NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE

Department of Biotechnology, Ministry of Science & Technology (Govt. of India)



e-Tender Notice for the award of work of Supply,
Installation, Testing & Commissioning of BMS
compatible BTU cum Flow meter on primary side of
PHE unit installed for Param Smriti Super Computing
Facility at Lab Bldg., National Agri-Food Biotechnology
Institute (NABI), Knowledge City, sector-81, MohaliPunjab, India

TENDER NO: NABI/ENGG/7(089)/2024-25

VOLUME-1

Tender Issued from: 02-04-2025

Last date of receipt of tender: 21-04-2025 up to 03:00 PM

Tender Opening date: 22-04-2025 @ 03:30 PM

NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE

e-NOTICE INVITING TENDER

1.0 Item rate e-Tenders in two parts [Part(A)-Technical Bid & Part(B)-Financial/Price Bid] are invited on the behalf of Executive Director, NABI from the specialized agencies/contractors/firms who have executed similar works with some Central Govt. department/State Govt. Department/Central Autonomous body/State Autonomous Body/Central PSU/State PSU/Central Govt. undertaking/State Govt. Undertaking/City Development Authority/Municipal Corporation of City/Reputed Private Companies & Organizations for carrying out the work of Supply, Installation, Testing & Commissioning of BMS compatible BTU cum Flow meter on primary side of PHE unit installed for Param Smriti Super Computing Facility at Lab Bldg., National Agri-Food Biotechnology Institute (NABI), Knowledge City, sector-81, Mohali-Punjab, India.

1.1 The work is estimated to cost **Rs.6,59,266/-** only inclusive of taxes. This estimate, however, is given merely as a rough guide.

1.2 Technical Eligibility Criteria for Bidders-

1.2.1 Experience of having successfully completed works during the last 07 years ending previous day of last date of submission of tenders.

Three similar completed works costing not less than the amount equal to 40% of estimated cost put to tender,

or

Two similar completed works, costing not less than the amount equal to 60% of the estimated cost put to tender,

or

One similar completed work of aggregate cost not less than the amount equal to 80% of the estimated cost.

Similar work means the work of Supply, Installation, Testing and Commissioning of HVAC works including Air Handling Units(AHUs)/Chillers/Ducting and Duct insulations/Valves/Flow Meter/BTU meter/ BMS Works (MANDATORY) etc. in Institutional campus/Universities/Hospitals/Multi-storey Office buildings/Commercial complexes/Power Plants/Refineries/Manufacturing Plants & Industries/Research Centres and Laboratories/Any other Industry/Organization.

- 1.2.2 The Agency/firm must have valid GST Registration No. The proof for the same shall be enclosed with the bid.
- 1.2.3 The Average Annual financial turnover of the firm should be at least 100% of the estimated cost during the last 03 consecutive financial years. Copies of duly attested statement (for last 03years) by Chartered Accountant should be provided.

1.2.4 The bidder shall have Employees Provident Fund (EPF) enlistment and proof of the same shall be attached along with the Technical Bid clearly showing the Provident Fund Code number. In case of non-eligibility/non-requirement of bidder for EPF enlistment, satisfactory document proof shall be enclosed by the bidder along with the Technical bid.

<u>Note-</u> The Tenderer shall produce definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified above. Completion Certificates/proofs need to be enclosed.

- 2. Agreement shall be drawn with the successful tenderer on prescribed format by the Competent Authority. Tenderer shall quote his rates as per various terms and conditions laid down in the tender document.
- 3. The time allowed for carrying out the work will be <u>04 weeks</u> from the date of start as defined in Schedule 'C' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
- 4. The site for the work is available.
- 5. (i)Tender documents can be downloaded directly from the NABI website **www.nabi.res.in** or E-Central public procurement portal **https://eprocure.gov.in/eprocure/app**.
- (ii)Tender forms, NIT and all the Tender documents consisting of all the set of terms & conditions of contract to be complied with by the contractor whose tender may be accepted, and other necessary documents can be seen in the office of Engineer-in-charge- Electrical, NABI on all working days between 10:00AM to 05:00PM.
- 6.(i)Tenders shall be accompanied with **Tender cost of Rs 590/-** only in the form of Demand Draft in favour of "National Agri-Food Biotechnology Institute" payable at Mohali.
- (ii)Tenders shall be accompanied with **Earnest money deposit of Rs.13,185/- only** in cash (up to Rs.10000/-)/Receipt Treasury Challan/Deposit at Call receipt of a scheduled bank/fixed deposit receipt of a scheduled bank/demand draft of a scheduled bank issued in favour of "National Agri-Food Biotechnology Institute" payable at Mohali.
- (iii) **Submission of Tender** The tender should be submitted/uploaded as e-Tender only in the following covers as detailed below:

