



TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY

Office of the Estate Officer

Madhavaram Milk Colony

Chennai-600 051

# TENDER DOCUMENT

## TWO COVER SYSTEM

- Name of work : Construction of Standard Unit Design Seed Processing Plant cum Seed Store under Seed hub Scheme at ICAR – Krishi Vigyan Kendra, Kattupakkam.
- Total Number of pages in this tender Document : 76 Pages
- Number of items in schedule " A" : 20 Items including sub items
- Tender should be submitted on or before : 17.05.2017 upto 03.00 P.M.
- Tender Document sold to

**TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY**  
**Office of the Estate Officer**  
**Madhavaram Milk Colony**  
**Chennai-600 051**

**Name of work : Construction of Standard unit design Seed Processing Plant cum Seed Store under Seed hub scheme at ICAR – Krishi Vigyan Kendra, Kattupakkam.**

**Special Conditions**

- 1) **The tender and EMD should be enclosed in separate covers and both the covers should then be submitted in a common sealed cover. All the three covers should be sealed. Tenders not submitted in sealed cover will be summarily rejected.**
- 2) **The rate in words and figures for each item of schedule should be furnished by the tenderer without fail in the appropriate columns.** The total of each page should be noted at the end of each page and carried over to the next page. The grand total value of the tender should be worked out and furnished at the end both in words and figures.
- 3) **The tenderer or a person nominated by the tenderer should be present on the tender opening day.**
- 4) **The work has to be completed within the agreement period from the date of handing over of the site. In case the contractor fails to show required progress of work, the Estate Officer is fully empowered to execute the unfinished works by engaging third party and the expenditure will be deducted from the running bill.**
- 5) **Contractors not registered with TANUVAS, has to provide all required documents including live certificate for registration without fail. Tender without such details will be rejected.**

**Contractor**

## ANNEXURE

### PARTICULARS TO BE FURNISHED BY THE TENDERER

1. Name of the tenderer and address :
2. Name of work :
3. Date of tender :
4. Total value of tender :
5. Details about E.M.D. enclosed for this tender and its validity :
6. Registered class of the tenderer with monetary limit and department in which registered. Certified copy of the registration should be attached :
7. Details of two similar value, work, completed in the last 3 years with name of work, place of work, value of work, etc. should be furnished or otherwise the tender will not be considered. :
8. Works under execution (details about name and place of work value of the work etc., should be furnished) :
9. Command of labour in brief :
10. Turnover of previous year (Particulars for a period of three consecutive years to be furnished) :
11. Whether Income Tax clearance certificate is enclosed. If not when it will be produced? :

12. (i) Sales Tax Registration Number :

(ii) Whether Sales Tax clearance certificate is enclosed? If not, when it will be produced?

13. In case of registered co-operative societies they should furnish name of the nominee with their credential details at the time of tender itself. They should also certify, that the nominee of the society is not a registered contractor in the Dept.

**14. TECHNICAL ASSISTANT DETAILS**

1. Name :

Qualification certificate :

Experience certificate :

2. Name :

Qualification certificate Experience certificate

OR

1. Name :

If retired Civil Engineer, Designation and date of retirement (copy to be enclosed)

15. Any other details :

**NOTE :** The consent letter from the Technical Assistant proposed to be employed should be obtained and enclosed with the tender.

## Declaration to be given by the Unemployed Engineer

1. Name :
2. Address :
3. Age :
4. Native place
5. District
6. Qualification
7. Year of passing
8. No. of years of employment
9. Name of the Division in which registered as an unemployed Engineer
10. Date of registration
11. Class of contractor Monetary Limit
12. Previous experience in year
  - a) Irrigation
  - b) Building
  - c) Head works
  - d) Bridges
  - e) Others

(Details with regard to name of work, nature of work etc., may be furnished in a separate sheet)

Contracts	Name of work	Value of work	Period of work	Nomination of tender
(1)	(2)	(3)	(4)	(5)

13. Annual turnover for first three years
  
14. Solvency / Immovable / Cash
  
15. Tools and Plant owned
  
16. Was there any default in fulfilling terms of contract and result and penal action
  
17. Special remarks if any

Station :

Signature and name of the Date :  
Unemployed Engineer

**TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY**

**Office of the Estate Officer, TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY., Madhavaram Milk Colony, CHENNAI-600 051**

- Name of work : Construction of Standard unit design Seed Processing Plant cum Seed Store under Seed hub scheme at ICAR- Krishi Vigyan Kendra, Kattupakkam.
- Last Date for receipt of tender : 17.05.2017 upto 3.00 pm
- Date and time of opening : 17.05.2017 at 3.30 pm
- E.M.D. to be remitted : Rs.25,600/-
- Mode of E.M.D. to remitted : In the shape of Demand Draft of the Nationalised / scheduled banks drawn in favour of Estate Officer, TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY (TANUVAS.), Chennai
- Cost of tender schedule : 1) 9,000/- + VAT @ 5% if purchased at Estate Office, TANUVAS., Madhavaram Milk Colony, Chennai-51.  
2) It can also be downloaded at free of cost from the website [www.tenders.tn.gov.in](http://www.tenders.tn.gov.in) and [www.tanuv.ac.in](http://www.tanuv.ac.in)

Note :

- 1. The tender and E.M.D. should be enclosed in separate covers, both the covers should then be submitted in a common sealed cover. All the three covers should be sealed. Tenders not submitted in sealed cover will be summarily rejected.**
- 2. The rate In words and figures for each item of schedule should be furnished by the tenderer without fail In appropriate columns. Corrections scribbling overwriting and erasing (should be avoided as far as possible) should be attested by the contractor.**
3. The total value of each Item of work should be worked out and entered in the amount column. Proper care must be taken in working out the value of each item of work taking Into account the unit for which the rate is quoted and the quantity of work to be done under the Item.
- 4. Copy of the Registration Certificate issued by T.N.P.W.D. / TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY / C.P.W.D. must be enclosed in the tender document submitted. Tenders without Registration Certificate is liable to be rejected.**

**NOTE:** The total of each page should be noted at the end of each page and carried over to next page. The grand total value of the tender should be worked out and furnished at the end, both in words and figures.

**CONTRACTOR**

**ESTATE OFFICER,  
TANUVAS., CHENNAI-51**

## **FOR SPECIAL ATTENTION OF THE TENDERER**

1. Proof of registration in T.N.P.W.D. / TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY. / C.P.W.D. as a contractor shall be attached with the tender.
2. Current Income Tax Clearance Certificate shall be enclosed with the tender.
3. Sales Tax Registration Number should be furnished and Sales Tax Clearance Certificate should also be produced before finalization of contract.
4. E.M.D. will be accepted in the shape of Demand Draft of the Nationalized / Scheduled banks drawn in the name of Estate Officer, TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY.
5. The following particulars shall also be furnished by the contractor along with the tender.
  - a) List of details of works executed by the contractor in the last three years to similar or more value.
  - b) A list of details of work to similar or more value under execution by the contractor with their values.
  - c) **Annual turnover of the last one year (necessary certificate to the effect issued by the respective bank shall be attached)**
6. The tender documents will be issued to the contractors registered in Tamil Nadu Public Works Department in the appropriate class and the Registered contractor of TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY. or any other Government Departments like C.P.W.D.

### **SPECIAL NOTE:**

**Please note that the tenders of those who have executed in the Government Departments only will be considered. Private works will not be taken into account while evaluating their tenders.**

**CONTRACTOR**

**ESTATE OFFICER,  
TANUVAS., CHENNAI-51**



## **SPECIAL INSTRUCTION TO THE TENDERERS**

1. The Tenderer should carefully go through the tender schedule and quote their rates for all items.
2. The rates should be filled in neatly in figures and in words and taking into account the metric units specified in the tender, scribbling, over writings and erasing should be avoided as far as possible.
3. The amount of each item of work should be worked out. Proper care must be taken in working out the amount of each item of work taking into account the unit for which the rate is quoted and the quantity of work to be done under the item.
4. The total for each page should be arrived at and, carried out to every page and the grand total value of work should be worked out and shown at the end.
5. The tender should be submitted along with a covering letter giving full details, as called for in the tender notice together with the copy of letter registering them into the appropriate class.
6. In case the tenderers who are eligible for concessional Earnest Money Deposit and accordingly they should furnish the reference No. and date in which the concession was granted to them A copy of the aforesaid reference may be enclosed along with the tender for ready reference.
7. Income tax clearance certificate for the current year should be submitted along with the tender or the tender in which the Income Tax clearance certificate for the current year was submitted to this office should be specified.
8. Details of previous work done by the Tenderers covering the cost of the work, the agreement, No. date, department in which the work was carried out, etc., should be furnished so as to assess the previous experience of the tenderers. Year wise details should be furnished so as to see that these tenderers have minimum experience of major building. **(Read special note in the page No.7 of this).**
9. List of various machinery and other equipments at the tenderers disposal for use in the execution of the work, should be furnished.
10. The TENDER form should be filled in while submitting the tender. The tenders submitted without filling up the tender form are liable to be rejected.
11. The tender must be submitted in a sealed foolscaps cover duly signing all the conditions.

**CONTRACTOR**

**ESTATE OFFICER,  
TANUVAS., CHENNAI-51**

## APPENDIX - 1

### TENDER NOTICE

(As amended in CO. M.S. No. 618/PW. Dt. 30.04.85)

1. On behalf of the Vice-Chancellor, Tamilnadu Veterinary and Animal Sciences University, Tenders will be received by the Estate Officer, Tamilnadu Veterinary and Animal Sciences University, Chennai-600 051 at his office upto 3.00 PM on **17.05.2017** for the work **Construction of Standard unit design Seed Processing Plant cum Seed store under seed hub scheme at ICAR – Krishi Vigyan Kendra, Kattupakkam.**

The tenders should be in the prescribed form obtainable from Estate Officer's Office, Tamilnadu Veterinary and Animal Sciences University, Chennai-600 051. The tenders will be opened by the Estate Officer at 3.30 P.M. on the same day at the place aforementioned.

