

# ANNEXURE-GCC

## Tender Package No: 5C under Phase-I

**Dated: 24.04.2021**

**For the Supply, Installation, Testing & Commissioning of Audio and Video System etc for Remaining Buildings at the Permanent Campus of Nalanda University (NU), Rajgir, Bihar.**

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**1. DEFINITIONS:**

- 1.1 GCC- General Condition of Contract.
- 1.2 The **Contract** means the documents forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of the President of India and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in- Charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.

In this document the following words and expressions shall carry the meaning hereby assigned to them:

- 2.1 "Owner/Purchaser/Employer/NU" shall mean and refer to the Nalanda University, Rajgir, Bihar
- 2.2 "Vice Chancellor" shall mean and refer to the Vice Chancellor of NU
- 2.3 "Registrar" shall mean and refer to Registrar of NU
- 2.4 "Project Manager" shall mean and refer to the person/Project Management Consultants (PMC) nominated as Project Manager by NU and shall report to Engineer in Charge.
- 2.5 "Architect Consultants" shall mean and refer to the Consultants appointed by NU as Architect Consultants.
- 2.6 "MEP Consultant" shall mean and refer to the Consultants appointed by "Architect Consultants" as MEP Consultants.
- 2.7 "Engineer in Charge" shall mean and refer to an authorized Engineer Officer appointed by NU who shall supervise and be In-Charge of the work.

- 2.8 "Bidder" shall mean and refer to an individual, proprietary firm, firm in partnership, limited company (private or public), joint venture or corporation but shall not include a special purpose vehicle.
- 2.9 "Year" means financial year unless stated otherwise.
- 2.10 "Market Rate" shall be the rate as decided by the Engineer-in-Charge on the basis of the prevailing cost of materials and labour at the site (where the work is being executed) involved in executing that item plus the percentage mentioned in Schedule 'F' to cover, all overheads and profits, **provided that no extra overheads and profits shall be payable on the part(s) of work assigned to other agency(s) by the contractor as per terms of contract.**

## **2. METHOD OF APPLICATION:**

- 3.1 If the bidder is an individual, the application for submitting tender shall be signed by such individual above the full type written name and current address.
- 3.2 If the bidder is a **proprietary concern**, the application for submitting tender shall be signed by the proprietor above full type written name and the full name of the proprietor firm with its current address.
- 3.3 If the bidder is a partnership firm, the application for submitting tender shall be signed by all the partners of the partnership firm above their full typewritten names and current address, or, alternatively, by one or more partners holding power of attorney for the firm and/or other partners. A notarized copy of such power of attorney shall be submitted along with the application and it must be disclosed that the firm is duly registered under the **INDIAN PARTNERSHIP ACT 1932**. The application shall also be accompanied with a notarized copy of the partnership deed and current addresses of all the partners of the firm.
- 3.4 If the bidder is a limited company or a corporation, the application for submitting tender shall be signed by a duly authorized person holding power of attorney for signing the application accompanied by a copy of the power of attorney. The bidder shall also furnish a notarized copy of the Memorandum and Articles of Association of the company.

## **3. FINAL DECISION MAKING AUTHORITY**

The NU reserves the right to accept or reject any tender and to annul the process and reject all tenders at any time without assigning any reason thereof or incurring any liability to the bidders.

- 4.** Particulars of the work given in Brief are to be considered Provisional. They are liable to change and must be considered only as advance information to assist the Bidders.

## **6. SITE VISIT**

The bidder shall visit the Site of Work, at his own cost, and examine the Site and its surroundings to satisfy himself and collect all information that may be considered necessary for proper assessment of the scope of Work enumerated in this tender document. Contact Person at Nalanda University for Coordination of Site Visit.

**Ms. Swati Krishna,**

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## **PROFORM & SCHEDULES:**

### **SCHEDULE A**

#### **SCHEDULE OF QUANTITIES**

As per Separate sheet Attached with this NIT. It is better to refer the BOQ sheet uploaded on ewizard/CPWP read with this NIT.

#### **SCHEDULE F (GENERAL RULES & DIRECTIONS)**

**(ALL RELEVANT CLAUSES AS PER GENERAL CONDITIONS OF CONTRACTS, CPWD SHALL BE APPLICABLE)**

1. **Authority Inviting Tender. - Registrar, Nalanda University, Rajgir, Bihar.**
2. **Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses "Deviation, Extra items and pricing & Deviation submitted items and pricing" Please refer below**

**Definitions:**

| Sr. No | DESCRIPTION  | DETAILS  |
|--------|--|--|
| 1      | <b>Owner</b>   | Vice Chancellor, Nalanda University, Rajgir, Bihar   |
| 2      | <b>Tender Accepting Authority</b>  | Registrar, Nalanda University, Rajgir, Bihar.  |
| 3      | <b>Engineer In charge</b>  | Authorized Engineer Officer appointed by Nalanda University Rajgir, Bihar  |
| 4      | <b>Project Manager</b>   | Nominated Person/PMC by NU   |
| 5      | <b>Designer &amp; Architect Consultants</b>  | VSC or the Consultants, appointed by NU as Architect Consultants.  |
| 6      | <b>Percentage on cost of materials and Labour to cover all overheads and profits for Extra Items</b> | 15% For all AV Works.  |
| 7      | <b>Rates considered for Estimate</b>   | DSR 2018 & Market Rates as applicable.(with correction slips issued up to the previous day of the last date of submission of tenders), |

**CLAUSE : Performance Guarantee**

|   |  |  |
|---|--|--|
| 1 | <b>Time allowed for submission of Performance Guarantee Programme Chart (Time and Progress) and applicable labour Licenses, Registration with EPFO, &amp; ESIC therefrom the date of issue of letter of acceptance</b> | 15 (Fifteen) Days  |
| 2 | <b>Maximum allowable extension beyond the period provided in 1 above</b>   | 7 (Seven) Days with late fee @ 0.1% per day of the Performance Guarantee amount. |

**CLAUSE for Compensation for Delay and Incentive for early completion**

|   |   |  |
|---|---|--|
| 1 | <b>Authority for fixing compensation under its clause</b> | Vice Chancellor, Nalanda University, Rajgir, Bihar |
| 2 | <b>Incentive for early completion</b>                     | Applicable as per detailed Clause.                 |

**Clause for Time and Extension for Delay**

|   |  |                       |
|---|--|-----------------------|
| 1 | Number of days from the date of issue of letter of acceptance for reckoning date of start. | 22 (Twenty Two) days. |
|---|--|-----------------------|

**Payment due to variation in prices of materials after receipt of tender**

NOT APPLICABLE

**Payment due to Increase/Decrease in Prices/Wages (excluding materials covered under clause 10CA) after Receipt of Tender for Works**

NOT APPLICABLE

**CLAUSE for: Settlement of Disputes**

|   |                        |                           |
|---|------------------------|---------------------------|
| 1 | Settlement of Disputes | Committee appointed by NU |
|---|------------------------|---------------------------|

**Employment of Technical Staff and employees**

Requirement of Technical Representative(s) in progressive manner in satisfaction of Project Manager & Engineer-In-Charge with its recovery Rate.

| S. No. | Minimum Qualification of Technical Representative   | Discipline                  | Minimum Experience      | Number     | Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause Figures |   |
|--------|---|-----------------------------|-------------------------|------------|---|---|
| 1      | Project Manager Graduate Engineer                   | Electrical/ Electronics/ IT | Ten Years               | One        | Rs. 30,000/- p.m.   | . |
| 2.     | Project Engineer Graduate Engineer                  | Electrical/ Electronics/ IT | Five years              | One        | Rs. 25,000/ p.m.  | . |
| 3.     | Site Engineer Graduate Engineer or Diploma Engineer | Electrical/ Electronics/ IT | Two years<br>Five years | Two<br>Two | Rs. 15,000/ p.m.<br>Rs. 15,000/ p.m.  |   |
| 6      | Site Engineer Graduate Engineer or                  | Sound Engineer              | Two years               | One        | Rs. 15,000/ p.m.  |   |



|  |                  |  |            |     |                 |  |
|--|------------------|--|------------|-----|-----------------|--|
|  | Diploma Engineer |  | Five years | One | Rs. 15,000/p.m. |  |
|--|------------------|--|------------|-----|-----------------|--|

**Milestone(s) as per table given below: -**

Though the overall time of completion is 6 months the contractor shall complete all the work in scope so that the buildings are ready for occupation in all respects, strictly conforming to the time limit specified for such items. Any delay in achieving specified timeline given in the Milestones (as mentioned below) of these building shall invite withholding of payments as indicated against each and every Milestone:

| <b>Project Milestone Schedule:</b>                 |   |   |  |
|--|---|---|--|
| Sr. No.  | Description of Milestone (Physical)   | Time allowed in Months (from date of start) | Amount to be with-held in case of non-achievement of milestone |
| <b>Milestone of Works (Time duration 9 Months)</b> |   |   |  |
| 1  | Shop drawings: Preparation by the contractor (System Integrator), approval as per the site requirement for 1 <sup>st</sup> lot of buildings including all technical datasheet.  | 15  | 0.5% of tendered value.  |
| 2  | FDCC, dispatch clearances etc formalities for at least Lot 1 (F Block, 300 seaters auditorium and classrooms) and Shop drawings: Preparation by the contractor (System Integrator), approval as per the site requirement for all remaining buildings including all technical datasheet. | 60 Days                                     | 0.5% of tendered value   |
| 4  | Supply of all equipment's, system for at least 1 <sup>st</sup> lot (F Block, 300 seaters auditorium and classrooms) at site in good condition as per building & shop drawings requirements including racks, cables, etc...  | 75 Days                                     | 0.5% of tendered value   |
| 6  | ITC for the AV system and handing over of the completion/inbuilt drawings) for 1 <sup>st</sup> lot (F Block, 300 seaters auditorium and classrooms)<br><br>And  | 90 Days                                     | 0.5% of tendered value   |

|   |   |          |                             |
|---|---|----------|-----------------------------|
|   | FDCC, dispatch clearances etc formalities for all remaining equipment's and systems.  |          |                             |
| 7 | Supply of all remaining equipment's, system   | 150      |                             |
| 8 | Final Handing over of the entire setup for Priority Building as per design intent along with details of the local service and central service centre. The contractor shall introduce in writing about the services support, do's & don'ts, Operation, Maintenance and Services procedures and guidelines. The contractor has to submit the AS Built Drawing and maintenance manuals of all the items. | 270 Days | 0.5 % of the tendered value |

**Note:**

- a. **Withheld amount shall be released if and when subsequent milestone is achieved.**
- b. **The Milestone may be rescheduled within the timeline as per the University's requirement.**
- c. **The detailed planning (micro and macro level) to be submitted by the system integrator in co-ordination of the Engineer In Charge or official delegated by the University.**

|          |   |  |
|----------|---|--|
| <b>1</b> | <b>Total Time allowed for execution of work</b> | 9 (Nine) Months  |
| <b>2</b> | <b>Authority to decide Extension of Time</b>    | Vice Chancellor, Nalanda University, Rajgir, Bihar   |
| <b>3</b> | <b>Rescheduling of Milestones</b>               | Engineer In Charge, and the Rescheduling is to be approved by Vice Chancellor, Nalanda University (NU) |

**SECTION**

for

**GENERAL CONDITIONS OF CONTRACT**

## **Definitions**

The **Contract** means the documents forming the tender and acceptance thereof and the formal agreement executed between the Competent Authority, Nalanda University and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-In-Charge/the Competent Authority at NU and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another. In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them: -

### **Work/JOB:**

The expression work or works shall, mean unless there be something either in the subject or context repugnant to such construction the context otherwise requires 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.

### **Site:**

The Site shall mean the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.

### **Contractor:**

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.

### **Owner:**

Owner shall mean the Nalanda University, Rajgir, BIHAR.

### **Project Manager:**

Means the authorized Engineer Officer nominated by the Project Management Consultant appointed by Nalanda University. He will report to the Engineer-In-Charge and will be responsible for day to day supervision of project execution and will assist Engineer-in-Charge in Planning, Quality Assurance and Control, Execution and monitoring the Progress of work.