1. Cover -1 marked as Technical Bid containing the following-

- a) Scanned copy of Demand draft (DD) of Rs.590/-only as cost of tender documents or cash receipt in case of tender fee submitted to NABI office in cash.
- b) Scanned Copy of Earnest Money Deposit (EMD) of Rs.13,185/-only in the prescribed format (i.e., DD/cash receipt, as the case may be)
- c) Scanned copies of Documents related to Technical eligibility criteria 1.2 i.e., Completion certificates/proofs of the similar works completed, and all other required documents as mentioned in the Technical Eligibility criteria i.e., GST registration document, Annual Financial Turnover certificates, EPF registration/enlistment document.
- d) Scanned copy of duly filled in and signed/stamped complete tender documents i.e., Volume-1

- 2. Envelope-2 marked as Price Bid containing the following-
- a) This shall contain the price for the execution of the works specified as per Volume-2 of the tender document.
 - Note: a) Documents to be uploaded in PDF format only (except Price Bid which should be in excel format only).
 - b) The original payment instrument like Demand Draft of any Nationalized Bank against Earnest Money and Cost of Tender document should be sent to the address- National Agri-Food Biotechnology Institute, Sector-81, knowledge City, PO- Manauli, SAS Nagar, Mohali 140306, Punjab by post/speed post/courier/by hand before bid opening date & time.

c) REGARDING TENDER FEE AND EMD EXMPTION

Only Tender Fee and EMD exemption is allowed for Micro & Small Enterprises (MSEs) who are registered with District Industries Centers (DICs)/Khadi & Village Industries Commission (KVIC)/ Khadi & Village Industries Board (KVIB)/ National Small Industries Corporation (NSIC)/MSEs registered under Udyog Aadhar Memorandum (UAM)/Directorate of Handicrafts and Handloom or any other body specified by Ministry of Micro, Small and Medium Enterprises (MoMSME) but relevant certificates of registration need to be enclosed by the bidder along with the Technical bid, claiming for exemption.

7. a)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 'C'. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'C' including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.

Upon submission of performance bank guarantee, the EMD submitted by contractor shall be returned.

- b) Upon award of work, contractor shall within 07 days sign the indemnity bond (performa prescribed at the end of tender document) for supply of minor materials and against violation of labour laws, other State/Central Acts/norms as amended from time to time, accidents, damages etc thus indemnifying NABI from negligence, loss of life/property, disputes, claims, violation arising out of the work due to contractor/his partner/workers/subcontractors etc. NABI shall have authority to take suitable action against contractor both financially as well as legally depending upon the violation by contractor/his partner/workers/sub-contractors etc
- 8. The description of the work is as follows:

Supply, Installation, Testing & Commissioning of BMS compatible BTU cum Flow meter on primary side of PHE unit installed for Param Smriti Super Computing Facility at Lab Bldg., National Agri-Food Biotechnology Institute (NABI), Knowledge City, sector-81, Mohali-Punjab, India.

Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the type of system (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 affect 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 at his own cost all materials, tools & plants, facilities for workers and all other services required 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 local conditions and other factors having a bearing on the execution of the work.

- 9. 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.
- 10. 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.
- 11. The Competent Authority reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
- 12. The tender for the works shall remain open for acceptance for a period of 75 days from the receipt of bid in case tenders are invited on 2 envelop system (as per CPWD manual 2019 Clause 4.14) (strike out as the case may be) if any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Institute shall, without prejudice to any other right or remedy, be at liberty to forfeit 100% of the said earnest money, as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.
- 13. This Notice Inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the Accepting/Competent Authority shall within 15 days from the date of award of work, sign the contract agreement consisting of: -
- a) The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming the tender as issued/downloaded at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
- b) Tender form-1

- 14. No price preference to any corporate society/Registered society, Govt. Public Sector undertakings / bodies shall be given, and tenders shall be exclusively dealt with on merit.
- 15. The contractor shall comply with the provisions of the Apprentices Act 1961, minimum wages Act 1948, Workmen's compensation Act 1923, contract labour (Regulation and Abolition Act 1970), payment of wages Act 1938, Employer's liability Act 1938, Maternity Benefits Act 1961, Employee's State Insurance Act, 1948, Employees Provident Fund Act, 1952 and the Industrial disputes Act 1947 as applicable and the rules and regulations issued there under and by the local Administration/ Authorities from time to time as well all provisions of law applicable to workmen. Failure to do so shall amount to breach of the contract and the Engineer-in-Charge may at his discretion terminate the contract. The Contractor shall also be liable for any pecuniary liability arising on account of violation by him of any of the said Acts and shall indemnify the Institute on that account. Institute will not be liable for any act or omission on the part of the contractor in so far as any violation of any of the aforementioned acts.
- 16. Each tenderer shall submit only one tender; either by him or as partners in a joint venture. A tenderer who submits or participates in more than one tender will be disqualified.
- 17. Unless otherwise stated, the contract shall be for the whole work as described in the "Schedule of Scope of Work" and the drawings. The contractor shall be bound to complete the whole work as described in the schedule of items of works and the drawings, including additional items, if any, as per drawings and instructions. The issuance of certificate of completion as issued by the Engineer-in-Charge shall be mandatory and will be conclusive proof of completion of work.
- 18. Interpretations, corrections and changes to the Tenders Documents shall be made by Addendum, if required.
- 19. Each Tenderer shall ascertain prior to submitting his Tender that he has received all Addenda issued and he shall so acknowledge their receipt in his Tender.
- 20. The provisions in the Tender documents shall govern over the contents of the above paragraphs if in contradiction or variation.
- 21. All pages of the Tender should be page numbered and indexed.
- 22. It is the responsibility of tenderer to go through the tender document to ensure furnishing all required documents in addition to above, if any.
- 23. The authorized signatory of the tenderer must sign the tender duly stamped at appropriate places and initial all the remaining pages of the tender.
- 24. A tender, which does not fulfil any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.
- 25. Only E-tenders shall be accepted, Tenders sent by fax/telex/by hand etc. shall not be acceptable.
- 26. NABI reserves the right to increase or decrease the scope of work.