The tenderers or their agents are expected to be present at the time of opening of tenders. The tender receiving officer will on opening each tender prepare a statement of the attested and unattested corrections therein and hand it over to the tenderer concerned and initial all corrections in the presence of the tenderers. If any of the tenderers or their agents finds it inconvenient to be present at the time, then in such a case, the tender receiving officer will on opening the tender of the absentee tenderer, make out a statement of the unattested corrections and communicate it to him. The absentee tenderer shall then accept the statement of the corrections without any question whatsoever.

2. Tenders must be submitted in sealed covers and should be addressed to the Estate Officer, Tamilnadu Veterinary and Animal Sciences University, Chennai-600 051. The name of the tenderer and name of the work being noted on the Cover. If the tender is made by an individual, it shall be signed with his full name and his address shall be given. If it is made by firm it shall be signed with the co-partnership, name by a member of the firm who shall also sign his name and the name and address of each member of the firm shall be given. If the tender is made by a corporation it shall be signed by a duly authorised officer who shall produce with his tender, satisfactory evidence of his authorisation. Such tendering corporation may be required, before the contract is executed, to furnish evidence of its corporate existence.
3. Each tenderer must also send a certificate of Income Tax Verification from the appropriate Income Tax authority in the form prescribed therefor. The certificate will be valid for one year from the date of issue for all tenders submitted during the period.

In the case of proprietary or partner firm it will be necessary to produce the certificate aforementioned for the proprietor or proprietors and for each of the partners as the case may be.

If the tenderer is a registered Tamil Nadu Public Works Dept. / TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY. / C.P.W.D. Contractor and if a certificate for the current year had already been produced by him during the calendar year in which the tender is made, it will be sufficient, if particulars regarding the previous occasions on which the said certificate was produced, are given.

Any tender received without a certificate aforementioned will be summarily rejected.

4. Each tender must pay an Earnest Money, Deposit a sum of **Rs.25,600/-** in the form of Demand Draft pledged in favour of the Estate Officer, TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY. This E.M.D. will be refunded to the unsuccessful tenderer on application after intimation is sent of rejection of the tender or at the expiration of three months from the date of tender whichever is earlier. The refund will be authorised by the Estate Officer. The E.M.D. will not be received in cash or currency notes.

The EMD will not carry any interest. It will be dealt with as provided in the tender.

5. The tender will remain valid for a period of 90 days from the last date of receipt of tender. The validity period can be extended further if the contractor gives his consent in writing specifying the period of extension.

- i) The tenderer whose tender is under consideration, shall attend the Estate Officer's office before the end of the period specified by written intimation to him. In case, the tenderer fails to attend the office before the end of the specified period, his tender will not be considered. He shall forthwith upon intimation being given to him of acceptance of his tender, by the officer duly authorised in his behalf hereinafter called "The accepting authority," make security deposit of 2% of the value of contract in the form of Demand Draft by taking into account of the amount of EMD already deposited with the tender it would be sufficient to pay the balance amount to make up the 2% of the value of contract for the purpose of Security deposit. However, the security deposit of one percent of the estimate cost of work can be deposited as one time deposit by the contractor. The security deposit together with Earnest Money Deposit and the amount withheld according to clause 64-1 of General conditions of Contract shall be retained as Security for the fulfillment of contract. If a cash Security Deposit is made by the contractor, he shall follow the procedure laid down in the proceeding paragraph for payment of Earnest Money Deposit and such deposit shall not bear interest.
- ii) On receipt of written communication of acceptance of tender, if the tenderer fails to pay the requisite security deposit within the period specified in the written communication or backs out from the tender or withdraws his tender, the Earnest Money Deposit shall be forfeited to the University.

If the contractor fails to carryout the contract, after paying requisite deposits, then he will be liable for the excess expenditure if any incurred to complete the work as contemplated in the General Conditions of Contract.

- (iv) It shall be expressly understood by the tenderer that on receipt of written communication of acceptance of tender by the tenderer there emerges a valid contract between the TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY. and the tenderer, for execution of the work without any separate written agreement. For this purpose the tender documents ie., tender notice, tender offered by the contractor, General Conditions of Contract, special conditions to the contract, correspondence, written communication of acceptance of tender etc., shall constitute a valid contract and that will be foundation of the rights of the both the parties to the contract.

Provided that it shall be open to the accepting authority to insist on execution of any written agreement by the tenderer, if administratively considered necessary or expedient.

6. The tenderer shall examine closely the Tamilnadu Building practice and also the General Conditions of Contract contained therein, and sign the Estate Office copy of the Tamil Nadu Bldg., Practice and its addenda volume in token of such study before submitting his tender unit rates, which shall be for finished work in situ. He shall also carefully study the drawing and addl. specifications and all the documents connected with the contract. The Tamilnadu Bldg., practice and other connected documents with the contract such as specifications, plans, descriptive specifications sheet regarding materials etc. can be seen at any time between 11.00 a.m. and 5.00 p.m. on office, days in the office of Estate Officer, Tamilnadu Veterinary and Animal Sciences University, Chennai-600 051.

A copy of the set of contract documents can also be had on payment of **Rs.9,000/- + Value Added Tax @ 5%** for each set if purchased at Estate Office, TANUVAS., Madhavaram Milk Colony, Chennai-51.

7. The tenderers attention is directed to the requirement for materials under the clause "Materials and workmanship" in the General Conditions of Contract. Materials conforming to the ISI. Standards shall be used on the work, and the tenderer shall quote his rates accordingly.
8. Every tenderer is expected before quoting his rates, to inspect the site of the proposed work'. He should also inspect the quarries and satisfy himself about the quality and availability of materials. The name of quarries and kiln etc. where from certain materials are to be obtained will be given in the descriptive specification sheet. The best class of materials to be obtained from the quarries or other source defined shall be used on the work. In every case the materials must comply with the relevant standard specification. Samples of materials as called for in the standard specification or in the tender notice or as required by the Assistant Engineer (Civil) shall be submitted for Executive Engineer's approval before the supply to site of work is begun. If the contractor after examination of the source of materials defined in the descriptive specification sheet is of the opinion that materials complying with the standard or other specification of the contract cannot be obtained in quality or sufficient quantity, from the source defined in the descriptive specification sheet, he shall so state in his tender and state where from he intends to obtain materials, subject to the approval of the Executive Engineer.

The University will not, however, after acceptance of contract rate pay any extra charges for lead or for any other reasons, in case the contractor is found later on to have misjudged the materials available. Attention of the contractor is directed to the "General Conditions of Contract" regarding payment of seignior-age tolls etc.

9. The tenderer's particular attention is drawn to the sections and clause in the General Conditions of Contract dealing with.
  1. Test, Inspection and rejection of defective materials and work.
  2. Carriage
  3. Construction plant
  4. Water and Lighting
  5. Cleaning up during progress and for delivery
  6. Accidents
  7. Delays
  8. Particulars of payment.

The contractor should closely peruse all the specification clauses which govern the rates which he is tendering.

10. A schedule of quantities accompanies this tender notice. It shall be definitely understood that the University does not accept any responsibility for the correctness or completeness of this schedule and that this schedule is liable to alterations by omissions deduction or additions at the discretion of the Estate Officer or the Engineer,i/c. Tamilnadu Veterinary and Animal Sciences University, Chennai-600 051. as set forth in the conditions of contract. The tenderer will, however base his lump sum tender on this schedule of quantities. He should quote specific rates for each item in the schedule and the rates should be in rupees and in sums of five paise. The rates should be written both in words and figures and the units words. The tenderer should also show the totals of each item and the grand total of the whole contract and quote in the tender a lumpsum of which he will undertake to do the whole work subject to the conditions of contract such lumpsum agreeing with the total amount of Schedule A. The schedule accompanying the lumpsum tender shall be written legibly and free from erasures, over writings, or conversion of figures. Corrections, where unavoidable should be made by crossing out, initialing dating and rewriting.
11. Tenderers offering a percentage deduction from or increase on the estimate amount except in the case of tender for maintenance and repair works called for specifically under percentage rate tender system and those not submitted in proper form or in due time will be rejected.
12. The tenderer should workout his own rates, without reference being made to the schedule of rates or the University works department estimate. However in case of tenders called for under % rate tender system, the tenderer should workout his own rate but quote his percentage rate above or below the total estimated cost of the work of the department indicated in the tender schedule.
13. The price at which and the sources from which certain particular materials shall be obtained by the contractor are given at the end of the schedule accompanying the tender form. Tenderer must accept the materials at these prices and shall quote their price for finished works accordingly. Notwithstanding any subsequent change in the market value for these materials, the charges to the contractor will remain as originally entered in the written contract. No centage or incidental charges will be borne by University in connection with this supply.
14. The attention of the tenderer is directed to the contract requirements as to the time of beginning of work, the rate of progress and the dates for the completion of the whole work and several parts. The following rate of progress and proportionate value of works done from time to time as will be indicated by the Engineer,i/c. certificates of the value of work done will be required. Date of commencement of the programme will be the date on which the site (or Premises) is handed over to the contractor.

Period after date of commencement	Total percentage of work to be completed based on contract lumpsum amount
1st Month	60%
2 <sup>nd</sup> Month	40%

**Note :** *The period to be entered in col. 1 for the purpose of following the rate of progress may be fixed by the Estate Officer to suit each case.*

15. No part of the contract shall be sub-let without written permission of the Estate Officer nor shall transfer be made by power of attorney, authorising others to receive payment on the contractor's behalf.
  
16. If further necessary information is required the Estate Officer will furnish such but it must be clearly understood that tenders must be received in order and according to instructions.
  
17. **The Estate Officer or other sanctioning authority reserves the right to reject any tender or all the tenders .**
  
18. The tenderers who are themselves not professionally qualified shall undertake to employ Qualified technical men at their cost to look after the work. The tenderers should state in clear terms whether they are professionally qualified or whether they undertake to employ technical men required by the department specified in the schedule below for the work. In case the selected tenderer is professionally qualified or has undertaken to employ technical men under him, he should see that one of the technically qualified men is always at the site of the work during working hours personally checking all items of works and paying extra attention to such works as may demand special attention (e.g.) reinforced concrete works etc.