### **Architect Consultants:**

Architect Consultants shall mean the Architect Consultant appointed by NU including its associate architects and their authorized consultants and Engineers to design and assist the Engineer In Charge in monitoring the Architectural, Structural, Electrical, Plumbing, Acoustic, HVAC, Landscape and Infrastructure works and also to check quality, project scheduling, cost control, installation of systems and equipment in the Works and ensure that the same is done as per the drawings approved.

**Engineer-in-Charge:**

Engineer-in-Charge (EIC) shall mean the authorized Engineer Officer appointed by NU, who shall supervise and be in charge of the work. Engineer-in-Charge will administer the contract with the assistance of his authorized subordinate Engineers.

**Accepting Authority:**

Accepting Authority shall mean the authority mentioned in **Schedule 'F'**.

**Excepted Risk:**

Excepted Risk are risk 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 Owner damage 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 (i.e. either the Owner or an Agency appointed by the Owner) or causes solely due to use or occupation by Owner of the part of the Work in respect of which a certificate of completion has been issued or a cause solely due to Owner's faulty design of works..

**Market Rate:**

Market rate shall be the rate as decided by the Engineer-in-Charge in consultation with Architect Consultants and Project Management Consultant (PMC) on the basis of the cost of materials and labour at the site where the Work is to be executed plus the percentage mentioned in **Schedule 'F'** to cover all overheads and profits of the Contractor and approved by the NU, **provided that no extra overheads and profits shall be payable on the part(s) of work assigned to other agency(s) by the contractor as per terms of contract. Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender documents or the standard Schedule of Rates of the government mentioned in Schedule 'F' hereunder, with the amendments thereto issued upto the date of receipt of the tender.**

**Tendered value:**

Tendered value / Contract value means the value of the entire Work as stipulated in the letter of award.

**Date of commencement of work:**

The Date of commencement of work shall be the date when contract comes into existence i.e. the date the Letter of Acceptance by NU is awarded or the first date of handing over of the site, whichever is later, in accordance with the phasing if any, as indicted in the tender document.

**Scope & Performance**

Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.

The contractor shall be furnished, free of cost one certified copy of the contract documents including specifications, Schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.

### **Works to be carried out**

The Work to be carried out under the Contract shall, except as otherwise provided in these conditions shall include all labour, materials, tools and plants, equipment and transport to be provided at the cost and expense of the Contractor which may be required in preparation of and for and in the full and entire execution and completion of the Works. The descriptions given in the Schedule of Quantities (Schedule A) shall unless otherwise 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 Works as aforesaid in accordance with good practice and recognized principles.

### **Sufficiency of Tender:**

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 and Tender Documents, which rates and prices shall, except as otherwise provided, cover all its obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works.

### **Discrepancies and Adjustment of Errors:**

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.

In the case of discrepancy between the schedule of Quantities, the Specifications and / or the Drawings, the following order of preference shall be observed: -

- I) Description of Schedule of Quantities.
- ii) Particular Specifications
- iii) Special Conditions.
- iv) Additional Conditions
- v) General Conditions
- vi) Drawings.
  
- vii) CPWD standard specifications for Civil, Plumbing, Mechanical and Electrical works.
- viii) Indian Standard specifications for AV works and related equipment's and accessories.
- ix) Indian Standard Specifications of BIS.
- x) Accepted good Engineering Practice based on experience of Foreign Countries" Codes.
- xi) Relevant IS or any other international code in case IS code is not available.

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.

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.

Signing of Contract: The successful bidder/contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of:

- i. The notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
- ii. Standard CPWD Form as mentioned in Schedule 'F' consisting of:
  - a. Various standard clauses with corrections up to the date stipulated in Schedule 'F' along with annexures thereto.
  - b. CPWD Safety Code
  - c. Model Rules for the protection of health, sanitary arrangements for workers employed by CPWD or its contractors.
  - d. CPWD Contractor's Labour Regulations.
  - e. List of Acts and omissions for which fines can be imposed.
- iii. No payment for the work done will be made unless contract is signed by the contractor

## **CLAUSES OF CONTRACT**

### **CLAUSE.1 Performance Guarantee**

(i) The contractor shall submit an irrevocable Performance Guarantee of 3% (Five percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-Charge up to a maximum period as specified in schedule 'F' on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in-Charge. This guarantee shall be in the form of Deposit at Call receipt of any scheduled bank/Bankers Cheque of any scheduled bank/Demand Draft of any scheduled bank or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Nalanda University 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 Nalanda University to make good the deficit.

(ii) The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets 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 Engineer In charge, 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 Nalanda University is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:

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

(b) Failure by the contractor to pay Nalanda University 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 Nalanda University.

(v) On substantial completion of any work which has been completed to such an extent that the intended purpose of the work is met and ready to use, then a provisional completion certificate shall be recorded by the Engineer-In-Charge. The provisional certificate shall have appended with a list of outstanding balance item of work that need to be completed in accordance with the provisions of the contract.

This provisional completion certificate shall be recorded by the concerned Engineer-In-Charge with the approval of Project manager/ chief Project manager/ Superintending

Engineer. After recording of the provisional completion certificate for the work by the competent authority, the 80% of performance guarantee shall be returned to the contractor, without any interest.

However, in case of contracts involving Maintenance of building and services. Any other work after construction of same building and services/ other work, then 40% of performance guarantee shall be returned to the contractor without any interest after recording the provisional completion certificate.

#### **CLAUSE. 1A. Recovery of Security Deposit**

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit Nalanda University, at the time of making any payment to him for work done under the contract to deduct a sum at the rate 2.5% (two decimal five per cent) of the gross amount of each running and final bill, till the sum deducted will amount to security deposit of 2.5 % (two decimal five per cent) of the tendered value of the work. Such deductions will be made and held by Nalanda University by way of Security Deposit unless he/they has/have deposited the amount of Security at the rate mentioned above in the form of Government Securities or fixed deposit receipt. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Nalanda University 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 Nalanda University 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 Owner 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 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 Nalanda University, 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 subject to the condition that amount of such bank guarantee, except last one, shall not be less than Rs.5 lac. Provided further that the validity of bank guarantee, including the one given against the earnest money shall be in conformity with provisions contained in this clause 17 which shall be extended from time to time depending upon extension of contract granted under provisions of Clause 2 (Compensation for delay) Clause 5 (Time and Extension for delay).

No interest shall be paid on the amount retained as Security Deposit by NU.

#### **Security deposit shall be released as follows:**

Security deposit shall be released after the completion of the Defects Liability period.



## **CLAUSE. 2. Compensation for Delay**

If the contractor fails to maintain the required progress in terms of clause 5 (Time and Extension for delay) or to complete the work and clear the site on or before the contract or justified extended date of completion as per clause 5 (excluding any extension under Clause 5.5) as well as any extension granted under clauses 12 and 15, he shall, without prejudice to any other right or remedy available under the law to the Owner on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the authority specified in schedule-F (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day/month (as determined) that the progress remains below that specified in Clause 5 (Time and Extension for delay) 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.

Compensation for delay of work with maximum rate @ 1 % (one percent) per month of delay to be computed on per day basis based on the quantum of damage suffered due to stated delay on the part of Contractor.

Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% (Ten per cent) of the accepted Tendered Value of work or of the accepted Tendered Value of the Sectional part of work as mentioned in Schedule 'F' for which a separate period of completion is originally given.

In case no compensation has been decided by the authority in Schedule 'F' during the progress of work, this shall be no waiver of right to levy compensation by the said authority if the work remains incomplete on final justified extended date of completion. If the Engineer In Charge decides to give further extension of time allowing performance of work beyond the justified extended date, the contractor shall be liable to pay compensation for such extended period. If any variation in amount of contract takes place during such extender period beyond justified extended date and the contractor becomes entitled to additional time under clause 12, the net period for such variation shall be accounted for while deciding the period for levy of compensation. However, during such further extended period beyond the justified extender period, if any delay occurs by events under sub clause 5.2, the contractor shall be liable to pay compensation for such delay.

Provided that compensation during the progress of work before the justified extended date of completion for delay under this clause shall be for non-achievement of sectional completion or part handing over of work on stipulated/justified extended date for such part work or if delay affects any other works/ services. This is without prejudice to right of action by the Engineer In Charge under clause 3 for delay in performance and claim for compensation under that clause.

In case action under clause 2 has not been finalized and the work has been determined under clause 3, the right of action under this clause shall remain post determination of contract but levy of compensation shall be for days the progress is behind the schedule on date of determination, as assessed by the authority in Schedule 'F', after due consideration of justified extension. The compensation for delay, if not decided before the determination of contract, shall be decided after determination of contract.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Nalanda University. In case, the

contractor does not achieve a particular milestone mentioned in schedule F, or the re-scheduled milestone(s) in terms of Clause 5 (Time and Extension for delay), the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied **as above**. Withholding of this amount on failure to achieve a milestone shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

## **CLAUSE 2 A Incentive for Early Completion**

**DELETED**

## **CLAUSE. 3. When Contract can be Determined**

Subject to other provisions contained in this clause, the Engineer – in charge may without prejudice to any other rights or remedy against the Contractor in respect of any delay, inferior workmanship or any claims for damages and/or any other provisions of this contract or otherwise, whether or not 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, 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 un-workman like manner or 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 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 or **section of work with individual date of completion on or before** the stipulated date or **justified extended date, on or before such date of completion; and the Engineer-in-Charge without any prejudice to any other right or remedy under any other provision in the contract has given further reasonable time in a notice given in writing in that behalf as either mutually agreed or in absence of such mutual agreement by his own assessment making such time essence of contract and in the opinion of Engineer-in-charge the contractor will be unable to complete the same or does not complete the same within the period specified.****

(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 service of Nalanda university or consultants 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 Nalanda University.

(vi) If the contractor shall enter into a contract with Owner 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 Owner 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 to do so, 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 **(excluding part(s) of work assigned to other agency(s) by the contractor as per terms of contract)**, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer -in-Charge.

When the Contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the Nalanda University shall have powers:

(a) To determine the contract as aforesaid **so far as performance of work by the contractor is concerned** (of which **determination** notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, the **Earnest money Deposit/** Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Owner.

(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 anyone or more of the above course(s) of action(s) being adopted by the Engineer-in-Charge the Contractor shall have no right to claim compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagement or made any advances on account or with a view to the execution of the Work or the performance of the contract And In case action is taken under any of the provisions aforesaid, the Contractor shall not be entitled to recover or be paid any

sum for any work thereof 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 the Contractor shall only be entitled to be paid the value so certified.

**CLAUSE 3A. Work cannot be Started Due to Reasons not within the Control of the Contractor.**

In case, the work cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work or one month whichever is more, either party may close the contract **by giving notice to the other party stating the reasons**. In such eventuality, the Performance Guarantee of the contractor shall be refunded within 30 days.

**Neither party shall claim any compensation for such eventuality. This clause is not applicable for any breach of the contract by either party.**

**CLAUSE. 4 Contractor Liable to Pay Compensation even if Action not taken as Clause 3 (When Contract can be determined)**

In any case in which any of the powers conferred upon the Engineer-in-Charge by Clause 3 (when contract can be determined) thereof, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Engineer-in-Charge which shall be final and binding on the contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work/or any part thereof, paying or allowing for the same in account at the contract rates, or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final, and binding on the contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and 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 Schedule F or the extended time in accordance with these conditions shall be the essence of the contract. The execution of the works shall commence from such time period as mentioned in Schedule F or from the date of handing over of the site, **notified by the Engineer-in-Charge, whichever is later. However, the handing over of site by the Engineer in Charge, in full or in part (if so provided in contract), shall be completed within two months for issue of acceptance letter.** If the Contractor commits default in commencing the execution of the work as aforesaid, **the performance guarantee shall be forfeited by the Engineer In charge and shall be absolutely at disposal of the Owner** without prejudice to any other right or remedy available in law.