- 27. The statutory deductions such as TDS, security 5 % from RA bills, labour cess, WCT, etc shall be deducted at source as per prevailing percentage/rates as amended from time to time by Central/Sate Govt.
- 28. The contractor shall give a list of both gazetted and non-gazetted NABI employees related to him.

NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE

Item rate Tender & Contract for Works

(i)	Tender for the work of: - Supply, Installation, Testing & Commissioning of BMS
con	patible BTU cum Flow meter on primary side of PHE unit installed for Param
Smi	riti Super Computing Facility at Lab Bldg., National Agri-Food Biotechnology
Inst	itute (NABI), Knowledge City, sector-81, Mohali-Punjab, India.

- To be uploaded by the bidder on E-Central public procurement portal https://eprocure.gov.in/eprocure/app by 15:00 hours on 21-04-2025. (ii)
- (i

(iii) To be opened at 15:30 hours on 22-04-2025.					
Tender Fee		Rs.590 /- only (Non-refundable)			
Estimated cost of work		Rs. 6,59,266/- only			
Performance Guarantee		@ 5% of Tendered value			
Security Deposit		@ 5% of value of work completed			
Earnest Money Deposit (EMD)		Rs.13,185/- only			
Place of opening of tender document	:	National Agri-Food Biotechnology, Knowledge City, sector-81, Mohali-Punjab			
Completion period	:	04 weeks from the date of start			
Issued to*:					
Signature of officer issuing the documents*:					
Designation*:					
Date of Issue*:					
*Not to be filled if tender is downloaded from website.					

TENDER

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

I/We hereby tender for the execution of the work specified for the Institute within the time specified in Schedule 'C' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in General Rules and Directions and in Clauses of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for one hundred and twenty (120) days from the due date of its opening/ 120 days from the date of opening of Price bid in case tenders are invited on 2/3 envelop system (strike out as the case may be) and not to make any modification in its terms and conditions.

A sum of Rs.13,185/- only is hereby forwarded in cash/receipt treasury challan/deposit at call receipt of a scheduled bank/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by a scheduled bank as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the Executive Director, NABI 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 the Executive Director, NABI or the 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.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in the Institute 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.

Dated:
Signature of Contractor Witness
Postal Address:
Occupation:

CONDITIONS OF CONTRACT

Definitions

- The Contract means the documents forming the tender and acceptance thereof and the formal agreement executed between competent authority on behalf of the Executive Director, NABI and the contractor, together with the document referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by 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: -
- a) 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.
- b) The **site** shall mean the land/ or other places like building etc. 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.
- c) The **contractor** shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such, individual, firm or company.
- d) Institute shall mean the National Agri-Food Biotechnology Institute (NABI), Mohali.
- e) Administration shall mean the administration of NABI, Mohali.
- f) **Local authority** shall mean the Municipal Corporation of Mohali and shall also deemed to include any other body, State Govt. Department or department of the administration.
- g) Accepting Authority shall mean the authority mentioned in Schedule 'C'.
- h) **Engineer-In charge** shall mean the Assistant Engineer-Electrical of NABI.
- i) **Schedule(s)** referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers.
- j) **Department** means National Agri-Food Biotechnology Institute (NABI), Mohali.
- k) **District Specifications** means the specifications followed by the State Government in the area where the work is to be executed.
- I) **Tendered value** means the value of the entire work as stipulated in the letter of award.
- m) Date of commencement of work: The date of commencement of work shall be the date of start as specified in schedule 'C' or the first date of handing over of the site,

whichever is later, in accordance with the phasing if any, as indicated in the tender document.

- n) 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 owner of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to owner's faulty design of works.
- o) **Market Rate** shall be the rate as decided by the Engineer-in-Charge on the basis of the cost of materials and labour as per market at the site where the work is to be executed plus the percentage, all overheads and profits.

Works to be carried out

3. 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 Scope of Work (Schedule A) 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.

Sufficiency of Tender

4. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.

Discrepancies and Adjustment of Errors

- 5. 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.
 - 5.1 In the case of discrepancy between the schedule of work, the Specifications and/or the
 - Drawings, the following order of preference shall be observed: -
- a) Description of Schedule of Scope of Work.
- b) Particular Specification and Special Condition, if any.
- c) Drawings.
- d) CPWD Specifications with up to date amendments.
- e) Indian Standard Specifications of B.I.S.