(The norms for the employment of technical Assistant and penalty for non-employment of such technical Assistant etc, is furnished in the format below)

## EMPLOYMENT OF TECHNICAL ASSISTANTS

NOTE :- 1

### *Employment of Technical Personnel*

1. From one to Rs. 5.00 Lakhs
  - 1) One Diploma Holder in Civil Engineering  
(or)
  - 2) Not less than one retired Junior Engineer
  
2. From Rs. 5 to 10 lakhs
  - 1) One B.E., (Civil)  
(or)
  - 2) Equivalent Degree holder  
(or)
  - 3) Not less than one retired Sub Divisional Officer  
AEE / ADE  
(or)
  - 4) One Diploma Holder with three years experience
  
3. From Rs. 10 to 25 lahs
  - 1) One B.E., (Civil) with 3 years experience  
plus ONE DIPLOMA Holder in Civil Engg.  
(or)
  - 2) Equivalent Degree holder with 3 years  
experience plus one Diploma holder in Civil Engg.  
(or)
  - 3) Not less than one retired Sub-Divisional Officer  
plus one Diploma holder in Civil Engg.  
(or)
  - 4) Two diploma holder in Civil Engg. with 3 and 5  
years experience respectively.
  
4. From Rs. 25 to 50 lakhs
  - 1) One B.E., Civil with 3 years experience plus two  
diploma holders in Civil Engg.  
(or)
  - 2) One B.E., (Civil) with 3 years experience plus two  
retired Junior Engineers.  
(or)
  - 3) Equivalent degree holder with 3 years experience  
plus two Diploma holders in Civil Engg. or Two  
retired Junior Engineers  
(or)
  - 4) One retired Sub Divisional Officer (AEE or ADE)  
Plus two diploma holders in Civil Engg. or one  
retired SDO (AEE or ADE) Plus two retired Junior  
Engineers
  
5. Above Rs. 50 Lakes

To be examined in individual cases depending upon the nature of work and the technical skill involved and defined in the tender notice regarding the No. of qualified technical personnel to be employed by the contractor

2. A penalty of Rs.5,000/- PM for diploma holder and Rs.8,000/- PM for Degree Holder be levied in case of default on the part of contractors in the norms mentioned above.
3. The employment of Technical Assistant should be based only on the value of contract. Engineers retired from Civil Engineering Departments are also suitable to supervise the Civil Engineering works because of their experience in Civil Engineering field.
4. The tenderer who himself is not professionally qualified should undertake to employ qualified technical men at his cost to look after the work. The tenderer should state in clear terms whether he undertakes to employ technical men required by the Department specified in the Schedule below for the work. In case the selected tenderer is professionally qualified or has undertaken to employ. Technical men under him he should see that one of the technically qualified men is always at the site of work during working hours, personally checking all items of works and paying extra attention to such works as may demand special attention eg. reinforced cement concrete works etc.
5. It will not be incumbent on the part of the Contractor to employ Technical Assistants when the work is kept in abeyance due to valid reasons and during such period in the opinion of the Engineer,i/c., the employment of Technical Assistant is not required for the due fulfillment of the Contract.
20. A tenderer submitting a tender which the tender accepting authority considers excessive and/ or indicative of the insufficient knowledge of current prices or definite attempt at profiteering will render himself liable to be debarred permanently from tendering or for such period as the tender accepting authority may decide. The tender rates should be based on the controlled price for materials - price permissible for the tenderer to charge a private purchaser under the provision of clauses 8 of hoarding and profiting prevention ordinance 1943 as amended from time to time and on similar principles in regard to labour and supervision in the construction.
21. The contractor should offer employment to ex-toddy tappers as far as possible.

**Note:** This paragraph should be scored out if the cost of work involved is less than Rs, 10, 000/-



22. The contractor shall comply with the provisions of the Apprentices Act 1961 and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the competent authority, may at his discretion, cancel the contract or invoke any of the penalties for the breach of contract provided in the conditions of agreement. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the Act. Contractor shall, during the currency of the contract, ensure engagement of the apprentices in the categories mentioned below who may be assigned to him by the Director of Employment and Training/State Apprenticeship Adviser, Tamil Nadu. The contractor shall train them as required under the Apprentices Act 1961, and the rules made there under and shall be responsible for all obligations of the employer under said Act including the liability to make payments to the apprentices as required under the said Act.

Value of contract	Category	No. to be appointed
Rs. 1.00 lakh and upto Rs.3.00 lakhs	1. Building Constructor 2. Brick layer	1
Above Rs. 3.00 lakhs and upto 10.00 lakhs	1. Building Constructor Brick layer 2. Diploma holder in Civil Engineering	1 1
Above Rs. 10 lakhs and upto 50.00 lakhs	1. Building Constructor Brick layer B.E., (Civil) or 2. Equivalent degree holder	1 1

"Unless the contractor has been exempted from engagement of apprentices by the Director of Employment and Training/State Apprenticeship Adviser, a certificate to the effect that "That contractor had discharged his obligation under the said Act, satisfactorily should be obtained from the Director of employment and Training/State Apprenticeship Adviser" and the same should be produced by the Contractor for final payment in the settlement of contract.

23. In the case of contracts for construction of buildings either permanent or semi permanent buildings, a sum equivalent to 2 1/2% of the value of work done will be retained with the University for a period of Two years reckoned from the date of completion of the work in order to enable the departmental officers to watch the effect of all seasons on the work done by the contractor. The amount so retained with the University will be refunded only on the expiry of Two years period referred to above and on execution of Indemnity bond by the contractor for a further period of Three years. The contractor shall be liable to set right all the defects arising out of his faulty execution or substandard work noticed during the above five years period at his cost.

ESTATE OFFICER,  
TANUVAS.,CHENNAI-51

## II. TENDER

To

The Vice-Chancellor

represented by the

Estate Officer,

Tamilnadu Veterinary and Animal Sciences University,

Chennai-600 051.

Sir,

1. I/We do hereby tender and if this tender be accepted undertake to execute the following work viz, as shown in the drawings and described in the specification deposited in the office of the Estate Officer with such variations by way of alterations or additions to and omission from the said works and method of payment as are provided for in the conditions of contract for the sum of Rupees (in figures and words) or such other sum as may be arrived at under the clause of the General Conditions of Contract relating to "Payment on lumpsum basis or by final measurements at unit prices"
2. I/We have also completed the priced list or items in schedule "A" annexed (in words and figures) for which I/We agree to execute the work and receive payment on measured quantities as per the General Conditions of Contract.
3. I/We do hereby distinctly and expressly declare and acknowledge that before the submission of my or our tender, I/We have carefully followed the instruction in the tender notice and have read the Tamilnadu Building Practice and the General Conditions of Contract there-in and the Tamilnadu Building Practice addenda volume, and that I/We have made such examination of the contract documents and of the plans, specifications, quantities and of the location, where the said work is to be done and such investigation of the work required to be done and in regard to the materials required to be furnished as to enable to thoroughly understand the intention of the same and requirement, covenants, stipulations and restrictions contained in the contract and in the said plans and specification, and distinctly agree that I/We will not hereafter make any claim or demand upon the University based upon or arising out of any alleged misunderstanding or misconception or mistake on my/our part of the said requirements covenants stipulations restrictions and conditions.
4. I/We enclose an income tax verification certificate.

I/We being a registered TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY contractor have produced an Income Tax verification certificate during the current calendar year in respect of (here particulars of the previous occasions in which the certificate was produced should be given) The legal address of the contractors for service of all letters and notices will be as follows. .

5. (i) (a) I/We enclose herewith a chalan for the payment of the sum of Rs .....  
.....(to be entered in words and figures) as Earnest Money not to bear interest.

5. (i) (b) I/ We have paid Rs .....(Rupees .....,  
.....as against the E.M.D. of Rs.  
..... (Rupees..... ) only.  
Since I am/We are eligible to pay the EMD, at concessional rates.
5. (i)(c) I am / We are..... and  
hence exempted from payment of E.M.D.
6. If my/our tender is not accepted this sum shall be returned to me/us on my/our applications when intimation is sent to me/us of rejection or at the expiration of three months from the date of this tender whichever is earlier. If tender is accepted, the Earnest Money shall be retained by the University as security for the due fulfillment of contract. If upon intimations being given to me/us by the authority authorized by the Vice-Chancellor under article 299 (1) of the constitution (hereinafter called the accepting authority) of acceptance of tender (I/We) fail to make the additional security Deposit, then I/We agree to the forfeiture of Earnest Money Deposit. Any notice required to be served on me or us hereunder shall be sufficiently served on me or us if delivered to me or us personally or forwarded to me or us by post (Registered or ordinary) or left at my or our address given herein. Such notice shall, if sent by post be deemed to have been served on me or us at the time when in due course of post it would be delivered at the address to which it is sent.
7. I/We fully understand that on receipt of communication of acceptance of tender from the accepting authority, there emerges a valid contract between me/us and the Vice-Chancellor of Tamilnadu Veterinary and Animal Sciences University and the tender documents ie. Tender notice tender with schedules General Conditions of Contract and special conditions of the tender negotiation letters, communications of acceptance of tenders, shall constitute a contract for this purpose and be the foundation of rights of both the parties provided that it shall be open to accepting authority to insist on execution of any written Agreement by the tenderer, if administratively considered necessary or expedient.
8. I/We have also signed the copy of Tamilnadu Building practice and addenda volume, thereto maintained in the Division office in acknowledgement of being bound by all conditions of the clauses of the General Conditions of Contract and all specifications for item of works described by a specification number in Schedule A.
9. In consideration of the payment of Rupees or such of the sum as may be arrived at under the clause of the General conditions of contract, relating to payment of lumpsum basis or by final measurement at unit prices I/We agree subject to said conditions to execute and complete the works shown upon the said drawing serially from number 1 to inclusive (Schedule - B) and described in the specifications (Schedule - C) and to the extent of probable quantities shown in (Schedule - A) with such variations by way of alterations

additions to or deductions from the said work and method of payment therefor as are provided for in the said conditions.

10.(i) The term "Estate Officer" in the said condition shall mean the TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY. officer in charge of the University having jurisdiction for the time being over the work who shall be competent to exercise all the powers and privileges reserved herein in favour of the University with the previous sanction of or subject to ratification by the competent authorities in case where such sanction or ratification may be necessary and who has been duly authorised under articles 299 (1) of the constitution.