**5.1** The contractor shall submit within Fifteen days of award of work

- (i) The contractor shall submit a programme Chart (Time and Progress) for each mile stone. The Engineer in Charge may within 30 days thereafter, if required modify, and communicate the program approved to the contractor failing which the program submitted by the contractor shall be deemed to be approved by the Engineer-in-Charge. The work programme shall include all details of balance drawings and decisions required to complete the contract with specific dates by which these details are required by the contractor without causing any delay in execution of the work. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Owner and the Contractor within the limitations of time imposed in the Contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate program has been agreed upon) complete the work as per mile stones given in Schedule F.
- (ii) In case of non-submission of construction programme by the contractor the program approved by the Engineer-in-charge shall be deemed to be final.
- (iii) The approval by the Engineer-in-charge of such programme shall not relieve the contractor of any of the obligations under the contract.
- (iv) The contractor shall submit the Time and progress chart and progress report using mutually agreed software or in other format decided by Engineer-in-Charge for the work done during previous month to the Engineer-in-charge on or before 5<sup>th</sup> day of each month failing which a recovery Rs. 5000/- shall be made on per week or part basis in case of delay in submission of the monthly progress report.

**5.2** If the work(s) were delayed by: -

- (i) Force majeure, or
- (ii) Abnormally bad weather, 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 Engineer-in-Charge in executing work not forming part of the Contract, or

(vi) Any other cause like above which, in the **reasoned opinion** of the Engineer-in-Charge is beyond the Contractor's control.

Then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the **Engineer In Charge for entry in the hindrance register (physical or web-based as prescribed in Schedule F)** but shall nevertheless use constantly his best endeavours to prevent the delay in overall completion of the work 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. **The contractor shall have no claim of damages for extension of time granted or rescheduling of milestone/s for events listed in sub clause 5.2.**

**5.3 In case the work is hindered by any reason, in the opinion of the contractor, by the owner or for someone for whose action the owner is responsible, the contractor may immediately give notice thereof in writing to the Engineer in Charge in the same manner as prescribed under sub clause 5.2 seeking extension of time or reschedule of milestone/s. The authority as indicated in schedule 'F' shall, if justified, give a fair and reasonable extension of time and reschedule the milestones for completion of work after due consideration of the same within 30 days of receipt of such request. In event of non-application by the contractor for extension of time Engineer in Charge after affording opportunity to the contractor may give, supported with a programme, a fair and reasonable extension within a reasonable period of occurrence of the event. Such extension of time or rescheduling of milestone/s shall be without prejudice to any other right or remedy of the parties in contract or in law; provided further that for concurrent delays under this sub clause and sub clause 5.2 to the extent the delay is covered under sub clause 5.2 the contractor shall be entitled to only extension of time and no damages.**

5.3 Request for rescheduling of Mile stones **or** extension of time, to be eligible for consideration, shall be made by the Contractor in writing with supporting documents within fourteen days of the happening of the event causing delay on the prescribed form **i.e. Form of application by the contractor for seeking reschedule of milestones (Appendix-XVI) or form of application by the contractor for seeking extension of time (Appendix- XVII) respectively** to the authority as indicated in Schedule-F. **The contractor shall indicate in such a request the period by which rescheduling of milestone/s or extension of time is desired. With every request for rescheduling of milestones, or if at any time the actual progress of work falls behind the approved program by more than 10% of the stipulated period of completion of contract, the contractor shall produce a revised program which shall include all details of pending drawings and decisions required to complete the contract and also the target dates by which these details should be available without causing any delay in execution of the work. A recovery as specified in Schedule 'F' shall be made on per day basis in case of delay in submission of the revised program.**

**5.4 In any such case the authority as indicated in Schedule 'F' may give a fair and reasonable extension of time for completion of work or reschedule the milestones. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the authority as indicated in Schedule 'F' in writing, within 30 days of the date of receipt of such request from the Contractor in prescribed form. In event of non-application by the contractor for extension of time E-in-C after affording opportunity to the contractor, may give, supported with a program (as specified under 5.4 above), a fair and reasonable extension within a reasonable period of occurrence of the event.**

**5.5 In case the work is delayed by any reasons, in the opinion of the Engineer-in-Charge, by the contractor for reasons beyond the events mentioned in clause 5.2 or clause 5.3 or clause 5.4 and beyond the justified extended date; without prejudice to right to take action under Clause 3, the Engineer-in-Charge may grant extension of time required for completion of work without rescheduling of milestones. The contractor shall be liable for levy of compensation for delay for such extension of time.**

#### **CLAUSE. 6. Measurement of Work Done**

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

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

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

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

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

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

The Contractor shall give not less than seven days' notice to the Engineer-in-Charge or his authorized representative in-charge of the Work before covering up or otherwise placing beyond the reach of measurement any Work in order that the same may be measured and correct dimensions thereof may be taken before the same is so covered up or placed beyond the reach of measurement and shall not cover up or placed beyond the reach of measurement any Work without the consent in writing of the Engineer-in-



Charge or his authorized representative in charge of the Work who shall within the aforesaid period of 7 days inspect the work, and if any Work shall be covered up or be placed beyond the reach of measurement without such notice having been given or Engineer-in-charge's consent being obtained in writing, the same shall be uncovered at Contractor's expense or in default thereof no payment or allowance shall be made for such Work or of the material with which the same was executed.

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

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

#### **CLAUSE. 6A. Computerized Measurement Book**

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

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

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

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

The final, fair, computerized measurement book given by the contractor, duly bound, with its pages machine numbered, should be 100% correct, and no cutting or over-writing in the measurements would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound, after getting the earlier MB cancelled by the Engineer in charge.



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

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

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

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

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

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

**CLAUSE. 7. Payment on intermediate Certificate to be regarded as Advances**

To be read as per NIT main document

## **CLAUSE 7A**

No running account bill shall be paid for the work till the applicable labour licenses, registration with EPFO & ESIC, whatever applicable are submitted by the contractor to the engineer-in-Charge.

## **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**

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

## **CLAUSE 8B Completion plans to be submitted by the contractor**

The contractor shall submit completion plan as required for all the AV works 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 **0.1% of Tendered Value** subject to a ceiling of Rs.15,000 (Rs. Fifteen thousand only) or as may be fixed by the Superintending Engineer concerned and

in this respect the decision of the Superintending Engineer shall be final and binding on the contractor.

The contractor shall submit completion plan for all the AV works done under this contract within Thirty days of the completion of the work, **provided that the services plans have been issued for execution by the Engineer-in-Charge, unless the contractor, by virtue of any other provision in the contract, is required to prepare such plans.**

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

#### **CLAUSE.9 Payment of final bill**

The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period of 6 (six) months, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge or his authorized representative, complete with account of materials issued by the Owner and the dismantled materials.

#### **CLAUSE. 9A Payment of Contractor's Bills to Banks**

Payments due to the contractor may, if so desired by him, be made to his bank, registered financial, co-operative or thrift societies or recognized financial institutions instead of direct to him provided that the contractor furnishes to the Engineer-in-Charge (1) an authorization in the form of a legally valid document such as a power of attorney conferring authority on the bank; registered financial, co-operative or thrift societies or recognized financial institutions to receive payments and (2) his own acceptance of the correctness of the amount made out as being due to him by the Owner or his signature on the bill or other claim preferred against the Owner before settlement by the Engineer-in-Charge of the account or claim by payment to the bank, registered financial, co-operative or thrift societies or recognized financial institutions. While the receipt given by such banks; registered financial, co-operative or thrift societies or recognized financial institutions shall constitute a full and sufficient discharge for the payment, the contractor shall whenever possible present his bills duly receipted and discharged through his bank, registered financial, co-operative or thrift societies or recognized financial institutions.

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

#### **CLAUSE. 10. Materials supplied by the Owner**

Deleted

#### **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 Owner.

The contractor shall, at his own expense and without delay, submit to the Engineer-in-Charge samples of materials to be used on the work and shall get these approved in advance from PMC & Architect Consultants. 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 submission 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 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.

The contractor shall at his own expense, provide a material-testing lab at the site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified.

#### **CLAUSE. 10B Secured Advance on Non-perishable Materials**

(i) The contractor, on signing an indenture in the form to be specified by the Engineer-in-Charge, shall be entitled to be paid during the progress of the execution of the work up to 75% (Seventy Five per cent) of the assessed value of any materials which are in the opinion of the Engineer in-Charge non-perishable, non-fragile and non-combustible and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. When materials on account of which an advance has been made under this sub-clause are incorporated in the work, the amount of such advance shall be recovered/deducted from the next payment made under any of the clause or clauses of this contract.

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

#### **Mobilization Advance**

No Mobilisation advance shall be paid.

#### **CLAUSE. 10C. Payment on Account of Increase in Price/Wages due to statutory Order(s)**

This clause is not applicable since Clause 10 CA and 10 CC are applicable.

#### **CLAUSE. 10CA Payment due to variation in prices of materials after receipt of tender**

Not Applicable

#### **CLAUSE. 10CC. Payment due to Increase/Decrease in Prices/Wages (excluding materials covered under clause 10CA after Receipt of Tender for Works)**

Not Applicable

#### **CLAUSE. 10D Dismantled Material Owner's Property**

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

#### **CLAUSE. 11 Work to be executed in Accordance with Specifications, Drawings, and 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 Engineer-In-Charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications of Central Public Works Department specified in Schedule 'F' or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.

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

#### **CLAUSE. 12 Deviations / Variations Extent and Pricing**

The Owner shall have power

(I) To make alteration in, omissions from, additions to or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the Work, and

(II) To omit a part of the Work(s) in case of non-availability of a portion of the site or for any reasons, and 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.

(III) Any Further deviation beyond this limit up to 1.5 times of the tendered amount shall be approved by Chief Engineer with recorded reason and in exceptional case, ADG shall have full power to approved the deviation beyond 1.5 times of tendered amount with recorded reason and take suitable corrective action.

#### **12.2 Deviation, Extra items and Pricing**

In the case of extra items (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 **which shall**

**include invoices, vouchers etc. and Manufacturer's specifications,** for the work **failing which the rate approved later by the Engineer-in-Charge shall be binding** and the engineer-in-charge shall within prescribed time limit of one month of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined, **failing which it will be deemed to have been approved.**

#### **Deviation, Substituted items, Pricing**

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).

#### **Deviation, Deviated Quantities, Pricing**

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in Schedule-F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within 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.

**12.3** The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Schedule-F, and the Engineer in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.

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

**12.5** For the purpose of operation of Schedule-F the following works shall be treated as works relating to work up to plinth level.

- (i) For buildings and basements: All works up to respective plinth level or up to floor 1 level.
- (ii) For abutments, piers and well staining: all works up to 1.2m above the bed level:
- (iii) For retaining wall, wing walls, compound walls, chimneys, overhead reservoirs/tanks and other elevated structures: All works up to 1.2 meter above the formation ground level
- (iv) For reservoirs/tanks (other than overhead reservoirs/tanks): All works up to 1.2 meters above the formation 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.

**12.6** Any operation incidental to or necessarily has to be in contemplation of bidder while filling 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 bidder 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(s).**

If at any time after acceptance of the **tender or during the progress of work, the purpose or object for which the work is being done changes due to any supervening cause and as a result of which the work has to be abandoned or reduced in scope**, the Engineer in-Charge shall give notice in writing to that effect to the Contractor **stating the decision as well as the cause for such decision** and the Contractor shall act accordingly in the matter. The Contractor shall have no claim to any payment of compensation or otherwise whatsoever on account of any profit or advantage which he might have derived from the execution of the Works in full but which he did not derive in consequence of the foreclosure of the whole or part of the Works. The Contractor shall be paid at contract rates for the full amount for Work(s) executed at site and, in addition, a reasonable amount as certified by the Engineer-in-Charge for the items hereunder mentioned which could not be utilized on the Work to the full extent in view of the foreclosures:

- i) Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office; storage accommodation and water storage tanks.
- ii) The Owner shall have the option to take over Contractor's materials or any part thereof either brought to site or of which the Contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however, the Owner shall be bound to take over the materials or such portions thereof as the Contractor does not desire to retain. For materials taken over or to be taken over by the Owner, the cost of such materials as detailed by Engineer-in-Charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the Contractor.



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

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

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

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

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

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

In the event of action being taken under Clause 13 to reduce the scope of work, the contractor may furnish fresh Performance Guarantee on the same conditions, in the same manner and at the same rate for the balance tendered amount and initially valid up to the extended date of completion or stipulated date of completion if no extension has been granted plus 60 days beyond that. Wherever such a fresh Performance Guarantee is furnished by the contractor the Engineer-in-Charge may return the previous Performance Guarantee.