- 5.2 If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.
- 5.3 Any error in 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.
- 5.4 In case of any conflict/discrepancy on any specification or item to be executed or any other issue related to the contract, the CPWD guidelines shall be referred to for the same with further recommendations and approvals of the Competent Authority.
- 6. No payment for the work done will be made unless contract is signed by the contractor.
- 7. The contractor shall give a list of both gazetted and non-gazetted NABI employees related to him (if any).

CLAUSES OF CONTRACT

CLAUSE 1

- (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 from the date of issue of letter of acceptance. This period can be further extended by the Competent Authority up to a maximum period as specified in schedule 'C' 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 Cash (in case guarantee amount is less than Rs.
- 10,000/-) or Deposit at Call receipt of any scheduled bank/Banker's Cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay Order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) 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 Government 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 Government to make good the deficit.
- (ii) The Performance Guarantee shall be initially valid up to the stipulated date of completion of work plus 60 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.
- (iii) The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which the owner 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 owner any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of 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 Competent Authority.

CLAUSE 1 A

Recovery of Security Deposit

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit Department at the time of making any payment to him for work done under the contract to **deduct a sum at the rate of 5% of the gross amount** of each running and final bill till the sum deducted will amount to security deposit of 5% of the tendered value of the work. Such deductions will be made and held by Government 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 the Government 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 the Government 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 Government 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 Engineer-in-Charge, 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 shall be collected from the running bills and the final bill of the contractor at the rates mentioned above.

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 lac subjects to the condition that amount of such bank guarantee, except last one, shall not be less than Rs. 5 lacs. Provided further that the validity of bank guarantee including the one given against the earnest money 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 Government on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the authority specified in schedule 'C' (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 @ half percent (0.5%) per week of delay for delay of work to be computed on per day basis provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 5% 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.

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 Government service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or 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 Government.
- (vi) If the contractor shall enter into a contract with Government 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 Government 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 proceedings 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 composition 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 the court to make a 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 Competent Authority 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 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 Government
- (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. 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 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 Competent Authority by Clause-3 thereof, shall have become exercisable and the same are not exercised, the non-exercise hereof 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 expenses 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 'C' 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 'C' 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, Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the performance guarantee absolutely.

- 5.2 If the work(s) be delayed by: -
- (i) Force majeure, or
- (ii) Abnormally bad weather, rains or
 - (iii) Serious loss or damage by fire, or
- (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 owner in executing work not forming part of the Contract, or
- (vi) Non-availability of stores material, which are the responsibility of owner to supply or
- (vii) Non-availability or break down of tools and Plant to be supplied or supplied by Government, or
- (viii) Any other cause which, 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 authority as indicated in Schedule 'C' but shall nevertheless use constantly his best endeavours 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 to the authority as indicated in Schedule 'C'. 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 'C' 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 'C' in writing, within 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 'C' and this shall be binding on the contractor.

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 off 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

After the work is carried out by the Contractor carried out, the contractor shall remove the wastage, debris etc. from the site completely arising out during the execution of the work. 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 (NOT APPLICABLE)

Completion Plans to be Submitted by the Contractor

The contractor shall submit completion plan for various executions, services etc. 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 Competent Authority concerned and in this respect the decision of the Competent Authority shall be final and binding on the contractor.

CLAUSE 9A

Payment of Running bills

The running bills shall be submitted by the contractor as per the progress of work done at site. However, the following will be the basis of payment for the items claimed under running bills:

- a) Gross Payment to be made on supply of material at site: 40% of Item value
- b) Gross Payment to be made on satisfactory Installation, Testing & Commissioning of material at site: 60% of Item value

After receipt of running bill at NABI, the contractor shall get the work executed/claimed in bill checked and verified from the Engineer-In charge within 02weeks time and after satisfactory verification of work executed at site, the payment to the contractor shall be released within a maximum of 03weeks time from the date of verification of work executed.

CLAUSE 9B

Payment of Final Bill

The final bill shall be submitted by the contractor in the same manner as specified in interim bills within 01month 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 here in under, the period being reckoned from the date of receipt of the bill by the Engineer-in- Charge or his authorized Asstt. Engineer, complete with account of materials issued by the Department and dismantled materials.

- i. If the Tendered value of work is up to Rs. 45 lacs: 2 months
- ii. If the Tendered value of work is more than Rs.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

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 Government. 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 specifications, approval of the Engineer-in-Charge shall be issued after the test results are received.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analysed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests 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

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 substituted 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.

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 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 after approval from Competent Authority shall have power

- i) Execute any extra item which was not initially considered in tender or could not be envisaged during estimation. The contractor shall be paid for same item based on DSR rates or market rate in case item is not available in DSR. In case of market rate, contractor has to submit analysis of rate in CPWD DAR format along with quotation/back up documents.
- ii) 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

- (iii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein 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.
- **12.1** The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered be extended, if requested by the contractor, as follows:
- (i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus
- (ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.

12.2 A. For Project and original works:

Deviation, Extra Items and Pricing

In the case of extra item(s) (items that are completely new, and are in addition to the 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-scheduled items (Non-DSR items) shall be made as per the prevailing market rate.