11. I/We agree that the time shall be considered as the essence of the contract and I/We hereby agree to commence the work as soon as this contract is accepted by the competent authority as defined by the University code and the site (or premises) is handed over to me/us as provided for in the said conditions and agree to complete the work within **TWO Months** from the date of such handing over of the site (or premises) and to show progress as defined in the tabular statement "rate of progress" subject nevertheless to the provisions for extension of time contained in clause 56 of the General Conditions of Contract appended to the Tamilnadu Building Practice. **In case the contractor fails to show required progress of work, the Estate Officer is fully empowered to execute the unfinished works by engaging third party and the expenditure will be deducted from the running bill.**

12. I/We agree that upon the terms and conditions of this contract being fulfilled and performed to the satisfaction of Engineer,i/c. the security deposited by me / us as herein before recited or such portions thereof as I/We may be entitled to under the said conditions be paid back to me/us as provided in clause 64 of the General conditions of Contract.

13. I am/We are professionally qualified and my/our qualification are as follows.

I/We in pursuance of clause 18 of tender notice, undertake to employ the following technical staff for supervising the work and will see that one of them is always at site during working hours personally checking all items of works and paying extra attention to such works „ as may require special attention (eg) reinforced cement concrete.

	Name of technical staff proposed to be employed (1)	Qualification (2)	Experience (3)
1.			
2.			
3.			

## SCHEDULE - A

(Schedule of Rates and Approximate Quantities)

- A. The quantities here given are those upon which the lump sum tender cost of the work is based but they are subject to alterations, omissions, deductions or additions as provided for in the conditions of this contract and do not necessarily show the actual quantities of work to be done. The unit rates noted below are those governing payment of extras or deductions for omissions according to the conditions of the contract as set forth in the General Conditions of Contract in Tamilnadu Building Practice and other conditions specifications of this contract.
- B. It is to be expressly understood that the measured work is to be taken nett (Not with standing any custom or practice to the contrary) according to the actual quantities when in place and finished according to the drawings or as may be ordered from time to time by the Estate Officer and the cost calculated by measurement or weight at the respective prices without any additional charge for any necessary and contingent works connected therewith. The rates quoted are for works in situ complete in every respect.

<b>Item No</b>	<b>Probable Quantities</b>	<b>Class and Description work</b>	<b>T.N.E.B.P No or other special specification no if any</b>	<b>Rate World Figure</b>	<b>Unit Words</b>	<b>Amt figure</b>
VIDE SHEETS ATTACHED SEPARATELY						

## SCHEDULE –B

### LIST OF DRAWINGS

### SUPPLEMENTAL LIST

Note: All drawings to be signed by the contractors as well as the officer entering into the contract.

As referred to in the specification including the General Conditions of contract in Tamilnadu Building practice

Sl.No	Drawing No	Description	Sl.No	Drawing No	Description	Date on which the drawing was supplied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
01.	001				Plan and section	

## SCHEDULE -C

List of specifications for the various items of works supplementing those described in Schedule A by standard specification numbers.

1. The contractor shall employ the following technical staff for supervising the work and shall see that one of them always at site during working hours personally checking all items of work and paying extra attention to such works as may demand special attentions eg. reinforced cement concrete works etc.

Name of the members of the technical staff to be employed	Qualification

Note 1 : In case the contractor is himself professionally qualified the above specification should be suitably altered and in case in which the contractor selected has not given in undertaking to employ qualified men it should be scored out.

2. A penalty of Rs.8,000/- per month for Diploma Holder and Rs.10,000/- p.m. for Degree holder be levied in case of default on the part of the contractors as per norms fixed by the Government for employment of Technical Assistant.
3. The employment of Technical Assistant should be based only on the value of contract Engineers and retired from Civil Engineering Departments are also suitable to supervise the civil Engineering works.
4. In case of the contractor who is professionally qualified is not in a position to remain always at the site of the work during hours personally checking all items of the work and paying extra attention to work as may demand special attention (eg) R.C.C. work etc. he should employ technically qualified men as prescribed for the works.
5. A movement register should be maintained for Technical Assistants employed by the Contractor or for the technically qualified Contractor. The Technical Assistants or Technically qualified contractors should note the arrival and the departure timings every day along with their initials. Such register should be produced during inspection of the Inspecting Officer.
6. It will not be incumbent on the part of the contractor to employ Technical Assistants when the work is kept in abeyance due to valid reasons and if during such period in the opinion of the Estate Officer, the employment of Technical Assistants is not required for the due fulfillment of the contract.

## SCHEDULE – D

### Special Conditions

1. Tenders with tampered seals will not be accepted.
2. Tenders in which the rates are not written in words will generally be rejected. In case of any discrepancy while expressing rates in words, the rate whichever is advantageous to University will only be taken into account. Tenders containing overwriting, corrections which are not attested by the tenderers will be liable for rejection.
3. The contractor should satisfy himself about the availability of the various materials at the quarries specified in the tender schedule for the work before tendering. In case, the contractor feels any difficulty in procuring the material from the stipulated quarries he should make a special mention of the fact with details of the quarry / Quarries from which he proposes to bring the required materials for the work in the covering letter to accompany his tender. Any claim for payment of extra cost on account of increase in the lead for materials at the later stage will not be accepted.
4. In case it is found by the Departmental Officers that the contractor has brought any of the required materials from a quarry with lesser lead than that is specified. In the schedule, proportionate deductions will be made from the contractors rate of payment for the finished work for the respective item / items of work.
5. A deduction of 2% will be made towards income Tax and sales Tax in every payment made to the contractor and as amended by the Government time to time.
6. Percentage Tender Conditions :  
  
On evaluation of Tender if it is found that if the overall quoted amount of the, Tender is less than 5 to 15% of the value put to Tender, the contractor shall pay an additional security at 2% of the estimated value. If the tender discount exceeds 15% to 20% the contractor shall pay an additional, Security deposit of 50% of the difference between the quoted amount and estimate amount Failure to furnish the Additional Security Deposit within 15 days from the date of receipt of Acceptance order and execute the Agreement shall entail cancellation of award of contract and forfeiture of E.M.D. furnished,"
7. An additional Security deposit of 1 % of the value of the contract will be remitted by the successful tenderer, if called for by the tender finalising authority.
8. A movement register should be opened and maintained for Technical Assistants employed by the Contractor or for the Technically qualified contractor. The Technical Assistant or Technically qualified Contractor should note the arrival and the departure timings every day along with their initials. Such Register should be produced during inspection of the Inspecting Officers.



9. Without prejudice to the generality of the above clause, the contractor shall during the currency of the contract, when called upon by the Engineer-in-charge engage and also ensure engagement by the Sub Contractors and others employed by the contractor in connection with the work such number of apprentices in the category mentioned, below and for such period, as may be required by the Engineer-in-charge. The Contractor shall train them as required under the Apprentices Act 1961 and the rules made there under and shall be responsible for all obligations of the employer under the said act including the liability to make payments to apprentice as required under that said act.
10. A statement giving particulars of equipment resources that will be put at the disposal of the work under the following classification should accompany the tender.
  - a) Equipment (Transport of materials viz. lorries and carts, concrete mixers)
  - b) Organisation
    - (i) Technical & (ii) Unskilled
11. The tender of the contractor who agrees to employ the maximum No. of Ex. service Men (No. to be specified in the tender) will receive preferential consideration. The tenderers are requested to report on their covering letter.
12. The Estate Officer reserves to himself the right of allotting the different sub works to the different contractors or to one and the same contractor as he may decide after the receipt of tenders.
13. All rates quoted in the tender shall be inclusive of Sales Tax, payable under the sales tax act as amended from time to time (including amendment Act 38/34) and that the contractor is responsible to file the Sales Tax return and pay the amount of tax as amended by the Commercial Tax Department. No request for payment of Sales Tax separately in addition to the tendered rates due to any plea of subsequent levy or increase in tax will be entertained vide clause 38(2) of General conditions of contract.
14. No seigniorage shall be charged where due for materials quarried from the PWD or other Govt. Quarries. No plot rent will be charged for materials stocked on University land during the course of construction provided all such materials are removed within one month after the work is completed.
15. Seigniorage or charges due for the use of private quarries and private land shall be paid by the contractor.

### III. Execution of Work

1. The entire work should be carried out as per specifications in the National Buildings code and Tamilnadu Building Practice.
2. The contractor shall make his own arrangements for clean and fresh water and shall meet all charges therefore. The special attention of the contractor is drawn to clause 36 of General Conditions of Contract regarding water and lighting.
3. The rates specified in schedule for the different items of works are for the finished work.
4. The contractor's rates are inclusive of Sales Tax payable by the contractor to Govt. as per the Tamilnadu General Sales Tax Act of 1939 as amended from time to time. No enhanced rates will be paid to the contractor for any upward revision of Sales Tax during the currency of the contract.
5. All minor baling and pumping incidental on the work shall be borne by the contractor, where heavy pumping is required the baling will be done departmentally. If the contractor is asked to do, the charges will be paid as per actual plus 10%. The Engineer in charge of the work will be the final authority to decide whether pumping is minor or heavy.
6. The cement concrete for reinforced cement concrete works shall be machine mixed.
7. The lime mortar shall be ground in mortar mill as per T.N.B.P.
8. More than 90 cm height of concrete should not be laid in one day. At the place where the concrete is stopped, it should end in the form of steps so as to facilitate receiving of the next length of concrete. Once a height of 90 cm of concrete is laid, it should be cured for three days before further concrete is laid.
9. Teakwood or country wood shall be of best quality and shall be subject to inspection and approval by Executive Engineer before use on the work.
10. PAINTING : Paint used for the work shall be of approved brand and colour.
11. Plastering : All external corners, "TEE" beam edges and doors and windows opening etc, shall be finished truly vertical or horizontal as the case may be. The rate for plastering shall include the cost of finishing. No separate extra for finishing the corners edges of beams etc. will be paid.
12. The planks for form work and centering for reinforced cement concrete works shall be well seasoned timber approved by the Estate Officer according to clause 8 of T.N.B.P. No. 30. They must be made smooth and perfectly level at top so as to give smooth and even finish to the reinforced cement concrete ceilings. Alternatively, the contractor may use steel sheets over wooden frames provided the required finish to the underside of the slab is obtained. Mango Planks shall not be used under any circumstances. Centering form works shall be provided to the extent and area ordered by the Engineer,i/c., during the execution.
13. The arrangements of steel rods for reinforcement for reinforced concrete works shall be in accordance with the working drawing supplied.