#### **CLAUSE 14. Carrying out part work at risk & cost of contractor.**

If Contractor

- At any time makes default during currency of the Work or does not execute any part of the Work with the due diligence and continues to do so after a notice in writing of 7 days from the Owner/Engineer-in-Charge; or
- Commits default in complying with any of the terms and conditions of the contract and does not remedy it or takes effective steps to remedy it or take effective steps to remedy it within 7 days even after a notice in writing is given in that behalf by the Owner/Engineer-in-Charge; or

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

The Engineer- in-Charge without invoking action under clause 3 (when Contract can be determined) may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to Owner, 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 Owner because of action under this clause shall not exceed 10% (Ten per cent) 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 Authority 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 Owner in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by Owner as aforesaid after allowing such credit shall without prejudice to any other right or legal remedy available to Owner as per agreement be recovered from any money due to the contractor on any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

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

In the event of above course being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.

## **CLAUSE.15. Suspension of Work**

(i) The Contractor shall, on receipt of the order in writing of the Engineer-in-Charge (whose decision shall be final and binding on the Contractor) suspend the progress of the Works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage, or injury to the Work already completed or endanger the safety thereof for any of the following reason:

- On account of any default on the part of the Contractor or;
- For proper execution of the Works or part thereof for reasons other than the default of the Contractor; or
- For safety of the Works or part thereof.  
The Contractor shall, during such suspension, properly protect and secure the Work(s) 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 as per (b) and (c) of para (i) above;

- The Contractor shall be entitled to an extension of time equal to the period of every such suspension plus 25% for completion of the item or group of items of Work for which a separate period of completion is specified in the contract and of which the suspended Work forms a part, and;

- If the total period of all such suspensions in respect of an item or group of items or Work for- which a separate period of completion is specified in the contract exceeds thirty days, the Contractor shall, in addition to the compensation payable under the Contract 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 by adding thereto 2% (to such compensation payable) to cover indirect expenses of the Contractor; provided the Contractor submits his claim supported by details to the Engineer-in-Charge within fifteen days of the expiry of the period of 30 days.

- If the Works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reason as per para (i) (a) 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 the Owner or where it affects whole of the Works, as an abandonment of the Works by the 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 the 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 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 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 15 days of the expiry of the period of 3 months.

**CLAUSE.16. Action in case work not done as per Specifications**

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

If it shall appear to the Engineer-In-Charge or his authorized subordinates in charge of the Work or to the Chief Engineer in charge of Quality Assurance or his subordinate officers or the officers of the organization engaged by the Owner for quality assurance or to the Chief Technical Examiner or his subordinate officers, 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 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 failing to do so within a period specified by the Engineer-in-charge in his demand aforesaid, then the Contractor shall be liable to pay compensation at the same rate as under clause 2 of the Contract (for non-completion of the work in time) for this default.

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

**CLAUSE. 17. Contractor Liable for Damages/ Defects during defects liability period**

If the Contractor or his working people or servants shall break, deface injure or destroy any part of building/ installation/ equipment in which they may be working, or any building road, road curb, 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 whatsoever, or if any defect, shrinkage or other faults appear in the Work within 12 (Twelve) 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 by the Engineer-in-Charge make the same good at his own expense or In default of the Contractor to make such payments, the Engineer-in Charge shall cause the same to be made good by other workmen and deduct the expense incurred from any sums that may be due or at any time thereafter may become due to the Contractor or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of twelve months after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later. Provided that in the case of road work, if in the opinion of the Engineer-in-Charge, half of the security deposit is sufficient, to meet all liabilities of the contractor under this contract, half of the security deposit will be refundable after six months and the remaining half after twelve months of the issue of the said certificate of completion or till the final bill has been prepared and passed whichever is later.

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

#### **CLAUSE.18. Contractor to provide tools & plants etc.**

The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Owner's store), machinery, tools & plants as may be required for the work. In addition to this, appliances, implements, other plants, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the 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. 18A.Recovery of Compensation paid to Workmen**

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

**CLAUSE. 18B.Ensuring Payment and Amenities to Workers if Contractor fails**

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

**CLAUSE.19. Labour Laws to be complied with, by the Contractor**

The contractor shall obtain a valid license under the Contract Labour (Regulation & Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also comply with provision of the interstate migrant workmen (Regulation of employment & condition of services) Act 1979. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.

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 Child Labour:**

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

**CLAUSE 19B Payment of wages:**

(i) The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as defined in the CPWD. Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.

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

(iii) In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Central Public Works Department contractor's Labour Regulations made by Government from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions 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 all the Central, State Laws & other statutory and regulatory provisions and Rules including but not limited to the provisions of the Payment of Wages Act, 1936, Minimum Wages Act 1948, Minimum Wages (Central) Rules, 1950, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, Child Labour (Prohibition and Regulation) Act, 1986 and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.

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

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

(viii) Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar (head of the labour Gang) 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 CPWD. Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs.200/- for each default and in addition, the Engineer-in- Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

#### **CLAUSE 19D**

The contractor shall submit by 4<sup>th</sup> and 19<sup>th</sup> of every month, to the Engineer-in-Charge, a true statement showing in respect of the second half of the preceding month and the first half of the current month respectively: -

- 1) The number of labourers employed by him on the work,
- 2) Their working hours,
- 3) The wages paid to them,
- 4) The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them, and
- 5) The number of female workers who have been allowed maternity benefit according to **"Leave and pay during leave Clause19F"** and the amount paid to them.

Failing which the contractor shall be liable to pay to Owner, a sum not exceeding Rs.200/- for each default or materially incorrect statement. The decision of the Engineer in Charge shall be final in deducting from any bill due to the contractor; the amount levied as fine and is binding on the contractor.

#### **CLAUSE 19E**

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



#### **CLAUSE 19F Leave and pay during leave:**

Leave and pay during leave shall be regulated as follows:

1. Leave:

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

2. Pay:

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

3. Conditions for the grant of Maternity Leave:

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

4. The contractor shall maintain a register of Maternity (Benefit) in the Prescribed Form as shown in appendix -I and II, and the same shall be kept at the place of work.

#### **CLAUSE 19G**

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

Should it appear to the Engineer-in-Charge that the contractor(s) is/are not properly observing and complying with the provisions of the CPWD. Contractor's Labour Regulations and Model Rules and the provisions of the Contract Labour (Regulation and Abolition) Act 1970, and the Contract Labour (R& A) Central Rules 1971, for the protection of health and sanitary arrangements for work-people employed by the contractor(s) (hereinafter referred as "the said Rules") the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the work-people within

a reasonable time to be specified in the notice. If the contractor(s) shall fail within the period specified in the notice to comply with and/observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-Charge shall have the power to provide the amenities hereinbefore mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his/their own expense and to approved standards all necessary huts and sanitary arrangements required for his/their work-people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said huts and sanitary arrangements be remodelled and/or reconstructed according to approved standards, and if the contractor(s) shall fail to remodel or reconstruct such huts and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-Charge shall have the power to remodel or reconstruct such huts and sanitary arrangements according to approved standards at the cost of the contractor(s).

#### **CLAUSE 19 H**

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

- (i) (a) The minimum height of each hut at the eaves level shall be 2.10m (7 ft.) and the floor area to be provided will be at the rate of 2.7 sqm. (30 sq. ft.) For each member of the worker's family staying with the labourer.
  - (b) The contractor(s) shall in addition construct suitable cooking places having a minimum area of 1.80m x 1.50m (6'x5') adjacent to the hut for each family.
  - (c) The contractor(s) shall also construct temporary latrines and urinals for the use of the labourers each on the scale of not less than four per each one hundred of the total strength, separate latrines and urinals being provided for women.
  - (d) The contractor(s) shall construct sufficient number of bathing and washing places, one unit for every 25 persons residing in the camp. These bathing and washing places shall be suitably screened.
- (ii) (a) all the huts shall have walls of sun-dried or burnt-bricks laid in mud mortar or other suitable local materials as may be approved by the Engineer-in-Charge. In case of sun-dried bricks, the walls should be plastered with mud gobri on both sides. The floor may be kutcha but plastered with mud gobri and shall be at least 15 cm (6") above the surrounding ground. The roofs shall be laid with thatch or any other materials as may be approved by the Engineer-in-Charge and the contractor shall ensure that throughout the period of their occupation, the roofs remain watertight.
  - (b) The contractor(s) shall provide each hut with proper ventilation.
  - (c) All doors, windows, and ventilators shall be provided with suitable leaves for security purposes.
  - (d) There shall be kept an open space of at least 7.2m (8 yards) between the rows of huts which may be reduced to 6m (20 ft.) according to the availability of site with the approval of the Engineer-in-Charge. Back to back construction will be allowed.

**(iii)Water Supply** - The contractor(s) shall provide adequate supply of water for the use of labourers. The provisions shall not be less than two gallons of pure and wholesome water per head per day for drinking purposes and three gallons of clean water per head per day for bathing and washing purposes. Where piped water supply is available, supply shall be at stand posts and where the supply is from wells or river, tanks that may be of metal or masonry, shall be provided. The contractor(s) shall also at his/ their own cost make arrangements for laying pipe lines for water supply to his/ their labour camp from the existing mains wherever available, and shall pay all fees and charges therefore.

(iv) The site selected for the camp shall be high ground, removed from jungle.

**(v)Disposal of Excreta** - The contractor(s) shall make necessary arrangements for the disposal of excreta from the latrines by trenching or incineration, which shall be according to the requirements lay down by the Local Health Authorities. If trenching or incineration is not allowed, the contractor(s) shall make arrangements for the removal of the excreta through the Municipal Committee/authority and inform it about the number of labourers employed so that arrangements may be made by such Committee/authority for the removal of the excreta. All charges on this account shall be borne by the contractor and paid direct by him to the Municipality/authority. The contractor shall provide one sweeper for every eight seats in case of dry system.

**(vi) Drainage** - The contractor(s) shall provide efficient arrangements for draining away sullage water so as to keep the camp neat and tidy. The contractor may provide package type STP plant of required capacity approved by engineer in charge for treating the sewage water and supply to the Owner free of cost for the use of gardening. The contractor will carry out maintenance of STP at his own cost. Contractor will keep the camp neat and tidy.

(vii) The contractor(s) shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers.

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

## **CLAUSE 19I**

The Engineer-in-Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors' employ upon the work who may be incompetent or misconduct himself and the contractor shall forthwith comply with such requirements. In respect of maintenance/repair or renovation works etc. where the labour have an easy access to the individual houses, the contractor shall issue identity cards to the labourers, whether temporary or permanent and he shall be responsible for any untoward action on the part of such labour. Engineer-in-charge will display a list of contractors working in the colony/Blocks on the notice board in the colony and also at the service center, to apprise the residents about the same.

## **CLAUSE 19J Occupation of Buildings by Unauthorized persons**

It shall be the responsibility of the contractor to see that the building under construction is not occupied by anybody unauthorized during construction, and is handed over to the Engineer-in-Charge with vacant possession of complete building. If such building though completed is occupied illegally, then the Engineer-in-Charge shall have the option to

refuse to accept the said building/buildings in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay, a levy up to 5% of tendered value of work may be imposed by the Engineer-in-charge whose decision shall be final both with regard to the justification and quantum and be binding on the contractor.

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

#### **CLAUSE 19K Employment of skilled/semi-skilled workers**

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

**For work costing more than Rs. 50 Crores, the contractor shall arrange on site training as per National Skill development Corporation (NSDC) norms for at least 10% of the unskilled worker engaged in the project in co-ordination with the CPWD Regional Training Institute and National Skill Development Corporation (NSDC) for certification at the level of skilled/ semi-skilled tradesmen.**

#### **CLAUSE 19 L Contribution of EPF and ESI**

The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of employer paid by the contractor shall be reimbursed by the Engineer-in-charge to the contractor on actual basis. The applicable and eligible amount of EPF & ESI shall be reimbursed preferably within 7 days but not later than 30 days of submission of documentary proof of payment provided same are in order.