Deviation, Substituted Items, Pricing

A. For Project and original works:

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

(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: **NOT APPLICABLE**

Deviation, Deviated Quantities, Pricing

A. For Project and original works:

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule C, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within 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 C, 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 lacs: 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 C, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.

- **12.4** For the purpose of operation of Schedule "C", the following works shall be treated as works relating to foundation unless & otherwise defined in the contract:
- (i) For Buildings: All works up to 1.2 metres above ground level or up to floor 1 level whichever is lower.
 - (ii) For abutments, piers and well staining: All works up to 1.2 m above the bed level. (iii) For retaining walls, wing walls, compound walls, chimneys, overhead reservoirs/ tanks and other elevated structures: All works up to 1.2 metres above the ground level.
- (iv) For reservoirs/tanks (other than overhead reservoirs/tanks): All works up to 1.2 metres above the ground level.

- (v) For basement: All works up to 1.2 m above ground level or up to floor 1 level whichever is lower.
- (vi) For Roads, all items of excavation and filling including treatment of sub base.
 - **12.5** Any operation incidental for testing 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 Competent Authority shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer-in-Charge shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

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.
- (iii) 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 Government, 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 Government 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 Government 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 Government 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 Competent Authority, (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 owner or where it affects whole of the works, as an abandonment of the works by owner, 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 owner, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Engineer-in-Charge may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within 30 days of the expiry of the period of 3 months.

CLAUSE 16

Action in case Work not done as per Schedule of Scope of Work

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-Incharge, 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, that any work has been executed with unsound, imperfect, or unskilful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months (six months in the case of work costing Rs. 10 Lac and below except road work) of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith

rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineering- 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 'C' 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 Competent Authority 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 liability 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 or if any defect, shrinkage or other faults appear in the work within 12 months 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 workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of 12 months 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.

After the notification of defect to the contractor by the Engineer-In charge, the contractor shall attend the complaint/defect within 48 hrs. of such notification and will rectify the same within the reasonable time limit. In case of non-rectification of defect by the contractor, the NABI shall get it rectified from some external agency at the risk and cost of the contractor.

The Defect Liability Period (DLP)/Warranty period of work done by the contractor is 12 months from the date of completion of work as certified by the Engineer-In-Charge. In addition to this, extended warranty, if any for items as given by the manufacturer will also be applicable. Warranty will be inclusive of all accessories and it will also cover all wearable & non-wearable components. Replacement and repair will be under taken for the defective goods.

CLAUSE 18

Contractor to Supply Tools, Tackles, ladders, Transport, Machinery 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 C. In addition to this, appliances, Instruments, 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 specifications or other documents forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in- Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer-in-Charge at the expense of the contractor and the expenses may be deducted, from any money due to the contractor, under this contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portion thereof.

CLAUSE 19

Labour Laws to be complied by the Contractor

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

The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996. Any failure to fulfil 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 19 B

Payment of wages:

- (i) The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as defined in the C.P.W.D 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 unauthorized 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-fulfilment 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.
- (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 thereunder from time to time.
- (vi) The contractor shall indemnify NABI against payments to be made under and for the observance of the laws aforesaid and any other law, 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 commission 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 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 and Abolition) Act, 1970, amended from time to time and rules

framed thereunder and other labour laws affecting contract labour that may be brought into force from time to time.

CLAUSE 21

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 person in the employ of Government in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer in - Charge on behalf of the President of India shall have power to adopt the course specified in Clause 3 hereof in the interest of Government and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.

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 owner on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, the contractor may file for arbitration. The arbitrator shall be appointed by Competent Authority, NABI & arbitration shall take place at Mohali under arbitration act.
- ii) The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.
- iii) It is also a term of the contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.

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 the case of any class of work for which there is no such specifications, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers' specifications, if not available then as per District Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

CLAUSE 29

Withholding and lien in respect of sum due from contractor

- 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 owner 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 owner 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 owner 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 owner or any contracting person through the Engineer-in- Charge pending finalization of adjudication of any such claim. It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or owner will be kept withheld or retained as such by the Engineer-in Charge or owner 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 Engineerin-Charge or the owner 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) Government shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical

examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for government 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 owner to the contractor, without any interest thereon whatsoever.

CLAUSE 31

Hire of Plant, Instruments & Machinery

The contractor shall arrange at his own expense all tools, plant, Instruments, ladders, machinery and equipment (hereinafter referred to as T&P) required for execution of the work.

CLAUSE 32

Employment of Technical Staff and employees

Contractors Superintendence, Supervision, Technical Staff & Employees

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.

In case contractor fails to depute the technical representative at site rate of recovery shall be imposed as per provisions in CPWD manual 2014 as amended/revised by CPWD from time to time.

CLAUSE 35

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 Executive Director, NABI shall have the option of terminating the contract without compensation to the contractor.

CLAUSE 36

If relative working in department then the contractor not allowed to tender

The contractor shall not be permitted to tender for works if officials responsible for award and execution of contracts. 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 NABI. Any breach of this condition by the contractor would render him debarred from tendering.