14. The Engineer,i/c. will be at liberty to carryout any portion of the work at any time either departmentally or through any other agency in the interest of University without assigning any reasons therefore to the contractor who is actually doing the work. The contractor is not entitled for any comprehension on account of the same. The contract will be only subject to this condition.
15. Earth work : Each and every borrow bit will be individually marked by the Section Officer and in urgent cases by the Masteries incharge of the work subject to the approval of the Section Officer. Earth should be removed only from the places marked and to the depth ordered by the above officer.
16. The contractor should not enter any private lands for removal of earth there from without the prior written consent of the landowners. If he does unauthorisedelly, the contractor alone will be held fully responsible for consequences arising there from.

#### **IV. SUPPLY OF MATERIALS**

1. The contractor's rate for the different items of work involving the use of cement are inclusive of the cost of Cement
2. The cement required for the work will be supplied by the contractor himself
3. The contractor should make his own arrangement at his own cost to take delivery of the cement from the dealer and to convey the same to his store shed at site of work. The stock of cement with contractors should be accessible to the Departmental Officers for verification at any time.
4. To be procured from authorised stockiest and dealers with details of printing in the Cement bag as approved by ISI (Pozzolona Cement printed in red colour and other Cement bags including OPC in black colour)
5. All Cement quantity should be supplied in paper bags only at site of work.
6. Test certificate to be obtained from Government institutions and Quasi Government institutions only by mentioning the name of work & period of contract and should not be from private institutions.
7. The minimum content of cement is to be ensured in use for works as specified in IS : 450-1978 Table - 19.

**8a. TABLE - PHYSICAL CHARACTERISTIC REQUIREMENTS OF CEMENT (OPC)**

Sl. No.	Characteristics	Requirements		
		33 Grade IS: 269-1989	43 Grade IS: 8112-1989	53 Grade IS : 12269-1989
1.	Minimum compressive strength in N/ Sq. mm 3 days 7 days 28 days	16 22 33	23 33 43	27 37 53
2	Fineness (minimum) (Sq. m/Kg)	225	225	225
3	Setting Time (minutes) Initial - (minimum) Final - (maximum)	30 600	30 600	30 600
4	Soundness, Expansion Le Chatleier - (maximum) mm Autoclave Test (maximum) %	10 0.80	10 0.80	10 0.80

9. Steel required for the work will be supplied by the Contractor himself
10. No separate charges will be paid to the contractor for straightening of mild steel rods. The contractor shall make his own arrangements for cutting to sizes, bindings and tying grills etc. Mild steel rods, should be cut and placed as reinforcements with proper care according to the available rods at site so as to ensure minimum possible wastage.
11. To be procured from authorised dealers and test certificate for strength as well as for unit weight to be produced before use in order to ascertain the size of rod and quantum of Steel actually used in the work.
12. Excessively rusted Steel rods should be rejected.
13. To be delivered at site of work and to be under the custody of contractor only.
14. Use of Steel rods shall confirm to the structural designs approved for the work.
15. Steel supplied shall confirm to standard specifications specified in Table : 16 of IS : 456-1978 as detailed below :
  - a) Mild Steel - Grade I of IS : 432/Part 1/1966. '
  - b) HYSD bars - IS : 1786 - 1985/
  - c) Cold worked - IS : 786-1979 (Grade Fe 415)
16. Steel manufactured from the waste Steel through the process of re-rolling shall be rejected since guarantee for the strength and quality is not certified by the authorised dealer or by the manufacturers.

## **CENTERING WORKS**

17. Payments for centering works for all R.C.C. items shall be made only after concrete is laid, even though separate rate is called for, for centering work in the Schedule.
18. The contractor will be held responsible for the proper safe custody of all the Departmental materials which are handed over to the contractor until they are finally used on the work or taken over by the Department.
19. The shed for storing materials should be put up by the contractor at his own cost.

### **V. Special Conditions for Earthwork Excavation in Hard Rock Requiring Blasting**

In the case of earthwork excavation in hard rock requiring blasting the tenderer should observe the following conditions.

- a. The blasted rock shall be compactly stacked for measurement. The net quantity of blasted rock shall be arrived at by allowing a deduction of 40% for voids and compared with the premeasured quantity and only the lesser of the Two shall be paid.

Where the rock other than hard rock and hard rock are mixed upon ground, the Two kinds of rocks shall be stacked separately for measurement. The net measurement of two kinds of rock shall be compared with the pre-measured quantity and only the lesser of the Two shall be paid for. If the total of net measurement of the two kinds of rock exceeds (or) falls short of the measurements of mixture, the volume of mixture proposed to be paid shall be apportioned in the proportion of the net actual measurements of stacks of the Two kinds of rocks.

- Note : i) 40% deduction for voids shall be adopted for compact and proper stacking but such percentage of deduction shall be increased for loose (or) improper stacks.
- ii) The blasted rock material, stacked, measured and paid for shall become the property of the department.
  - iii) I.S. Code No. 1200 (Part I) 1969 method of measurement of buildings and Civil Engineering of work. Part I "Earthwork" may be referred as and when necessary.

## **VI MOSAIC FLOORING**

1. Cement concrete flooring tiles shall be manufactured from a mixed cement natural aggregates and colouring materials where required by pressure process. During manufacture the tiles shall be subjected to a pressure of not less than 140 kg. per. sqm. (or) 2000 lbs. sq.inc)
2. Proportion of cement to aggregate in backing of the tiles shall be not less than 1:5 by weight.
3. On removal from mould, the tile shall be kept in moist condition continuously for at least 7 days and subsequently if necessary kept in moist for such a longer period that would ensure their conformity, to the requirements of Traverse strength, Resistance to wear and tear absorption and would minimize shrinkage and cracking. Tiles shall be stored under cover.
4. TOLERANCE : Tolerance on length and breadth shall be plus or minus one millimeter.

### ***Thickness of Wearing Layers***

<b>Class of tiles</b>	<b>Minimum thickness of wearing layer (mm)</b>
Plain cement and plain coloured tiles for general duty	<b>3</b>
Plain cement and plain coloured tiles for heavy duty	<b>6</b>
(Mosaic) terrace tiles with chips of size varying from the smallest upto 6mm (1/4")	<b>5</b>
(Mosaic) terrace tiles with chips of size varying from the smallest upto 12 mm (1/2")	<b>5</b>

5. Colours and Appearance : The colour and texture of the wearing layer shall be uniform throughout its thickness.
6. When specifying the tiles, the contractor should specifically indicate whether the chips to be used are from the smallest units 6mm from smallest upto 12mm or from the smallest upto 200mm size. The officers of the department shall also specify size of chips by referring the approximate photograph given in figure 4 to figures 6 in Indian Standard 1237/1959.

CONTRACTOR

ESTATE OFFICER,  
TANUVAS., CHENNAI-51

### **8.b. Cement Conditions :**

The Procurement of cement of required specifications for the works subject to the followings.

- A. The contractor shall procure cement required for the works only from reputed cement factories (main producer or their authorized agents, manufacturing cement to ISI standard) acceptable to the Engineer-in-charge. The contractor shall be required to furnish to the Engineer-in-charge bills of payment and cost certificates issued by the manufacturer or their authorized agents to authenticate procurement of quality cement from the approved cement factory.
- B. The contractor shall procure in standard packing of 50Kg. Per bag bearing manufacturer's. The contractor shall make necessary arrangement at his own cost to the satisfaction of Engineer-in-charge for actual weightment of random sample from the available stock and shall conform with the specification laid down by the Indian Standards Institution as the case may be cement shall be got tested for all the tests including through destructive and non-destructive test materials etc, as directed by the Engineer-in-charge in advance before the use of cement bags. In case test results indicate that the cement arranged by the contractor does not conform to the relevant code, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a day's time of written order from the Engineer-in-charge to do so.
- C. The employer will furnish air recreating agents and admixtures required to the Contractor free of cost at the employer stores. The use of such admixtures and agents shall be made as per the instructions of the Engineer-in-charge. The cost of Cartage / Storage, handling, batching mixing shall be borne by the Contractor and shall be included by him to unit officers tendered for concrete.
- D. The cement shall be brought at site in bulk of approximately 50 tones or as decided by the Engineers-in-charge for large works
- E. The Cement Godown of the capacity to store a minimum of 1000 bags of cement shall be constructed by the Contractor at site of work, for which no extra payment shall be made. The Contractor shall facilitate inspection of the Cement Godown by the Engineer-in-charge at any time.
- F. The Contractor shall further at all times satisfy the Engineer-in-charge on demand by production or records and test book or by submission of returns and other proofs as directed that the cement is being used as tested and approved by the Engineer-in-charge for the purpose and the Contractor shall at all times, keeps his record up to date and enable the Engineers-in-charge to apply such checks as he may desire.
- G. Cement which has been unduly long in storage with the Contractor or alternatively has deteriorated due to inadequate storage and thus become unfit for use on the works will be rejected by the Department and no claim will be entertained. The Contractor shall forth with remove from the work area any cement the Engineer-in-charge may disallow for use of work and replace it by cement complying with the relevant Indian Standards

# GENERAL CONDITIONS OF CONTRACT

## A. PREFACE

I. Intent and reference to TamilNadu Building Practice. It is intended by these Tamilnadu Practice to describe;

- a. The character of the materials to be used
- b. The method of execution of work and
- c. The contractor's responsibilities to the Public, Government and his workmen and general contract conditions which are to be accepted by every contractor who executes work entrusted to him by the Department.

12 Wherever the term "Standard Specifications" or "Specifications" of the abbreviation "T.N.B.P. No" or "TNBP" is used in the specifications or in estimates or contract documents, it shall refer to the relevant specification in the Tamilnadu Building Practice.

### **1.3 The abbreviation "I.S." shall mean 'Indian Standard'**

2. Applicability of the Tamilnadu Building Practice

2.1 It shall be unnecessary to include in any contract documents a specification for any item of work which is defined in the tender notice or in the contract schedule of work to be done by a Tamilnadu Building Practice number (TNBP No. ) The fact that the item is defined as specification, shall mean that the contractor is to execute the work .according to such specification modified as may be necessary by an addendum specification for that particular item of work. In the absence of specification for any work or material in the T.N.B.P. such work should be carried out in accordance with the instruction given by the Executive Engineer.