#### **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 there under and other labour laws affecting contract labour that may be brought into force from time to time.

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

The contract shall not be assigned or sublet without the written approval of the Engineer-in-Charge. And if the contractor shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any officer or person in the employ of Owner or any of its formally appointed consultants in any way relating to their 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 Owner (Nalanda University shall have power to adopt the course specified in Clause 3 (when contract can be determined) hereof in the interest of Owner and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.

**CLAUSE. 22. Compensation**

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Owner without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

**CLAUSE. 23. Changes in firm's Constitution to be intimated**

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

**CLAUSE. 24. Works to be executed under the Contract**

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 herein 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 in relation to the contract, design, drawings, specification, estimates, instructions, orders or these conditions or otherwise concerning the Work 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

- (a) If the Contractor considers any Work demanded of him to be outside the requirements of the Contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge or **if the Engineer in Charge considers any act or decision of the contract** on any matter in connection with or arising out of the contract or carrying out of the Work to be unacceptable he shall promptly within 15 days request the Owner in writing for written instruction or decision on such matters. Thereupon, the Owner shall give his written instructions or decisions within a period of one month from the receipt of the Contractor's letter.

If the Owner fails to give his instructions or decision in writing within the aforesaid period or if the Contractor is dissatisfied with the instructions or decision of the Owner, the Contractor may, within 15 days of the receipt of the Owner's decision, give notice to the Owner to appoint an Arbitrator failing which the said decision shall be final, binding and conclusive and not referable to adjudication by the Arbitrator. It is a term of contract that each party invoking arbitration must exhaust the aforesaid mechanism of settlement of claims/disputes prior to invoking arbitration.

**(b) Disputes or difference shall be referred for adjudication through arbitration by a Tribunal having sole arbitrator where Tendered amount is Rs. 100 Crore or less. Where Tendered Value is more than Rs. 100 Crore, Tribunal shall consist of three Arbitrators as above. The requirements of the Arbitration and Conciliation Act, 1996 (26 of 1996) and any further statutory modifications or re-enactment thereof and the rules made there under and for the time being in force shall be applicable.**

It is a term of this Contract that the party invoking Arbitration shall give a list of disputes with amounts claimed, **if any**, in respect of each such dispute along with the notice for appointment of Arbitrator and giving reference to the rejection by the Owner of the appeal.

**It is also a term of this contract that any member of the Arbitration Tribunal shall be a Graduate Engineer with experience in handling public works engineering contracts at a level not lower than Chief Engineer (Joint Secretary level of Government of India). This shall be treated as a mandatory qualification to be appointed as arbitrator.**

**Parties, before or at the time of appointment of Arbitral Tribunal may agree in writing for fast track arbitration as per the Arbitration and Conciliation Act, 1996 (26 of 1996) as amended in 2015.**

**Subject to provision in the Arbitration and Conciliation Act, 1996 (26 of 1996) as amended in 2015 whereby the counter claims if any can be directly filed before the arbitrator without any requirement of reference by the appointing authority, the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs. 1,00,000/-, the arbitrator shall give reasons for the award.**

It is also a term of the contract that if any fees and other expenses are payable to the Arbitrator, these shall be paid **as per the act**.

**The place of arbitration shall be as mentioned in Schedule F. In case there is no mention of place of arbitration, the arbitral tribunal shall determine the place of**

**arbitration. The venue of the arbitration shall be such place as may be fixed by the Arbitral Tribunal in consultation with both the parties. Failing any such agreement, then the Arbitral Tribunal shall decide the venue.**

**CLAUSE. 26. Contractor to indemnify Owner against Patent Rights**

The contractor shall fully indemnify and keep indemnified the Owner against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against Owner in respect of any such matters as aforesaid, the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise there from, provided that the contractor shall not be liable to indemnify the Owner if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf.

**CLAUSE 27 Lump sum provision in Tender.**

This Clause is deleted.

**CLAUSE.28 .Action where no Specifications are specified**

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

(i) Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, the Engineer-in-Charge or the 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 finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Engineer-in-Charge or the 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 the 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 by the competent

court, as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Engineer-in-Charge or the 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) Owner 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 Owner 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.

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

#### **CLAUSE. 29A.Lien in respect of claims in other Contracts**

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

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the Owner will be kept withheld or retained as such by the Engineer-in-Charge or the Owner or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the Contractor.

#### **CLAUSE 30. Employment of Coal Mining or Controlled area labour not permissible.**

This clause is not relevant to this work and hence deleted.



**CLAUSE. 31. Unfiltered Water Supply**

This clause is not relevant to this work and hence deleted.

**CLAUSE 31A Departmental Water supply if available.**

This clause is not relevant to this work and hence deleted.

**CLAUSE 32. Alternate water arrangements**

This clause is not relevant to this work and hence deleted.

**CLAUSE. 33. Return of Surplus materials**

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

**CLAUSE. 34 Hire of Plant & Machinery**

This clause is deleted as the Owner cannot supply any Plant and Machinery.

**Clause 35. Conditions relating to use of asphaltic materials.**

Deleted

**CLAUSE 36. Employment of technical Staff and employees**

Contractors Superintendence, Supervision, Technical Staff & Employees

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

The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge, the name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising the work. Minimum requirement of such technical representative(s) and their qualifications and experience shall not be lower

than specified in Schedule-F. The Engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative(s) to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the contractor shall appoint another such representative(s) according to the provisions of this clause. Decision of the Tender Accepting Authority shall be final and binding on the contractor in this respect. Such a principal technical representative and other technical representative(s) shall be appointed by the contractor soon after receipt of the approval from Engineer-in-charge and shall be available at site before start of work.

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

If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) shall be effected from the contractor as specified in Schedule 'F' and decision of the Engineer-in-Charge as recorded in the site order book and measurement recorded checked/test checked in Measurement Books shall be final and binding on the contractor. . Further if the contractor fails to appoint suitable technical Principal technical representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is/are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative(s) (in the form of copy of Form-16 or CPF deduction issued to the Engineers employed by him) along with every on account bill/final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

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

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

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

**CLAUSE. 37. Levy/Taxes payable by Contractor**

(i) **GST, or any other tax, levy or Cess in respect of input for or output by this contract shall be payable by the contractor and Owner shall not entertain any claim whatsoever in this respect except as provided under Clause 38.**

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

**CLAUSE 38 Conditions for Reimbursement of levy/taxes if levied after receipt of tenders.**

a) **GST, labour cess and other statutory deductions etc shall be made at source as per prevalent law. The deductions of security deposit, income tax etc shall be done after calculation of due payments and net payment shall be reduced accordingly. Copy of GST registration shall be submitted with the tender document during its submission. All tendered rates under the contract shall be inclusive of any tax, levy or cess application on last stipulated date of receipt of tender including extension if any. No adjustment i.e. increase or decrease shall be made of any variation in the rate of GST, any other levy or cess applicable on Inputs. However, effect of variation in rates of GST or imposition or repeal of any other tax, levy or cess applicable on output of the work shall be adjusted on either side, increase or decrease. Provided further that for Buildings and Other Construction Workers Welfare Cess or any tax (other than GST), levy or cess varied or imposed after the last date of receipt of tender including extension if any, any increase shall be reimbursed to the contractor only if the contractor necessarily and properly pays such increased amount of taxes/levies/cess. Provided further that such adjustment including GST shall not be made in the extended period of contract for which the contractor alone is responsible for delay as determined by authority for extension of time under Clause 5 of Schedule F.**

b) The Contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and required, and shall allow inspection of the same by a duly authorized representative of the Owner and/or Engineer-in-Charge and shall also furnish such other information/document as the Engineer-in-Charge may require from time to time.

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

**CLAUSE. 39. 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 Owner shall have the option of terminating the contract without compensation to the contractor if there is no legal heir or successor of the contractor capable of completing the remaining work. The decision of the Engineer In charge in this regard shall be final and binding.

**CLAUSE 40. If relative working in Nalanda University then the contractor not allowed to tender:**

The contractor shall not be permitted to tender for the work in Nalanda University where his near relative is posted as an officer in any capacity. 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 the Nalanda University or in the Ministry of External Affairs. Any breach of this condition by the contractor would render him liable to be rejected from participating in this or any other subsequent tender(s).

**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 41. No Gazetted Engineer to work as contractor within one year of Retirement.**

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

**CLAUSE 42. Return of material & recovery for excess material issued.**

This Clause is deleted as the Owner is not going to supply any materials.

**CLAUSE. 43. Compensation during warlike situations**

The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Engineer-in-Charge, such payments being in

addition to compensation up to the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the Engineer in Charge. The contractor shall be paid for the damages/destruction suffered and for restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract.

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

In the event of the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Engineer in Charge.

#### **CLAUSE. 44. 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 Engineer-in-Charge may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

#### **CLAUSE. 45. Release of Security Deposit after labour clearance**

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

#### **Contractor's Responsibilities and Work Control**

The Contractor shall have complete control of the Works and shall effectively and diligently control, direct and supervise his employees, supervisors, subordinates and Sub-Contractor(s) so as to ensure timely completion of the Works in order and in conformity with the Contract Documents. It shall be the sole responsibility of the Contractor for

construction means, methods, techniques, sequences and procedures, and for coordinating the various parts of the Work, whether carried out by the Contractor or any Sub-Contractor.

The Contractor shall provide adequate, qualified and experienced personnel for the proper superintendence and execution of the Works until completion. The category and strength of such personnel shall be determined by the Engineer-in-Charge, and such approved site organization strength shall be maintained by the Contractor at all times until completion of Work(s), and also during defects liability period and as may be decided by the Engineer-in-Charge.

The Contractor shall be responsible for the design, erection, operation, maintenance and removal of temporary structures and other facilities at his own cost during completion of the Works. Any approval sought, given or implied, regarding sufficiency, stability and safety of temporary staging and facilities, shall in any way not relieve the Contractor of his responsibility.

a) The Contractor shall study all Contract Documents and promptly report to the Engineer-in-Charge any non-conformity, discrepancy, inconsistency or omission he may discover in the same. In the event of such discovery, the Contractor shall not proceed with the affected Works until he has received due corrections and clearances from the Engineer-in-Charge.

b) The Contractor shall be deemed to have thoroughly studied and satisfied himself regarding Contract Documents and particularly all drawings before commencement of the Work(s). Should any discrepancy or error be discovered during execution of parts of the Work(s) necessitating demolition, repairs or reconstruction, all such remedial measures shall be carried out only with the approval of the Engineer-in-Charge and entirely at the cost of the Contractor. In such an event the Contractor shall neither claim any extra payment nor any extension of time for any delay caused by virtue of such demolition, repairs and reconstruction.

Any instructions given to the Contractor's supervisory staff by the Engineer-in-Charge shall be deemed to have been given to the Contractor. Instructions that involve any variations in design or specifications and which may have a bearing on time and cost shall be through a written Change Order by the Engineer-in-Charge and at rates agreed in writing prior to implementation

The Contractor shall at his own cost, obtain any permits or authorizations necessary for the execution of the Work and obtaining any permits or approvals for the works executed by him, from all concerned statutory and Owner Authorities/Authority's,

including but not limited to Municipal bodies, Electrical Authority, Fire Service Authorities etc.,

The Contractor shall not be entitled to claim additional sums on account of having to work overtime in order to complete an operation that cannot be interrupted, for working in extended shifts / night shifts /holidays.

In the event the Contractor chooses to work overtime, in extended night shifts as and by way of overtime either by working extended/night shifts or morning or holidays in order to complete the Work(s) within the specified period or on holidays, he shall do so by obtaining prior written approval from the Engineer-in-Charge at least twenty-four hours in advance. The Contractor moreover shall ensure that in any of the above circumstances he maintains the full-agreed strength of his supervisory staff.

The Contractor shall take all necessary precautions to protect the site and Works, materials, plant and equipment, whether his own or belonging to the Owner or any Sub-Contractors, against hazards of fire, rains, floods, landslides, underground water, accidents, etc.

The Contractor shall not be permitted to replace nor remove his Project Manager/Project Engineer / Site Engineer etc. from the site without the prior written approval of the Engineer-in-Charge.