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

CLAUSE 37

No Gazetted Engineer to work as Contractor within one year of retirement

No engineer of gazetted rank or other gazetted officer employed in NABI Engineering division or administrative duties shall work as a contractor or employee of a contractor for a period of one year after his retirement from NABI service without the previous permission of Competent Authority at NABI 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 Competent Authority at NABI as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.

CLAUSE 40

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 thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the owner 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.

Applicable Law

The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.

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 ½ to 1(½ horizontal and 1 vertical.)
- 2. Scaffolding of staging more than 3.6 m (12ft.) 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 at least 90 cm. (3ft.) 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 (12ft.) 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. (3ft.)
- 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 9m. (30ft.) 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 up to and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least $\frac{1}{4}$ " 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 may be 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.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.
- 7. 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 white washing 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) Stone breaker 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 at least for an hour before the workers are allowed to get into the 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 measure are adhered to: -
- (a) Entry for workers into the line shall not be allowed except under supervision of higher officer.
- (b) At least 5 to 6 manholes upstream and downstream should be kept open for at least 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, workers should be sent only with Oxygen kit.
- (e) Safety belt with rope should be provided to the workers. While working inside the manholes, 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 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 up to which a 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 a source of friction on any inflammable gas that might be present.
- (I) The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole.
- (m) The workers shall be provided with Gumboots or non-sparking shoes bump helmets and gloves non-sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs 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.
- (v) 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. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken: -
- (a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- (b) 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.
- (c) 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.
- 8. An additional clause (viii)(i) of Central Public Works Department Safety Code (iv) the Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, wherever 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 a 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 scraping.
- (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 officer.
- (viii) Medical examination may be done further in such cases.
- (ix) Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
- 9. When the work is done near any place where there is risk of drowning, all necessary equipment's should be provided and 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.
- 10. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions:
- (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 a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
- (c) 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.
- (d)In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block 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 a 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.
- (e)In case of departmental machines, the safe working load shall be notified by the Electrical Engineer in- Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.
- 10.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 energized, 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.
- 11.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.

- 12.. 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.
- 13.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 the Labour Officer or Engineer-in-Charge of the department or their representatives.
- 14. Contractor shall indemnify NABI from the disputes arising out of loss of life to its workers, material during the whole duration of contract agreement including defect liability period.
- 15. Notwithstanding the above clauses from (1) to (16), 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.

OTHER CONDITIONS

- 1. The safety precautions/provisions as per CPWD Safety Code mentioned in CPWD General Condition of Contract 2020 may be required to execute the work by contractor free of cost.
- 2. Model Rules for the Protection of Health and Sanitary Arrangements for Workers to be followed by Contractor as per CPWD General Condition of Contract 2020.
- 3. Contractor Should be follow C.P.W.D. Contractor's Labour Regulations as per CPWD General Condition of Contract 2020.
- 4. List of acts and omissions for which fine can be imposed to be implemented on site as per CPWD General Condition of Contract 2020

Note: - The above safety precautions/provisions along with any other as may be required to execute the work shall be provided by contractor free of cost.

SCHEDULE-A

SCOPE OF WORK

ABOUT THE WORK/PROJECT:

National Agri-Food Biotechnology Institute (NABI) is a Central Autonomous Institute under Department of Biotechnology, Ministry of Science and Technology, Govt. of India. The Institute has developed in 35 acres in Knowledge City, sec-81, Mohali. The NABI indents to install and commission the BMS compatible BTU cum flow meter on Existing Chiller Line and on primary side of BHU unit installed for Param Smriti data centre at Lab Bldg., NABI as per the Schedule-D of Items specified in this Tender Document

(Volume-1). The contractor shall strictly comply to the approved technical specifications and approved makes list as specified below:

All the works shall be executed in accordance with CPWD General Specifications for Heating, Ventilation & Air Conditioning (HVAC)-2024, CPWD General Specifications for Electrical Works Part I Internal – 2023, CPWD General Specifications for Electrical Works Part II External - 2023

1.0 SUBMITTALS

The contractor shall submit data and documents specified in the following paragraphs.

- A. **Shop Drawings:** Submit shop drawings for each product and accessory required. Include information not fully detailed in manufacturer's standard product data, including, but not limited to, the following:
 - 1. Piping Layout showing different pipe sizes along with positioning of BTU cum Flow meter unit as per the site requirement.
- 2. Installation information, including, but not limited to, weights and dimensions.
- 3. Information about terminal locations for power and control connections.
- B. **Wiring Diagrams:** Submit wiring diagrams detailing power, signal, and control systems, clearly differentiating between manufacturer installed wiring and field-installed wiring, and between components provided by the manufacturer and those provided by others.
- C. **Operation and Maintenance Data:** Submit operation and maintenance data to include in operation and maintenance manuals, including, but not limited to, safe and correct operation of AHU functions.

NOTE: All the material as per the scope of work shall be got approved as sample/drawings/data sheets/technical details from the Engineer-In charge before procurement at site by the contractor.