2.2 THESE GENERAL CONDITIONS OF CONTRACT SHALL APPLY TO ALL AGREEMENTS ENTERED INTO BY CONTRACTORS WITH TAMILNADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY AND shall form an inseparable condition of contract and it shall

not be necessary to append a copy of the same to the agreement.

### **3. Contractor to sign in the Divisional (or the Sub- divisional) copy of the T.N.B.P.**

3.1 Every Contractor who executes work for the Tamilnadu Veterinary and Animal Sciences University shall carefully study the specification for all items of work which are included in the schedule for work to be done and his obligation under the "General Conditions of Contract" which apply to all agreements, and he shall sign in the Divisional Office copy of the T.N.B.P. (or the Sub-Divisional Office copy if so arranged by the Executive Engineer) as evidence that he understands clearly the conditions of contract governing his agreement and accepts the same.

32 It shall not be necessary for the contractors to sign the Divisional Office copy of the T.N.B.P. for every contract awarded to him, but his signature therein will be evidence that he accepts the conditions of contract (which include the specifications) as detailed in the T.N.B.P. for every contract into which he enters. It shall also be the contractor's responsibility by frequent perusal of the Divisional Office (or the Sub Divisional Office) copy to become conversant with sanctioned alterations or additions made to the T.N.B.P. as soon as they are made. A separate volume of addenda to the T.N.B.P. will be maintained in each Division (or sub division office) as the case may be, in which will be entered all sanctioned corrections and additions. This must also be studied and signed by every contractor before executing an agreement. Interleaving corrections slips will not be made for this purpose. The .contractor should purchase copy of the T.N.B.P. for his reference while executing work.

### **4. Sub-specifications**



4.1 Works of similar nature having many common clauses in their specifications are grouped under one specification number with a "General" preface thereto and the subspecifications are therefore given an alphabetical affix.

## **5. Additions and alterations to the T.N.B.P.**

5.1 Additions and alterations to the T.N.B.P. will be incorporated in the addenda volume as authorised by the Executive Engineer.

## **6. Power of Estate Officer and Executive Engineers to supplement or alter the T.N.B.P.**

6.1 Estate Officer and Executive Engineer may alter the specification for any particular contract which is within their respective power of sanction, when such alteration is found necessary by attachment of a correction sheet to the contract form, bearing the T.N.B.P. number, the corrections and the signature of the Estate Officer or the Executive Engineer as the case may be, together with the signature of the contractor. Similarly additional specifications for items for which there are no standard specifications will be made by attachment to the contract documents of addendum specifications sheets bearing the signature of the Executive Engineer as the case may be and the signature of the contractor.

## **A-1.DEFINITIONS AND INTERPRETATIONS**

### **7. Definition of terms**

7.1 Wherever the words and expressions defined in this clause or pronouns used in their stead occur in contract documents (which includes the T.N.B.P) they shall have the meanings hereby assigned to them except where the context otherwise requires :

a) "Estate Officer" means the Superintending Engineer for the time being in charge of the concerned work under execution or such other departmental assistants or subordinates to whom the Executive Engineer may have delegated certain duties, acting severally within the scope of the particular duty entrusted to them.

### **b) No delegation by Finance Officer which affects agreements**

It is however, to be distinctly understood that the Finance Officer or the higher authority who is vested with the powers of acceptance of the particular agreement under reference will make no delegation of powers to such assistants or subordinates with in any way affects the agreement and its contract condition when such agreement is to be or has been accepted by the Finance Officer or by the other higher authority respectively. The duties of such assistants or subordinates will be solely duties of supervision to ensure compliance with contract conditions.

c) "Contractor means the particular persons firm or corporation with whom an agreement has been made by the Finance Officer or higher authority as the case may be, for executing work defined in the concerned agreement and for purpose of instructions regarding compliance with contract conditions, it shall include the contractor's authorised agent, who is maintained on the work by the contractor.

d) Works or work means the works by or by virtue of the contractor contracted to be executed whether temporary or permanent and whether original, altered substituted or additional or connected with the supply repairs or carriage of tools. and plant and supply of manufacture of other stores.

12 Works importing the singular only also include the plural and vice-versa where the context requires.

NOTE: The terms section officer, Assitant Executive Engineer, Executive Engineer used in the following clauses shall where the context so requires, be construed as also including officers of the corresponding grade in the Highways and Rural Works Department.

## **8. Evidence of Experience**

Tenderers shall, if required, present satisfactory evidence to the Executive Engineer that they have been regularly engaged in constructing such works, as they propose to execute and that they are fully prepared with the necessary capital, machinery and materials to begin the work promptly and to conduct it as required by T.N.B.P. and the other specifications for the particular work if tendered for, in the event of their tender being accepted.

## **9. Legal address Notices**

9.1 Tenderers should give in their tender their place of residence and postal address. The delivering at the above named place or posting in a post box regularly maintained by the Post Office Department or sending by letter registered for acknowledgement of any notice, letter or other communication to the contractor shall be deemed sufficient service thereof upon the contractor in writing as may be changed at any time by an instrument executed by the contractor, and delivered to the Estate Officer

9.2 Nothing contained in the agreement and its contract conditions shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the contractor personally.

## **B. STATEMENT OF APPROXIMATE QUANTITIES IN**

### **SCHEDULE – A**

10.1 The quantities mentioned in tender notices and in agreement schedule - A, are worked out from the relevant drawing in

office and may or may not be the actuals required for execution. The Engineer,i/c. does not be the expressly or by implication agree that the actual amount of work to be done will correspond therewith but reserves the right to increase or decrees the quantity of any class or portion of the work as he deems necessary.

10.2 Tenderers must satisfy themselves by a personal examination of the site of the proposed work, by examination of the plans and specifications and by others means as they prefer as to the accuracy and sufficiency of the statement of quantities and all conditions affecting the work and shall not at any time after the submission of their tender, dispute or complain of such statement of quantities or assert, that there was any misunderstanding in regard to the nature or amount of the work to be done nor in consequence apply for extension of time for completion beyond the agreement date.

## **11. Approximate not to mean deviation from drawings and specification**

11.1 This declaration of the approximate, nature of the statement of quantities in Schedule. A does not, however, in any way imply that the quantities will be increased for departure by the contractor from strict compliance with sanctioned drawings and specifications to suit his own convenience or reduce his costs.

## **12. To compare tenders**

12.1 The quantities in Schedule - A are given for a uniform comparison of lump-sum tenders.

## **C DRAWINGS AND SPECIFICATIONS**

### **13. Purpose**

13.1 The contract drawing if any, read together with the contract specifications are intended to show and explain the manner of executing the work and to indicate the type and class of materials to be used.

### **14. Conformance**

14.1 The works shall be carried out in accordance with the drawings and specifications which form part of the contract and in accordance with such further drawings, details and instructions, supplementing or explaining the same as may from time to time be given by the Engineer,i/c.

14.2 If the work shown on any such further drawings or details, or other work necessary to comply with any such instructions, directions, or explanations, be in the opinion of the contractor, of a nature which the schedule rate in the contract does not legitimately cover, he shall before proceeding with such work, give notice in writing to this effect to the Engineer,i/c. and contractor failing to agree as to whether or not there is any excess rate to be fixed and the Engineer,i/c. deciding that the contractor is to carry out the said work, the contractor shall accordingly do so, and the question whether or not there is any excess and if so the amount there of, shall failing agreement, be settled by an arbitrator as provided in the arbitration clause, unless the subject is one which is left to the sole discretion of the Engineer,i/c. under the clauses of these conditions of contract and the contractor shall be paid accordingly.'

14.3 It shall be the responsibility of the contractor to give timely notice to the Engineer,i/c. regarding anything shown on the drawings and not mentioned in the specification, or mentioned in the specifications and not shown in the drawings or any error or discrepancy in drawings or specifications and obtain his orders thereon. Figure dimensions are to be taken and not those obtained from scaling the drawings. In any discrepancy between drawings and specifications, the contractor shall forthwith apply to the Engineer,i/c. for such further instructions, drawings or specifications as he requires it, being understood that the subject to be dealt with under the building procedure of best modern practice. The Engineer,i/c. will furnish instructions, drawings or

specifications if in his opinion, they are required by competent workmen, for the proper execution of the work.

### **15. Variations by way of modifications, omissions or additions.**

15.1 For all modification, omissions from or additions to the drawings and specification, the Engineer,i/c. will issue revised plans, or written instructions or both and no modification, omissions or additions shall be made unless so authorised and directed by the Engineer,i/c. in writing.

15.2 The Engineer,i/c. shall have the privilege of ordering modifications, omissions or additions at any time before the completion of the work and such orders shall not operate to annul those portions of the specifications with which said changes do not conflict.

15.3 The contractor shall submit to the Engineer,i/c. a statement giving details of the claims' for any additional work within 30 days of the work and no claim for any such work will be considered which has not been included in the statement.

### **16. Copies of Drawing and Specifications**

16.1 One copy of the available drawings and specifications (apart from the T.N.B.P. a copy of which the contractor should purchase for his reference) shall be furnished free of cost to the contractor for his own use. Such copies of supplementary details furnished by the Estate Officer shall be kept by the contractor on the work until the completion thereof, and the Assistant Executive Engineer or Engineer,i/c. shall at all times have access to them.

### **17. Signed drawing - No authority to the Contractor**

17.1 No signed drawing shall be taken as in itself an order for variation, unless either it is entered in the agreement schedule of drawings under proper attestation of the

contractor and the Estate Officer or unless it has been sent to contractor by the Estate Officer, with a covering letter confirming that the drawing is an authority variation of the contract under reference.

## **D. MATERIALS AND WORKMANSHIP**

### **18. To be the best quality**

18.1 All materials, articles and workmanship shall be the best of their respective kind for the class of work described in the contract specification and schedule materials being obtained from sources approved by the Engineer,i/c.. The word "best" as used in these specifications shall mean, that in the opinion of the Engineer,i/c. there is no other superior quality of materials or finish of articles on the market and that there is no better class of workmanship available for the nature of the particular item described in the contract schedule. The contractor shall, upon the request of the Engineer,i/c., furnish him with the vouchers to prove that the materials are such as are specified.

