arrange his work such that there will be no interruption/stoppage of the works.

However, the Contractor shall afford necessary facilities to execute the work simultaneously with other agencies executing the works for the same project. The Client shall entertain no claim on this account.

49. Role of Architect /Design consultant

Interaction & follow-up with Local/State/National/International statutory authorities and obtain approvals, no objection certificates, and commencement certificate, completion certificates, etc.

(i) Construction Phase

- Architect/Design Consultant will initiate activities that will be necessary in the performance of the services in accordance with the Master Plan. In case any change is required in design it will be attended. Any clarification required by clients/ Project Management Consultant/ contractor on design/drawing matters will also be attended.

- Approval of Sample

The Architect/Design Consultant will be involved in selection of samples wherever required by the client.

(ii) Post – Construction Phase

- Conduct inspection after confirmation from the client that the project is practically complete.
- Prepare a snag list; advise the Implementation Agency(s) to make good the defects within a specific period
- Upon completion of the remedial works, conduct a final inspection together with the Client and his representatives.

(iii) **Final Acceptance**

- After all defective works are made good certify to the effect that the project is completed in conformity with the provisions of the contract.
- Issue Certificate of Final Completion
- Submit the required documents to the statutory authorities after completion and obtain NOC for commissioning the facilities/ services as required.

(iv) **As-Built Drawings**

Review AS-BUILT drawings prepared by the Contractor prior to final drafting.

50. DECLARATION FOR STANDARD SPECIFICATIONS

I/We also declare that I/We possess a copy of standard specification as published by CPWD for Civil/Mechanical/Electrical/AC works a copy of "Specification for Roads and Bridges published by MoRTH for Road works" and shall carry out all items of works as per these specifications and as per relevant Indian standards as required by IISER TVM.

I/We * also declare that I/We have *perused in detail and examined closely the specifications and I/We * agree to be bound by and comply with all such specifications for this work.

I/We * declare that the work will be carried out as per the specification in tender document and as per the specifications said above. The items of work not covered in the specifications said above will be carried out as per the specifications in the relevant CPWD/MORTH specifications, and if not covered in such specifications the work will be carried out as in the relevant specifications of Bureau of Indian Standard, and if not covered in any of the above, the work will be carried out as directed in writing by the Engineer-in-charge.

I/We * declare that the rates quoted by me/us are on the basis of the above.

Date:

Signature of
Contractor with Stamp

*Strike out whichever is not applicable