### **Submittals**

a) "Shop drawings" means those drawings or other documents, which are specifically prepared by or on behalf of the Contractor to illustrate details of construction for the purpose of fabrication or installation and are submitted to the Owner to indicate the Contractor's intended method of achieving the end result required by the Contract Drawings and Specifications.

b) "Project data" includes standard drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the Work required by the Contract.

c) "Samples" are physical examples, which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

d) "Other submittals" includes progress schedules, setting drawings, testing and inspection reports, and other information required by the Contract Documents to be submitted by the Contractor for information or approval by the Owner.

### **Schedules of Submittals**

Promptly after contract award the Contractor shall submit to the Engineer-in-Charge the submittal schedule showing when shop drawings, product data or samples and other submittals required by and under the Tender Documents would be submitted for the approval of the Engineer-in-Charge.

### **Review and approval of submittals by Contractor**

The Contractor shall co-ordinate and compile all submittals required by and under the Contract Documents, and thoroughly check them for accuracy, completeness, and compliance in accordance with contract requirements and shall indicate his approval thereon in the form required by the Contract Documents as evidence of such co-ordination and checking. Submittals to the Engineer-in-Charge without the approval of the Contractor shall be returned by the Engineer-in-Charge for resubmission. Submission of shop drawings, product data or samples shall constitute a representation that the Contractor has agreed to, asserted and guaranteed that the assemblies, products or materials indicated therein will be available in a timely manner and in the quantities required for the project as set out under the Contract Documents.

### **Submission**

All submittals shall be in English language, and any system of dimensions (i.e.; English or metric) shown shall be consistent with that used in the Contract Documents. The Contractor shall submit all Submittals in the form and number required by the Contract Documents within required time limits and sufficiently in advance of construction requirements to permit adequate review by the Owner for correction, approval and resubmission if required. No extension of time shall be allowed on account of any delay by the Owner in approving such submittals, if the Contractor has failed to act promptly and responsively in making his submissions. Each submittal shall be identified as required by the Contract Documents.

### **Action on Submittals**

The Engineer-in-Charge will indicate an approval or disapproval of the Submittals for and on behalf of the Owner requiring approval by the Owner and if not approved as submitted shall indicate the Owner's reasons thereof. Approval by the Engineer-in-Charge shall not relieve the Contractor from responsibility for any errors or omissions in his submittals, nor from responsibility for complying with the requirements of this contract, except with respect to variations described by the Contractor and approved in accordance with "Variations in Submittals" Clause. The approval of the Engineer-in-Charge on the submittals will be for general compliance with the intent of the Contract Documents and with the information given therein, and shall not be construed

- a) As permitting any departure from the contract requirements



- b) As relieving the Contractor of responsibilities for any error including details, dimensions, materials, etc. and
- c) As approving departures from details appearing on Contract 'Drawings and Specifications.

Where approval of Submittals is required, the Contractor shall perform the Work in accordance with such approved Submittals. Any Work performed by the Contractor prior to such approval by the Engineer-in-Charge shall be at the sole risk and liability of the Contractor.

### **Variation in Submittals**

If Submittals contain any variations from the contract requirements, other than those requested on previous submittals, the Contractor shall specifically describe such variations in writing and the reasons thereof to the Engineer-in-Charge. If the approval of any such variation affects the Contract Price or the Completion time of the Contract, the Engineer-in-Charge shall issue an appropriate Contract modification. Otherwise, the variation may be approved by the Engineer-in-Charge, only by specific reference thereto in writing. The Contractor shall not be entitled to rely on general approval of a submittal as an approval of variations of requirements of the Contractor. If the Contractor fails to describe such variations and shall not be relieved from the responsibilities of executing the Work in accordance with the contract, notwithstanding a general approval of such submittals. Nothing contained herein shall relieve the Contractor of the responsibility of notifying the Engineer-in-Charge of any part of the Contract Drawings or Specifications, which the Contractor knows or reasonably should have known which could result in defects under construction.

### **Use of submittals**

The Owner may duplicate, use, and disclose in any manner and for any purpose shop drawings, product data and other submittals delivered under this contract.

### **Placement of Orders**

The Contractor shall place orders for items requiring a sample or product data submittal promptly after receiving the written approval of the submittal by the Engineer-in-Charge. No such materials or products shall be ordered or used in the Work until such written approval by the Engineer-in-Charge has been given. In the event such materials or products pre ordered or used in the Works without the written approval of the Engineer-in-Charge, the same shall be at the risks, consequences, liability and costs of the Contractor.

### **Use and testing of samples**

a) Use:

Approved samples not destroyed in testing will be sent to Engineer-in-Charge. Those samples, which are in good condition, will be marked for identification and may be used in the Works. Materials and equipment incorporated in the Work shall match the approved samples within any specified tolerances. Other samples not destroyed in testing nor approved will be returned to the Contractor at the expense of the Contractor if so requested at the time of submission.

b) Failure of samples to pass specified tests:

Failure of any material to pass the specified tests will be sufficient cause for refusal to consider, under this contract, any further samples of the same brand or make of that material or equipment which previously has proved unsatisfactory in service.

c) Taking and testing of samples:

Samples of various materials or equipment delivered on the site or in place may be taken by the Engineer-in-Charge for additional testing by the Owner outside of those found not to have met contract requirements, unless the Engineer-in-Charge determines it to be in the Owner's interest to accept the non-conforming materials or equipment with an appropriate adjustment of the Contract Price/Value as determined by the Engineer-in-Charge.

d) Cost of additional testing:

Unless otherwise specified, when additional tests are made, only one test of each set of sample proposed for use will be made at the expense of the Contractor. Samples, which do not meet contract requirements, will be rejected. Further testing of additional samples, if required, will be made at the expense and costs of the Contractor.

**Co-operation with other contractors/specialized agencies/sub-contractors**

1) The Contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupants of the adjacent properties and to the public in general. The Contractor shall take all care, as not to damage any other adjacent property or other services running adjacent to the plot. If any damage is done, the same shall be made good by the Contractor at his own cost and to the entire satisfaction of the Engineer-in-Charge. The Contractor shall use such methodology and equipment for execution of the work, so as to cause minimum environmental pollution of any kind during execution, to have minimum execution time and minimum inconvenience to road users and to the occupants of the buildings on the adjacent plot and public in general, etc. He shall make good at his own cost and to the entire satisfaction of the Engineer in Charge any damage to roads, paths, cross drainage works or public or private property whatsoever

caused, due to the execution of the work or by traffic brought thereon, by the Contractor. Further, the Contractor shall take all precautions to attend to the environmental related restrictions imposed by Govt. of Bihar as well as prevent any pollution of streams, ravines, river bed and waterways. All waste or superfluous materials shall be transported by the Contractor, entirely to the satisfaction of the Engineer-in-Charge. Utmost care shall be taken to keep the noise level to the barest minimum so that no disturbance as far as possible is caused to the occupants / users of adjoining buildings. No claim whatsoever on account of site constraints mentioned above or any other site constraints, inadequate availability of skilled, semi-skilled or unskilled workers in the near vicinity, non-availability of machinery spare parts and any other constraints not specifically stated here, shall be entertained from the Contractor. Therefore, the Bidders are advised to visit site and get first-hand information of site constraints. Accordingly, they should quote their tenders. Nothing extra shall be payable on this account.

2) The Contractor shall cooperate with and provide the facilities to the sub-Contractors and other agencies working at site for smooth execution of the work. The contractor shall indemnify the Owner against any claim(s) arising out of such disputes. The Contractor shall:

3) Properly co-ordinate their work with the work of other Contractors.

4) Co-ordinate with other Contractors for leaving inserts, making chases, alignment of services etc. at site.

5) Adjust work schedule and site activities in consultation with the Engineer-in-Charge and other Contractors to suit the overall schedule completion.

6) Resolve the disputes with other Contractors/ sub-contractors amicably and the Engineer-in-Charge shall not be made intermediary or arbitrator.

7) The work should be planned in a systematic manner so as to ensure proper co-ordination of various disciplines.

8) The contractor shall conduct his work, so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-In-Charge and shall as far as possible arrange his work and shall place and dispose of the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and in a proper co-ordination manner and shall perform it in proper sequence to the complete satisfaction of others.

## **Percentage Rates**

(A) The percentage rates quoted by the Contractor are deemed to be inclusive of site clearance, setting out work, profile, setting lay out on ground, establishment of reference bench mark(s), installing various signage, taking spot levels, survey with total station, construction of all safety and protection devices, compulsory use of helmet and safety shoes, and other appropriate safety gadgets by workers, imparting continuous training for all the workers, barriers, preparatory works, construction of clean, hygienic and well ventilated workers housings in sufficient numbers as per drawing supplied by Engineer in charge, working during monsoon or odd season, working beyond normal hours, working at all depths, height, lead, lift, levels and location etc. and any other unforeseen but essential incidental works required to complete this work. Nothing extra shall be payable on this account and no extension of time for completion of work shall be granted on these accounts.

(B) The rates quoted by the bidder, shall be firm and inclusive of all taxes and levies as applicable (including taxes and GST as per Clause 38). Labour cess applicable as per relevant Central/State laws will be deducted from every bill of the contractor and deposited to respective Government department. TDS for Income-tax and any other tax as applicable will be deducted from contractors' bills and deposited to respective Government department. The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the contractor shall be reimbursed by the Engineer-in-charge to the contractor on actual basis. Effect of any tax due to new legislation shall be adjusted accordingly as per actual on production of documentary proofs of payment of such tax to concerned Government departments.

(C) No foreign exchange shall be made available by the Owner for importing (purchase) of equipment, plants, machinery, materials of any kind or any other items required to be carried out during execution of the work. No delay and no claim of any kind shall be entertained from the Contractor, on account of variation in the foreign exchange rate.

(D) All ancillary and incidental facilities required for execution of work like labour camp, stores, fabrication yard, offices for Contractor, watch and ward, temporary ramp required to be made for working at the basement level, temporary structure for plants and machineries, water storage tanks, installation and consumption charges of temporary electricity, telephone, water etc. required for execution of the work, liaison and pursuing for obtaining various No Objection Certificates, completion certificates from local bodies etc., protection works, testing facilities / laboratory at site of work, facilities for all field tests and for taking samples etc. during execution or any other activity which is necessary

(for execution of work and as directed by Engineer-in-Charge), shall be deemed to be included in rates quoted by the Contractor, for various items in the schedule of quantities. Nothing extra shall be payable on these accounts. Before start of the work, the Contractor shall submit to the Engineer-in-Charge, a site / construction yard layout, specifying areas for construction, site office, positioning of machinery, material yard, cement and other storage, steel fabrication yard, site laboratory, water tank, etc.

(E) For completing the work in time, the Contractor might be required to work in two or more shifts (including night shifts). No claim whatsoever shall be entertained on this account, not with-standing the fact that the Contractor may have to pay extra amounts for any reason, to the laborers and other staff engaged directly or indirectly on the work according to the provisions of the labour and other statutory bodies regulations and the agreement entered upon by the Contractor with them.

(F) All material shall only be brought at site as per program finalized with the Engineer-in-Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.

(G) Rate shall including of Liaison work required, if any, in this regard with the local bodies. Nothing extra shall be payable on this account. Statutory charges, fees etc. required to be paid to the local bodies in this connection shall only be payable by the Owner or shall be reimbursable to the contractor on production of proof of actual payment made by him.

(H) It is clarified that the contractor shall be responsible for obtaining all No-objection certificate (NOCs) and relevant licenses for services like lift installation, electrical installation, fire installation and like. Nothing extra shall be payable on this account.

## **General Guidelines for AV System works including O&M.**

### **1. SCOPE OF WORK**

The general character and the scope of work to be carried out under this contract is illustrated in, Drawings, Specifications and Schedule of Quantities. The Contractor shall carry out and complete the said work under this contract in every respect in conformity with the contract documents and with the direction of and to the satisfaction of the Owner's site representative. The contractor shall furnish all labour, materials and equipment (except those to be supplied by the owner) as listed under Schedule of Quantities and specified otherwise, transportation and incidental necessary for Design, supply, installation, testing and commissioning of the complete AV works as described in the Specifications and as shown on the drawings. This also includes any material, equipment, appliances and incidental work not specifically mentioned

herein or noted on the Drawings/Documents as being furnished or installed, but which are necessary and customary to be performed under this contract.