18.2 Samples of materials shall be furnished at the contractor's expense to the Engineer,i/c. when called for in the tender notice or ordered to be furnished by the Engineer,i/c. prior to execution of any work.

### **19. Conversion for proportions**

19.1 Wherever the proportions are written by figures without further description and where the meaning is otherwise clear as to which figure is intended to apply to each material, then the usual conventions will be understood to apply.

For example,

1:2 Means 1 lime (or cement in accordance with the context) and 2 sand.

1:2:4 Means 1 lime (or cement in accordance with the context) 2 sand 4 broken stone (or other aggregate in accordance with the context).

### **20. Measurement and mixing**

20.1 In the case of loose materials such as lime sand, cement, broken stone, surki, motar, etc. the proportions demanded by the specifications must be measured in properly constructed measuring boxes or weighed or in such other manner as shall be instructed by the Engineer,i/c.. Measurement is not to be done in loose heaps when intimate mixtures such as motar concrete, etc., are to be formed. The mixing must always be done on closely constructed platform so that there will be no leakage of any of the materials through the floor of the platform and also that no foreign materials can be incorporated during the mixing. These platforms must be approved by the Engineer,i/c.. The cost of such measuring boxes and platforms and all the work referred to herein shall be borne by the contractor. '..

### **21. Data**

21.1 The materials and labour utilized in the execution of work by the contractor shall not be less than that given in the Tamilnadu P.W.D Standard Data for the relevant item.

NOTE In case the contractor considers that the materials and labour provided in the T.N.P. W.D Standard data for the execution of particular items of work are in excess, the contractor may furnish detailed data for such items along with tender with reasons for variations from P.W.D Standard Data.

### **22. Layout of materials stacks**

22.1 The contractor shall deposit materials for the purpose of the work on such parts only on the ground as may be approved by the Engineer,i/c.. He shall submit for the approval of the Engineer,i/c. before starting work, a detailed site survey clearly indicating positions and areas where materials shall be stacked and sheds built.

### **23. Source of purchase of materials and stores**

23.1 The Engineer,i/c. shall, during the progress of the work, have power to cause the contractor to purchase and use such materials or supplies from Government brick fields, stores or other sources as may be specified in the contract for the purpose therein specified.

### **24. Contractor liable for materials supplied by University**

24.1 The contractor shall be responsible for all materials and other articles and things which may be supplied by University from the time he takes delivery thereof and shall make good any loss, damage wastage or undue wear and tear that may take place from whatever cause and pay to University for such loss, damage, wastage or undue wear and tear such sum as the Engineer,i/c. may determine.

24.2 If at any time subsequent to the execution of the agreement University materials other than those specified in the Agreement are to be supplied to the contractor for use on work they will be charged at the market value prevailing at the time of supply or stock issue rate which - ever is greater. The contractor will be informed in writing the rate which he demands for finished work in view of the fact that he is to use University materials.

### **25. Test inspection and rejection of defective materials and works**

25.1 The contractor shall provide proper facilities at all times for the testing of materials and inspection of the work by the Engineer,i/c. shall accordingly also have access at all times to the places of storage or manufacture where materials are being made for use under the contract to determine that manufacture is proceeding in accordance with the drawings and specifications.

25.2 The contractor shall, upon demand, also forward for the Engineer,i/c. inspection test certificate supplied by the vendors, when he is purchasing consignments of cement, steel and other materials in respect of which certificates are usually available.

25.3 The Engineer,i/c. shall have power to reject at any stage, any work which he considers to be defective in quality of materials or workmanship and he shall not be debarred from rejecting wrought materials by reasons of his having previously passed them in an unworked condition. Any portion of the work or materials rejected or pronounced to be inferior or not in accordance with the drawing and specification, shall be taken down and removed from the work site at the contractor's expense, within 24 hours after written instructions to the effect have been given by the Engineer,i/c.. Replacement shall at once be made in accordance with the specifications and drawings at the contractors expense.

25.4 In case of default on the part of the contractor to carry out such orders the Engineer,i/c. shall have power to employ and pay other persons to carry out the orders at the contractors risk and all expenses consequent thereon incidental thereto shall be borne by the contractor.

25.5 In lieu of rejecting work not done in accordance with the contract, the Engineer,i/c. may allow such work to remain, and in that case shall make such allowance for the difference in value, as in his opinion may be reasonable.

25.6 Works opened for inspection:- The contractor shall, at the request of the Engineer,i/c., within such time as the Engineer,i/c. shall name, open for inspection any work covered up and should the contractor refuse or neglect to comply with such a request the Engineer,i/c. may employ other workmen to open up the same. If the said work has been covered up in contravention of the Engineer,i/c. instructions or if on being opened up, it be

found not in accordance with drawings and specifications or the written instructions of the Engineer,i/c. the expenses of opening it and covering it up again whether done by or recovered from the contractor. If the work has not been covered up in contravention of such instructions or if on being opened up it be found to be in accordance with the drawings and specifications or the written instructions of the Engineer,i/c., the expenses aforesaid shall be borne by University and shall be added to the contract sum, provided always that in the case of foundations, or any other urgent works so opened up and requiring immediate attention the Engineer,i/c. shall, within reasonable time after the receipt of a notice from the contractor that the work has been opened, make or cause the inspection there of to be made, and at the expiration of such time if such inspection shall not have been made, the contractor may cover up the same, and shall not be required to open it up again for inspection except at the expense of University.

#### **26. Defects, shrinkages, etc, after completion**

26.1 Any defects, shrinkage or other faults which may appear within six months from the completion of the works arising, in the opinion of the Engineer,i/c. from faulty materials or workmanship not in accordance with the drawings and specification or the instructions of the Engineer,i/c. shall, upon the directions in writing of the Estate Officer,i/c. and within such reasonable time as shall be specified there, be amended and made good by the contractor at his own cost, unless the Engineer,i/c. shall decide that the contractor ought to be paid for the same at the rates agreed on such reduced or other rates, as the Engineer,i/c. may fix and in case of default, the Engineer,i/c. may employ and pay other persons to amend and make good such defects, shrinkage or other faults or damage, and all expenses consequent thereon and incidental thereto shall be borne by the contractor.

26.1 (A) The shrinkage period of six months referred to in main clause 26.1 above, will be five years in respect of all contracts for construction of original buildings either semi permanent or permanent to ensure structural stability of the building.

(G.O.Ms. No. 181 PWD 28.1.86)

26.2 Provided that in the event of University taking over portions of the works as and when they are completed the liability of the contractor under this clause shall extend to a period of six months (or five years as the case may be) from the date of final taking over of the work irrespective of the actual dates on which portion of the works were taken over.

#### **27. Estate Officer's Decision**

27.1 To prevent disputes and litigation, it shall be accepted as an inseparable part of the contract that in matters regarding materials workmanship, removal of improper work, interpretation of the contract drawings and contract specifications, mode of procedure and the carrying out of the work, the decision of the Estate Officer shall be final and binding on the contractor and in any technical question which may arise touching the contract, the Estate Officer's decision shall be final and conclusive.

#### **28. Dismissal of workmen**

28.1 The contractor shall employ in and about the execution of the works only such persons as are careful, skilled and experienced in their several trades and callings and the Estate Officer shall be at liberty to object to and request the contractor to remove from the works any person employed by the contractor in or about the execution of the works who in the opinion of the Estate Officer misconducts himself or is incompetent or negligent in the proper performance of his duties and such persons shall not be again employed upon the works without the permission of the Estate Officer.

## **D.1 GENERAL OBLIGATIONS**

### **29. Contractor's maistri or agent and contractor's staff**

29.1 The contractor shall in his own absence keep constantly on the works a competent maistry or agent and any directions or explanations given by the Engineer,i/c. or his representatives to such maistri or agent shall be held to have been given to the contractor. The contractor shall further provide all staff which is necessary for the proper supervision, execution and measurement of the work to ensure full compliance with the terms of the contract.

### **30. University Maistries or agents**

30.1 The University may be represented or the work by an agent clerk of the works, or maistri who is not borne on the official or officers and subordinates of the University. He (if appointed) shall, in the absence of the Executive Engineer, furnish the contractor with the Estate Officer/Assistant Executive Engineer's or his representative's instructions of the works and the contractor shall duly comply with such instructions and directions to the progress and execution of the works and the contractor shall duly comply with such instructions and directions and shall on the the written requisition of the maistri clerks of works or agent, stay the further progress of any portion of the works which in his judgment is being constructed with unsound or improper material or workmanship, until the opinion and determination of the Estate Officer shall be obtained thereon, but such maistri clerk of works or agent is to have no power whatever to order any extra works or deviation from the specifications and drawings.

## **E. INCLUDED IN CONTRACT RATES**

### **3. Defining contract schedule rates**

31.1 The rate entered in a contract schedule for any class of work shall be for finished work in situ and shall include all contingent

expenses whether direct construction expenses involved in the building in place in accordance with the drawings and specifications or whether they be expenses imposed by an outside authority such as local body. Such contingent expenses shall not entitle the contractor to claim an extra in respect thereof.

### **32. Carriage**

32.1 Rates for finished work shall always include the cost of conveyance and all leads, lifts, loading unloading and stacking in the manner and at the place ordered by the officer in immediate charge of the work, unless circumstances necessitate provisions for a separate schedule item, in which case for such will be specified in the tender notice or schedule.

32.2 Wherever the term "carriage" of "conveyance" is used in a schedule item, it shall in the absence of other schedule provisions or modifying description in the specification, be taken to include all leads, lifts loading, unloading and stacking in uniform stacks to the satisfaction of the Engineer,i/c. with careful attention to close packing in case of materials which are to be measured in stacks as a basis of payment for finished work.

*NOTE 1: In the case of important leads and lifts as may occur in river conservancy and other such works where lifts over flood banks and long leads may be involved, it is usual to make separate schedule item provision with a specification defining the exact work to be done for each tendered rate.*

*NOTE 2 : Payment for carriage will ordinarily be by bulk forweight at a rate between specified place and on the basis of the method adopted in the standard schedule of rates for carriage of materials. The distances will be measured by the nearest practicable and cheapest routes, whether metalled or unmetalled road or cart track.*

32.3 When cart or vehicles of any sort are engaged by the day, the quantity of materials to be conveyed, the distance to be traveled and the number of trips to be made shall, if he considers necessary be fixed by the Engineer,i/c..