2.0 Result

The technician of the contractor shall submit a full report and installation certificate on completion of commissioning.

3.0 Training

As part of the commissioning procedures, the manufacturer shall train the owner's representatives for full operation & routine/preventive maintenance of the system.

APPROVED MAKES LIST

S.No	Item	Approved Makes
1	Ultrasonic Heating & Cooling Flow Meter /BTU Meter	Kamstrup / Siemens / Honeywell / ABB
2	Butterfly Valves	Advance / Honeywell / Audco / Leader
3	Insulation	A-FLEX / K-FLEX / ARMACELL
4	Standalone DDC Control Panel with on board Ethernet port	Honeywell-Trends

5	Cables/ Wires	POLYCAB / FINOLEX / KEI
6	Cat-6 networking cable	Belden / Molex / Panduit / Simon / AMP / Norden / Finolex / Delton

NOTE: The make of any other Item if not specified in the tender document shall be got approved from Engineer-In charge before procurement at site by the contractor.

SCHEDULE-B

Reference to Conditions of Contract

Name of Work: Supply, Installation, Testing & Commissioning of BMS compatible BTU cum Flow meter on primary side of PHE unit installed for Param Smriti Super Computing Facility at Lab Bldg., National Agri-Food Biotechnology Institute (NABI), Knowledge City, sector-81, Mohali-Punjab, India.

1) Estimated cost of work Rs.6,59,266/- only

2) Earnest Money Deposit : Rs.13,185/-

3) Performance Guarantee : 5% of tendered value4) Security Deposit : 5% of tendered value

SCHEDULE -C

GENERAL RULES & DIRECTIONS

Officer inviting Tender: Manager- Admin

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3.

See below

Definitions:

Clause 1 (i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance/award
Clause 2 Authority for fixing compensation under clause 2 Executive Director, NABI
Clause 5
Number of days from the date of issue of letter of acceptance for reckoning date of start of work – 07 days from the date of site clearance given by NABI
Time allowed for execution of work. 04 weeks after reckoning date of start of work
Authority to decide: (i) Extension of time
Clause 12
Type of work*: Supply, Installation, Testing & Commissioning of BMS compatible BTU cum Flow meter on primary side of PHE unit installed for Param Smriti Super Computing Facility at Lab Bldg., National Agri-Food Biotechnology Institute (NABI), Knowledge City, sector-81, Mohali-Punjab, India.
12.2 & 12.3 Deviation Limit beyond which clauses
12.2 & 12.3 shall apply for building work
12.5 (i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items)

Amendments	as	per	CPWD	Works	Manual	2024	with	up	to	date
(ii) Deviation Limit for item	ns m	entio	ned in ea	arth						
work subhead of DSR and related items as per CPWD Works Manual 2024 with up to date amendments										
Clause 16 Competent Authority for d	lecid	ing re	educed ra	ates.	Execu	ıtive D	irecto	or, N	ABI	

Clause 18

Any machinery, Instruments, tools & plant, ladder etc. required during execution of allotted work shall be provided by contractor. No extra payment shall be paid to contractor for any machinery, Instruments, tool & plants etc.

Clause 36 (i)

Requirement of Technical Representative(s) and recovery Rate----- As per

requirements laid down in tender and as per CPWD Works Manual 2024 Or as amended from time to time by CPWD

SCHEDULE-D

ITEMS FOR EXECUTION

S.No	Item description	Unit	Qty.
1	Supply, Installation, Testing and Commissioning of Ultrasonic heating & cooling flow meter of dia 65 mm complete with Digital display microprocessor technology and ultrasonic measuring techniques, data logger, flanges, gasket, thermo well, fittings, sensors, control wiring and necessary hardware complete in all respects.	Nos.	01
2	Supply, Installation, Testing and Commissioning of Butterfly valves dia 65 mm, flanges, gasket, nut & bolts, fittings, pipe etc. complete as required.	Nos.	03
3	Supply, Installation, Testing and Commissioning of insulation of the newly laid meter and valves etc. complete as required with Nitrile 19mm thick in double layer pasted on the pipe with suitable adhesive and cladded with Al sheet of 26Gauge with necessary hardware.	Nos.	01
4	Supply, Installation, Testing and Commissioning DDC Controller Panel: The controllers shall be 32 bit microprocessor based standalone with real time clock. The DDC's shall be capable of peer to peer communication with other DDCs and lockable MS mounting cabinets duly powder coated connector strip, internal wiring and space to house controller & relays, connector strip current transformer, MCB, internal wiring. Use of AI to DI multiplexer is also not acceptable. DDCs shall be compact factories fitted with IO Points with 6 Nos. Immersion Temp Sensor for CHW line with brass thermo well. Measuring range: 30-110°C, Accuracy: ±1.3 °C.	Nos.	01
5	Supply, Laying, Testing and Commissioning of control cum transmission wiring of 2 core X 1.5 sq. mm ² copper wire, armoured ATC conductor cable for Powering DDC, actuators etc. in suitable PVC conduits.	Mtr.	450
6	Supply & Installation of Armoured Cat-6 networking cable. In suitable PVC conduits.	Mtr.	100

FORM OF PERFORMANCE BANK GUARANTEE

	having offered to accept the terms and conditions of the proposed agreement between
1.	We,
2.	We,
3.	We, the said bank further undertakes to pay the Institute 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 our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.
4.	We,
	We,
5.	This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
6.	We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Institute in writing.