The scope of all items under this specification/NIT for AV systems is SITC – Supply, Installation, Testing and Commissioning.

The agency that is bidding for the total project shall be called as "Bidder".

Entire responsibility towards the successful execution of the AV Systems of the project shall remain with the Bidder.

The Bidder is advised to visit the site and familiarise themselves with installation site prior to bidding for the project.

Along with their bids, the Bidder shall provide technical confirmation consisting of the following:

- a. Compliance to the minimum required specification in prescribed format
- b. Manufacturer's Authorization in the prescribed format for all items as per the list provided.

Upon awarding of the contract, the Bidder shall provide technical datasheets and specification sheets for approval for all items prior to initiating any supply including:

- a. Details on makes and models being submitted such as model nos. and version nos.
- b. Datasheets and technical literature for the products being submitted

**If any options and/or accessories or OEM-specific accessories and options are required especially such as, but not limited to items such as, additional power supplies, relay or relay boxes, LVC units, IO terminals or IO boxes, IR sensors, IR extenders, IR probes, transformers or auto-transformers for voltage levels, mounting arrangement, fixtures, set of proprietary cables and licences etc., the Bidder shall supply the same without any extra cost to the client as may be required, irrespective of whether or not explicitly mentioned in the BoQ, so as to make the AV system operational.**

**Any minor civil work like chipping, Grouting, Making holes in RCC or Brick Wall, Zari work in Wall, Floor or ceiling and repairing it to match the surrounding shall be part of this work and shall not be paid separately. NO extra payment for any such civil work shall be done to the contractor.**

The AV system shall be installed at following locations as mentioned below:

1. 99-Seater conference room-01 no. (Outreach Building)
2. 100-Seater class room-01 no. (Lab Building)
3. 230-Seater class room-01 no. (Lab Building)
4. 40-Seater Classroom-06 no. (School Building)
5. 30+62-Seater conference room-01 no. (Lab Building)
6. 40-Seater conference room-01 no. (Outreach Extension Building)
7. 14-Seater Meeting room-01 nos. (Outreach Building)

8. VC room room-01 no. (Outreach Extension Building)
9. 15-Seater Meeting room-01 no. (Lab Building)
10. 14-Seater Meeting/Common room-02 nos. (Outreach Building)
11. 14-Seater Meeting room-01 no. (Block A Building)
12. 08-Seater Meeting room-01 no. (Outreach Building)
13. 08 & 04-Seater Meeting/Discussion room-09 nos. (Outreach Extension Building)
14. 8-Seater Meeting room-04 nos. (Block A Building)

All cabling, i.e., supply, laying, termination and testing for transmission of video/audio over respective AV cables such as shielded twisted pairs CATx, HDMI, VGA + Audio, DVi, HD-SDi, RS-232 and other control cabling for AV equipment such as between AV rack (containing AV equipment such as switchers, controllers, DSPs and CAT5x/6 transmitter-receivers) and AV field devices (such as projectors, CAT5x/6 transmitter-receivers etc.) shall be within the scope of the Bidder. **Also minor civil work such as chipping, grouting etc. shall be within the scope of bidder.**

Also, Ethernet LAN cabling for AV equipment such as for accessing their web browsers for management and control of AV devices shall be within the scope the Bidder (e.g., projectors, DSP, switchers etc.). LAN configuration for supplied LAN switches and AV Wi-Fi routers shall be within the scope of the Bidder.

**The centralized equipment such as MCU, Streaming and Recording devices shall be installed in main ELV server room or as per client's requirement.**

Based on the makes and models intended to be supplied from the acceptable list of makes and prior to the commencement of work, the Bidder shall submit their technical proposal for individual rooms for approval, consisting of the following:

- a. Shop drawings consisting of equipment layouts (furniture and RCP co-ordinated).
- b. Shop drawings consisting of schematic layouts.
- c. Shop drawings consisting of conduit layouts & cable routing plan.
- d. Simulation calculations based on EASE or similar tools/software belonging to respective OEM factoring requirements and parameters such as STI, SPL levels, RT60. The result for the same shall be submitted for all areas.
- e. Lens calculations and other such optics related calculations for projectors in respect of screen sizes and throw distance.

Upon completion of work and prior to handover, the Bidder shall submit 3 sets of duly laminated as-built drawings and documentation as mentioned below:

- a. Final equipment layouts (furniture and RCP co-ordinated) – AutoCad & pdf format, clear copy of which shall be permanently fixed inside respective AV rack.
- b. Final schematic layouts - AutoCad & pdf format, clear copy of which shall be permanently fixed inside respective AV rack.
- c. Final conduit layouts - AutoCad & pdf format, clear copy of which shall be permanently fixed inside respective AV rack.

- d. Final cable routing plan – cable schedule, cable IDs, labelling and documentation, type of cable, no. of cables etc. - AutoCad & pdf format, clear copy of which shall be permanently fixed inside respective AV rack.

The Bidder shall carry out and furnish audio test parameters such as – SPL, S/N Ratio and Room Equalization.

The Bidder shall obtain required SDKs (Software Development Kits) and APIs (Application Programming Interface) for various interfacing and integration requirements of the AV system.

For all AV systems, the core software, operating software, application software and GUI etc. as applicable shall be of the latest versions. The upgrades and enhancements of the software images, core software and firmware for all equipment under this scope shall be free (without any extra cost) to the client for the entire life cycle of these products.

The Bidder is advised to inform the Engineer-in-Charge or client, of any specific requirements related to their equipment such as heat dissipation, earthing or grounding, UPS, ventilation or any other required site pre-conditions, in writing before supply and commencement of work so as to incorporate the same at site by other agencies.

However, if the input power supply parameters, i.e., voltage levels and frequency required by the supplied equipment are different from those available at site, the Bidder shall take necessary actions at its own cost so as to make the equipment installable, e.g., transformers, stabilisers, auto-transformers etc.

The Bidder is advised to specifically use items only from the list of acceptable makes and provide information on compliance of performance specifications in the prescribed format.

Make of components required to be used by Bidder to complete the installation, if not mentioned anywhere, shall be required to be approved from Engineer-in-Charge or client in writing before installation.

At the time of handing over of the installation to the client, the Bidder shall provide a week's training to the designated personnel of the client.

The Bidder shall depute qualified and well-trained engineers for the installation and commissioning of the AV system as well as for the Operations & Maintenance of the AV system.

#### **OPERATION, MAINTENANCE AND TESTING:**

##### **A) Operation:**

1. One Customer Support Engineer (BE Electronics or equivalent) and two Technicians (Diploma holders) each having an experience of minimum 5 years in Audio Visual Systems shall be employed per shift by the Bidder, to be posted daily, except Sundays and public holidays, at Nalanda University Campus, Rajgir, Bihar.

There shall be 2 shifts (8 hours each) per day and the timings shall be decided and informed by the client. If additional manpower is required by the client outside the above working hours, such as on special occasions, systems being critically non-



operational, planned or unplanned shutdown of equipment, the same shall have to be arranged by the Bidder. The decision of Engineer-in-Charge or the client in this regard shall be final and binding to the Bidder.

B) Comprehensive Maintenance:

The Maintenance responsibility shall include:

1. Comprehensive Maintenance of AV system as a whole comprising of all components & equipment of the BoQ installed in the various areas such as, but not limited to, Class Rooms, Meeting Rooms, Conference Rooms, Board Room and VC Room, Language Lab, Mediaroom for all such equipment such as, but not limited to, video equipment, projectors, speakers, amplifiers, DSP processors, audio mixers, microphones, chairman-delegate system, including repairs, servicing, replacements of defective parts & equipment's and software up-gradation etc., complete as required to keep the system fully functional.
2. Preventive Maintenance of the AV system shall also be done by the Bidder. The Bidder shall provide a schedule for the same in consultation with the Engineer-in-Charge or the client.
3. The Bidder shall keep sufficient inventory of spares & equipment as considered necessary at the site for immediate attending the fault/breakdown & for replacement as the case may be.
4. The arrangement for importing of spares & equipment as required including that of foreign exchange, if any, shall be the responsibility of the Bidder.
5. Replacement of all consumable items shall be the responsibility of the Bidder.
6. The spare & equipment to be used for repairs/replacement shall be of the same make & specification as provided originally in the AV system.
7. The Bidder must take all the necessary precautions/measures so that there is no breakdown during any of the meetings/academic sessions. The Bidder has to attend to any fault immediately or has to provide suitable alternative immediately so that the proceeding of the meetings/academic sessions are not disturbed/hampered.
8. During installation, commissioning and operations and maintenance activity, the Bidder shall make adequate safety provisions for the safety of their service personnel. Any equipment for installation, commissioning and operations and maintenance activity as well as safety related equipment shall be arranged for by the Bidder.
9. Any testing and measuring equipment and other facilities required for the work shall have to be arranged for the Bidder.

C) Testing Plan and Handing Over

The Bidder shall provide operations manual with sufficient visual information such as screen shots, voice-over for instructions etc. for the installation-specific items of the AV system, e.g., but not limited to, wired control panel and other such items.

At the time of handing over of installation to the client, for all equipment that are covered under SITC, the Bidder shall transfer all warranties and guaranties from OEM – original equipment manufacturer – to the client.

After successful installation of equipment, the AV System integrator shall carry out the following tests to the satisfaction of the Engineer-in-charge/NU representatives.

All required test & measuring instruments e.g., signal generators, digital multi-meters, video and audio sources, impedance meters, megger (for earthing) and SPL meter etc., shall be deployed by the AV System integrator at their own costs.

1. List of Tests/Checks to be carried out at site:

| Sr. No. | Description   | Remarks |
|---------|---|---------|
| 1       | Input power supply quality – voltage levels, polarity, ground/earth impedance measurements, phase/neutral cabling.  |         |
| 2       | The AV System Integrator shall demonstrate the working of the AV system as per the schematic, e.g., auto input selection, scaling of VGA, operation of the wired button panel.                    |         |
| 3       | For all Ethernet ports involving UTP/STP CAT5e/CAT6 cable, scanner reading and test result shall be provided.   |         |
| 4       | The AV integrator shall test that there is no acoustic feedback from speakers to the microphones and shall rectify the same by adjusting gain of microphones or by adjusting mixer/DSP parameters |         |
| 5       | Shall check the functionality of all wireless microphones for poor spots and shall rectify the same by checking cables, re-alignment and relocation of wireless antennae, if provided.            |         |
| 6       | SPL Levels / Sound Dispersion at various locations shall be tested and documented   |         |
| 7       | Impedance test of loudspeakers  |         |

2. Documentation for AV Racks

| Sr. No. | Description   | Remarks |
|---------|---|---------|
| 1       | The AV System integrator shall provide an AV rack numbering scheme clearly indicating:<br><br>Rack ID/Number<br>Rack/Location<br>List of Equipment installed in the rack, including make and model nos.<br>Quantity of AV equipment installed inside rack |         |
| 2       | The AV System integrator shall provide the connectivity schematic for individual rack   |         |
| 3       | Cable IDs and tags  |         |
| 4       | Signal IDs at connectors, e.g., HDMI <sub>1</sub> , VGA <sub>4</sub> etc.   |         |
| 5       | AV System integrator shall clearly identify hazardous sections of rack such as power distribution panels and put up adequate visual signs for ensuring safety of personnel.   |         |
| 6       | List of recommended procedures including Do's and Don't-Do's shall be provided on the inside of each rack.  |         |

3. Documentation for programming and software configuration (via serial ports or USB ports or Ethernet/webserver)

| Sr. No. | Description | Remarks |
|---------|-------------|---------|
|---------|-------------|---------|

|   |  |  |
|---|--|--|
| 1 | Wherever equipment configurations are carried out such as in mixers, DSPs, video controllers, conference controllers, video switching devices, a backup in suitable media shall be provided to the client. |  |
| 2 | Softcopy as well as hardcopy of configuration / programming templates shall be provided  |  |
| 3 | All APIs and SDKs shall be handed over and shall be the property of the client.  |  |

#### 4. Operational Instructions

| Sr. No. | Description   | Remarks |
|---------|---|---------|
| 1       | As-built system schematic diagrams shall be provided and which shall be pasted on the inside of the AV rack.  |         |
| 2       | For all such drawings revision numbering and date of revision shall be documented and available at rack itself.   |         |
| 3       | The procedure for powering up or starting up the AV rack shall be provided and pasted on the inside of the AV rack.   |         |
| 4       | A step-by-step visual walk-through shall be provided for start-up procedure as well as operating procedure including for various menus, wired button panel etc. |         |
| 5       | Screenshots of programming and operations' steps shall be provided  |         |
| 6       | A customized operational manual for each room/type of room shall be provided which shall include instructions for equipment as actually installed in that room. |         |

## 2. MAINTENANCE AND OPERATION DURING DEFECTS LIABILITY PERIOD

Contractor is responsible to provide a comprehensive Operation and maintenance for the system installed and commissioned by him for a minimum of **Two (2) years** and is covered under this defect liability period. The defect liability period shall start from the **Date of Taking over** of the system by the University. Contractor shall take actions as described below but not limited to:

### 1. Complaints

The Contractor shall receive calls for any and all problems experienced in the operation of the system under this contract, attend to these within 2 hours of receiving the complaints and shall take steps to immediately correct any deficiencies that may exist. Corrective actions to problem experienced, if takes longer time, shall be complied 100% by during next business hours.

### 2. Repairs

All equipment that requires repairing shall be immediately serviced and repaired. Since the period of Mechanical Maintenance runs concurrently with the defects liability period, all replacement parts and labour shall be supplied promptly free-of-charge to the Owner.

### 3. Log Book

The contractor shall provide four (4) copies of bound printed comprehensive log book containing tables for daily record of all temperature pressures, humidity, power consumption, starting and stopping times for various equipment, and record of unusual observations. This log book shall contain pages for one year's records of above observations.

- 5. Operation of equipment
  - i) 10 hours a day, year round during working office hours for full load
  - ii) 14 hours a day, year round during non-work hours for part load.
  - iii) All stand-by equipment to be operated as per mutually agreed program.
  - iv) Proper entry and upkeep of relevant log books.
  - v) Maintain complaints register. Submit weekly report.
  - vi) Proper housekeeping of all areas under the contract.
  - vii) Prepare daily consumption report and summary of operation.

### **3. INSTRUCTION, OPERATION AND MAINTENANCE MANUAL**

The Contractor shall prepare and produce instruction, operation and maintenance manuals in English for the use, operation and the maintenance of the supplied equipment and installations, and submit to the Engineer In charge/ Consultants in three (3) copies at the time of taking over. In addition, one set with editable version will be given on compact disc. The manual shall generally consist of the following:

- a) Description of the project.
- b) Operating instructions.
- c) Maintenance instructions including procedures for preventive maintenance.
- d) Manufacturers catalog.
- e) Spare parts list.
- f) Trouble shooting charts.
- g) Drawings.
- h) Type and routine test certificates of major items.

### **4. TRAINING**

The concerning vendor shall be liable to impart training to the field personnel or Engineer appointed by Owner responsible for daily operations and maintenance. Such trainings shall consist of but not limited to following:

- a) Providing classroom training as well as field training. The duration of classroom training shall be minimum of **03** hours and that of field training shall be **05** hours and shall be repeated for all buildings or systems.
- b) The concerning vendor shall provide such training for each building and systems.
- c) Training syllabus shall be submitted and approved in prior by "The Consultant/Engineer In charge".
- d) Providing video recording of every such training and shall submit 4 copies of training videos in CD/DVD/Pen drive to "The Client".
- e) Wherever required representatives of respective OEM shall be present at the time of imparting training and ensuring all necessary information shall be imparted to the owner's representative.
- f) The concerning vendor shall be liable to arrange required representatives of respective OEM during training.

### **5. OPERATING INSTRUCTIONS**

The contractor shall submit a draft copy of comprehensive operating instructions and maintenance schedule for all systems and equipment included in this contract. This shall be supplementary to manufacturer's operating and maintenance manuals. Upon approval of the draft, the contractor shall submit **four (4)** complete bound sets of typewritten operating instructions, maintenance schedules, and log books.

The manual shall be carefully indexed and shall include sections on:

- a) General description of equipment's & systems.
- b) Handbooks operation & maintenance instructions of manufacturers.

- c) Drive List
- d) Technical Particulars of Equipment's
- e) Start-up & stopping procedure.
- f) Procedure & setting of Controls
- g) List drawings
- h) Schedule of spare parts essential & others.
- i) Test results & certificates.
- j) Log Book format.

## **6. COMPLETION CERTIFICATE**

On completion of the installation a certificate shall be furnished by the contractor countersigned by the licensed supervisor, under whose direct supervision the installation was carried out. This certificate shall be in the prescribed form as required by the local statutory authority. The contractor shall be responsible for getting the installation inspected and approved by the local concerned authorities and for obtaining the necessary clearance certificates from the authorities.

## **7. COMPREHENSIVE ANNUAL MAINTENANCE & OPERATION SERVICE**

Contractor shall be required to carry out the operation and Maintenance of the AV systems installed by him for the defects liability period and if found satisfactory by the university then this may be extended by the University for further 3 years. However, during the operation, a snag list may be issued to contractor for further modification without any cost implication.

- a) Operation contract
  - i) 24 hours a day, year round for full load
  - ii) All stand-by equipment to be operated as per mutually agreed program.
  - iii) Proper entry and upkeep of relevant log books.
  - iv) Maintain complaints register. Submit weekly report.
  - v) Proper housekeeping of all areas under the contract.
- b) All Inclusive Maintenance Contract
  - i) Scope.  
The AMC shall cover all the items installed by the contractor
  - ii) Routine Preventive Maintenance Schedule to be submitted
    - Schedule to cover manufacturer's recommendation and/or common engineering practice (for all equipment's and related accessories, cables, wires, panels etc under contract).
    - Equipment's history card giving full details of equipment and frequency of checks and overhaul.
    - Monthly status report.
- c) Uptime during maintenance contract
  - i) 99% uptime of all systems under contract.
  - ii) Up time shall be assessed every month and in case of shortfall during any month the contract shall be extended by a month.
  - iii) There shall be no reimbursement for the extended period.
  - iv) Break-downs shall be attended to within ten hours of reporting.
- d) Manpower
  - i) Adequate number of persons to the satisfaction of the Owner's site representative shall be provided including relievers.
  - ii) Statutory requirements of EPF, ESIC and other applicable labour legislations to be complied with; and monthly certification to that effect to be submitted.

- iii) Duty allocation and Roaster control shall be contractor's responsibility.
- iv) No overtime shall be payable by Owner for any reason whatsoever.
- e) Shut Downs
  - i) Routine shut downs shall be permitted only as allowed by the Chief Engineer.
  - ii) Contractor shall be at liberty to carry out routine maintenance as and when required but with prior permission of the Owner.
- f) Security Deposit and Performance Guarantee

The Contractor shall provide Security deposit and Performance Guarantee in the form of Bank Guarantee amounting to 10% of the total AMC and O&M contract value on start of the AMC and O&M period post DLP period.

## **8. DISPUTE IN MODE OF MEASUREMENT**

Where Works have to be measured for any purpose whatsoever, it shall be in accordance with item specifications as per relevant Indian Standards unless otherwise specifically indicated in the Contract Specifications. All measurements will be recorded in metric units only. In case of absence of mode of measurement of any item not covered by both the methods mentioned above, the Engineer-in-Charge's decision shall be final and binding. The required number of bills, measurement sheets, registers, bill forms, level/field books, materials/ account registers, testing registers, site order books and any other stationary item pertaining to this contract shall be printed and provided for by the contractor, at his own cost in the format prescribed and approved by the Engineer-in-Charge in writing.

## **9. TIME FOR COMPLETION**

Time for completion for all the works shall be as per the Project Time Line Matrix from the date of issue of Letter of Intent (LOI).

The work shall be executed strictly as per the Time Schedule, working drawings and specification of the items included into the schedule of items. The period of work given includes the time required for mobilization and completion in all respects to the entire satisfaction of the Engineer-in-Charge.

- a) Weekly programs of work will be drawn up by the Contractor to be approved by the Engineer-in-Charge. The Contractor shall scrupulously adhere to these schedules by deploying adequate personnel and construction tools and tackles. In all matters concerning the extent of targets set out for weekly programs and degree of achievements, the decision of Engineer-in-Charge shall be final and binding.
- b) The time for completion mentioned above shall be inclusive of any monsoon following within the aforesaid time for completion. Delay/ held up of work on account of monsoon/ rain will not be considered for granting of additional time to complete the work.

## **10. WARRANTIES AND GUARANTEES**

All manufacturers' warranties & guaranties for the equipment supplied by the contractor shall be passed on to the owner.

## **11. MEASUREMENTS**

The Engineer-in-Charge shall, except as otherwise stated ascertain and determine by measurement the value of Work done, in accordance with the Contract and as per actual Work done. The Engineer-in-Charge shall, when he requires any part or parts of the Works to be measured, give notices to the Contractor's authorized agent or representative who shall forthwith attend or send a qualified agent to assist the Engineer-in-Charge in making such measurement and shall furnish all particulars required by either of them. Should the Contractor not attend or neglect or omit to send such representative then the measurement made by the Engineer-in-Charge shall be taken to be the correct measurement of the Work. For all measurements, figured dimensions given in the drawings shall be followed. Measurement of all hidden items shall be carried out by the Engineer-in-Charge. The Contractor or his representative who attends may at the time of measurement take such notes and measurements as he may desire.

Where Works have to be measured for any purpose whatsoever, it shall be in accordance with item specifications as per relevant Indian Standards unless otherwise specifically indicated in the Contract Specifications. All measurements will be recorded in metric units only. In case of absence of mode of measurement of any item not covered by both the methods mentioned above, the Engineer-in-Charge's decision shall be final and binding. The required number of bills, registers, bill forms, level/field books, materials/ account registers, testing registers, site order books and any other stationary item pertaining to this contract shall be printed and provided for by the contractor, at his own cost in the format prescribed and approved by the Engineer-in-Charge in writing.

## **12. CONTRACTOR PERSONNEL AT SITE:**

List of persons employed by Contractor for the subject work mentioning their residential address shall be submitted to Nalanda University. In case of any revision, the same shall be informed to NU from time-to-time.

The Contractor shall be directly responsible for any/all disputes arising between him and his personnel and keep indemnified NU against all losses, damage and claims arising thereof.

Within the Nalanda University premises, the Contractor's personnel shall not do any private work other than their normal duties.

The contractor may also be required to provide photo passes to the personnel required by him, for security and safety reasons and furnish the details of the same when asked for.

Contractor shall be fully responsible for theft, burglary, fire or any mischievous deeds by his staff and any loss to Nalanda University shall be recovered from the immediate bill of the Contractor.

Contractor shall provide all necessary tools and tackles, equipment's, safety belt, wheel burrow, scaffolding, ladders, drilling m/c & safety equipment etc. required to carry out job at his cost and material used by Contractor shall be of standard make and approval of Engineer-In-Charge shall be taken for the same.

Engineer In-charge also reserves the right to ask the Contractor to remove particular person(s) from site with immediate effect if his behavior/ performance is not up to the mark and/or found indulging in unlawful activities, Contractor shall immediately comply with such instructions.

It will be the responsibility of contractor's engineer to ensure that their personnel behave in a proper manner and behavior and not to undergo the argument with the employees. It will be the responsibility of the Contractor's Engineer to deal with such complaints or co- ordinate with the University Engineer.

**13. Compliance of various rules and regulations during execution of AV works in line with Green Building norms as per GRIHA.**

All measures will need to be complied with by the CONTRACTOR and supervised by the PMC in order to assure that the right information is obtained on the required manners and time. This information will have to be sent to the Owner/Architect, on a forth night basis. The PMC will supervise the collated information and records to asses any discrepancy or improvement required in order to prepare the submittal to GRIHA for Green Building Certification.

A photographic and paper record as required will have to be provided of all below mentioned measures to the Architects/Sustainability Consultant.