7.	This guarantee shall be valid up to satisfactory completion of work at site and as per successful completion of time schedule period given in tender documentunless extended on demand by the Institute. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs (Rupees) 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 offor(indicate the name of the Bank)

ANNEXURE-1

INDEMNITY BOND (VIOLATION OF LAWS, NORMS, ACCIDENTS, DAMAGES ETC)

(To be submitted by bidder on Non-Judicial Stamp Paper of Rs.100/- only) Name of the work- Supply, Installation, Testing & Commissioning of BMS compatible BTU cum Flow meter on primary side of PHE unit installed for Param Smriti Super Computing Facility at Lab Bldg., National Agri-Food Biotechnology Institute (NABI), Knowledge City, sector-81, Mohali-Punjab, India.

KNOW all men by these presents that I/Weaddress) do hereby execute Indemnity Bond in favour Biotechnology Institute having their office at Knowledge City the projectunder consideration.	of National Agri- Food Sector-81, Mohali and for
On this day of2024	
THIS DEED WITNESSETH AS FOLLOWS:	

THIS DEED WITNESSETH AS FOLLOWS:

I/We, (Name of Contractor) hereby do indemnify and save harmless NABI having their office at Knowledge City, Sector-81, Mohali from the following: -

- Any third-party claims, civil or criminal complaints/liabilities/material/life loss during site mishaps and other accidents such as snake bites etc or disputes and/or damages occurring or arising out of any mishaps at the site due to faulty work, negligence, faulty execution/construction and/or for violating any law, rules and regulations in force, for the time being while executing/executed allotted works by me/us.
- Any damages, loss or expenses due to or resulting from any negligence or breach of duty on the part of me/us or any sub-Contractor/s if any, servants or agents.
- Any claims by an employee of mine/ours or of sub-Contractors if any, under the workman compensation act and employers' Liability act, 1939 or any other law rules and regulations in force for the time being and any acts replacing and/or amending the same or any of the same as may be in force at the time and under any law in respect of injuries to persons or property arising out of and in the course of execution of the Contract work and/or arising out of and in the course of employment of any workman/employee.
- 4. Any act or omission of mine/ours or sub-Contractor/s if any, our/their servants or agent which may involve any loss, damage, liability, civil or criminal action.

IN WITNESS WHEREOF THE HAS SET HIS/THEIR HANDS ON THIS DAY OF SIGNED AND DELIVERED BY THE AFORESAID

IN THE PRESENCE OF WITNESSES:

1.

2.

ANNEXURE-2

PRICE REASONABILITY CERTIFICATE

Ref No.	Date:
This is to certify that we have offered the log Bid dated w.r.t Tender No. NABI Installation, Testing & Commissioning of Exprimary side of PHE unit installed for Palab Bldg., National Agri-Food Biotechnosector-81, Mohali-Punjab, India.	/ENGG/7(89)/2024-25 regarding Supply, BMS compatible BTU cum Flow meter on ram Smriti Super Computing Facility at
We would like to certify that the quoted prices the same item on lesser rates than those be nor they will do so till the validity of offer or later.	ing offered to NABI to any other customer
	Seal and Signature of the bidder

Note: This certificate should be on the letter-head of the bidder and should be signed by an authorised person. It should be enclosed by the Bidder with the technical bid documents.

ANNEXURE-3

MANDATORY SITE VISIT FORMAT

REF TENDER NO: NABI/ENGG/7(89)/24-25

NAME OF WORK: Supply, Installation, Testing & Commissioning of BMS compatible BTU cum Flow meter on primary side of PHE unit installed for Param Smriti Super Computing Facility at Lab Bldg., National Agri-Food Biotechnology Institute (NABI), Knowledge City, sector-81, Mohali-Punjab, India.

This	is	to	certify	that	I/We	(Name	of	Representative,	Designa	ation)	
								(Name	of	
contra	actor/	firm v	with add	ress) ha	ave visit	ed the sit	e on			and	
are thoroughly aware of the work, technology/machinery installed at NABI campus in											
relation to the above-mentioned work. We understand the execution site, guidelines,											
working hours etc. and shall adhere to the contract stipulations, terms, conditions and											
clauses. We, understand that, if any equipment/machinery, other parameters had been											
missed out by us during site visit, it shall be deemed to be included in our scope of work											
as per NIT terms and conditions.											
Date of visit:						Signature of Firm's Representative who had visited the site					
								Name of Represer	ntative & De	signation	
\/orifi	ad the	st Eirr	n had via	itad tha	nita an						
veiiii	eu ina	מנ רווו	II IIau VIS	ited the	Site on						
								Signature of Er	-	Charge on If of NABI	

Note: - Site visit is allowed only on working days (Monday to Friday: 9 am to 5 pm except on Holidays)