32.4 The contractor is responsible for making good all loss in transporting materials entrusted to him or his agents, whether caused by wastage, breakage, theft or any other cause.

32.5. No payments shall, in any case, be made for the return trips with carts empty. Where there are loads also for the return trip the agreement rates should allow for the reduced cost thereby on each set of materials so conveyed.

### **33. Constructions plant**

33.1 The contractor shall include in his tendered price and shall provide and install all necessary construction plant and shall use such methods and appliances for the performance of all the operations connected with the work embraced under the contract as will secure a satisfactory quality of work and rate of progress which in the opinion of the Engineer,i/c. will ensure the completion of the work within the time specified. If at any time before the commencement, or during the progress of the work, or any part of it such methods or appliances appear to the Engineer,i/c. to be insufficient or inappropriate for securing the quality of the work required or the said rate of progress, he may order the contractor to increase their efficiency or to improve their character, and the contractor shall comply with such orders, but the failure of the Engineer,i/c. to demands such increase of efficiency or improvement shall not relieve the contractor from his obligation to secure the quality of work and the rate of progress required by the contract and the contractor alone shall be responsible for the efficiency and safety of his plant, appliances and methods.

33.2 It is however, open to Engineer,i/c. to lend or supply to the contractor any tools, implements, materials and machinery that the Engineer,i/c. may consider desirable but for any such tools, implements, materials and machinery that may be lent or supplied to contractor by University, the contractor shall pay such deposit and hire, or purchase price as may be determined by the Engineer,i/c.. All articles that may be so lent or hired to the contractor shall be returned in good serviceable condition by him to the Engineer,i/c. before the final bill for work is paid and any shortage or damage shall be recovered from the contractor in the final bill at such rate as may be determined by the Engineer,i/c. after making such allowance as he may consider suitable for fan- wear and tear.

### **34. Scaffolding instructions**

34. All requisite scaffolding shall be provided at the contractor's expense and shall be double, i.e. it must have two sets of upright supports. Care must be taken to ensure the safety of the work people and the contractor must comply with such instructions as the Engineer,i/c. may issue to ensure such safety. The contractor will be entirely responsible for any damage or injuries to persons or property resulting from ill erected scaffolding, defective ladders, or otherwise arising out of his default in this respect. The contractor's attention also invited to the "safety code"

### **35. Temporary structure**

35.1 The Contractor shall erect and maintain at his own cost temporary weather proof sheds at such places and in a manner approved by the Engineer,i/c. for keeping materials under cover. The contractor shall



also provide and maintain at his own expenses such temporary fences, guards, bridges and roads as may be necessary for the execution of his contract work or for safeguarding or accommodating the public. If the Engineer, i/c. shall order any departure from the arrangements made of the contractor, the contractor shall comply with such orders as the Engineer, i/c. may issue to safeguard or accommodate the public. Sheds for housing workmen shall be provided at the contractor's expense if, in the opinion of the Engineer, i/c., such are necessary or desirable,

### **36. Water and Lighting**

36.1 The contractor shall pay all fees and provide water and light as required from municipal mains or other sources and shall pay all charges therefore (including storage tanks, meters, etc) for the use of the work and workmen unless otherwise arranged and decided on in writing with the Engineer, i/c. The water for the works shall be, so far as practicable, free from earthy vegetable, or organic matter and from salts or other substances likely to interfere with the setting of mortar or otherwise prove harmful to the work.

### **37. Sun protection keeping dry and pumping**

37.1 The contractor shall at his own expense arrange all requisite protection of the work and materials against sun or rain effects and shall keep all portions of the work free from water to the satisfaction of the Engineer, i/c. and shall use his own plant for the purpose unless otherwise specifically provided in the contract specification.

### **38. Tools and Seigniorage**

38.1 The contractor shall, unless otherwise specifically stated in the tender notice and

subsequently on this basis in the contract be responsible for the payment wherever payable of all import duties, tolls, octroi duties, seigniorages, quarry fees, etc. on all materials and articles that he may use.

38.2, The contractor shall be solely responsible for the payment of sales tax under the provision of Madras General Sales Tax Act 1939 (Madras Act IX of 1939) as in force for time being and the rates for the various items of the work shall remain unaffected by any change that may be made from time to time in the rate at which such tax is payable.

38.3 Notwithstanding anything's contained in section 10 of the Indian Traffic Act, of 1894, the rates for items involving, the use or supply of articles obtained' by the contractor from outside India shall remain unaffected by any changes that may be introduced in Customs duties.

*NOTE : For works carried out on behalf of the Government of India, Seigniorage fees, etc, referred to in this clause will have to be levied in every case.*

38.4 No seigniorage shall be charged where due for materials quarried from the P.W.D. or other Government quarries Assistance as necessary will be given to the contractor by the department to obtain access to quarries approved by the Engineer, i/c.. No plot rent shall be charged for materials stacked on the University lands during the course of construction provided all such materials are removed within one month after the work is completed.

38.5 Seigniorage charges due for use of private quarries and private land shall be paid by the contractor.

38.6 The contractor shall form his own approach road to the worksite for which no extra will be due to him. On completion the

contractor shall not be permitted to remove the materials laid for formation of road. If the contractor is allowed to use the existing roads he shall maintain them in good condition at his own cost through out the period of the contract.

### **39. Setting out works**

39.1 The contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position, levels, dimensions and alignment of all parts of the works and for the provision of all materials, staff and labour in connection therewith.

### **40. Cleaning up during progress and for delivery**

40.1 All rubbish shall be burnt or removed from the site, as it accumulates. All floors, stairs, landing windows, surface and soil drains shall be cleaned down and put in a thoroughly complete clean, sound and workman like state to the satisfaction of the Engineer,i/c. before the work is finally handed over all rubbish and surplus materials not required by the Engineer,i/c. having first been removed by the Contractor. The contractor shall be give notice in writing to the Engineer,i/c. when the work is so ready to be handed over and shall be responsible for its maintenance until it is taken over by the Engineer,i/c..

## **F. RESPONSIBILITIES AND LIABILITIES OF THE CONTRACTOR**

### **41. Observance of laws, local regulations and notices,**

#### **Attachments**

41.1 The contractor shall confirm to the regulations and bylaws of any local authority and or of any water or lighting companies with those systems the structure is proposed to be connected and shall before making any variations from the drawings and specification that may be necessitated by so confirming, give to the Engineer,i/c.

written notice., specifying the variations proposed to be made and the reasons for making them and apply for instructions, thereon. In case the contractor shall not received such instruction within seven days, he shall proceed with the work confirming to the provisions regulating or by-law in question and variation in the drawing or specifications so necessitated shall be dealt with under clause 59.

41.2 The contractor shall give all notices required by the said Act, regulations or by-laws and pay all fees in connection therewith unless otherwise arranged and decided on in writing with the Engineer,i/c.. He shall also ensure that no attachments are made against materials of work forming part of or for the use of the contract. In every case referred to in this clause the contractor shall protect and indemnify University against any claim or Liability arising from or based on the violation of any such law, ordinance, regulation order, decree, or attachment whether by himself or by his employees.

### **42. Accidents - Hoarding - Lighting Observations –**

#### **Watchmen**

42.1 When excavations have been made or obstacles have been put in public thorough fares or in places where there is any likelihood of accidents, the contractor shall comply with any requirement of law on the subject and shall provide suitable hoarding lighting and watchmen as necessary.

42.2 It shall be contractor's sole responsibility to protect the public and his employees against accident from any cause and he shall indemnify University against any claims for damages for injury to person or property, resulting from any such accident and shall where the provisions of the Workmen's Compensation Act apply take steps to properly insure against any claims there under.

42.3 On the occurrence of accident which results in the death of any of the workmen employed by the contractor or which so serious as to be likely to result in the death of any such workmen, the contractor shall within 24 hours of the happening of such accident, intimate in writing to the concerned Engineer,i/c. of University the fact of such accident. The contractor shall indemnify University against all loss or damage sustained by University resulting directly or indirectly from his failure to give intimation in the manner aforesaid including the penalties of fines if any payable by University as a consequence of University's failure to give notice under the Workmen's Compensation Act or otherwise conform to the provisions of the said Act in regard to such accident.

42.4 In the event of an accident in respect of which compensation may become payable under the Workmen's Compensation Act VIII of the 1923 whether by the contractor or by the University as principal it shall be lawful for the Engineer,i/c. to retain out of money due and payable to the contractor such sum or sums of money as may, in the opinion of the said Engineer,i/c. be sufficient to meet such liability. The opinion of the Engineer,i/c. shall be final in regard to all matters arising under this clause.

42.5 The contractor shall indemnify University from and against all claims and proceedings for or on account of infringement of any patent rights, design, trade mark, or name or other protected rights in respect of any constructional plant, machine work or materials used for or in connection with the works or temporary works, or any of them and from and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof in relation thereto.

42.6 In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this

agreement, the contractor shall comply with or cause to be complied with all the rules framed by the University from time to time for the provision of health and sanitary arrangements to workers employed by University and their contractors (vide appendix) In case the contractor fails to make arrangements and provide necessary facilities as aforesaid the Engineer,i/c. shall be at liberty to make arrangements and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

42.7 In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this agreement, the contractor at his own expense shall arrange for the safety provisions as per "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 arrangements and provide facilities as aforesaid the Engineer,i/c. shall be at liberty to make arrangements and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

42.8 In respect of all labour directly or indirectly employed in the work for the performance of the contractors part of this agreement the contractor shall arrange to furnish in triplicate particulars for each work in the proforma Vide Appendix XXXVIII by the end every month to the Executive Engineer in charge of the work.

### **43. Blasting**

43.1 Blasting executed by contractors in connection with University works shall be carried out in the manner described under "Blasting operation - Instructions to Contractor" of the TNBP.

#### **44. Protection of Existing and Adjoining premises**

44. The contractor is to protect the whole of the adjoining and where necessary, the existing premises and all works and all fittings to all buildings on and adjoining the site against the structural and decorative damages caused by the execution of these works and make good in all respects all such damage done or occurring to the same, and leave such reinstatement in perfect order. He is also to make good any damage done in the execution of the work to existing public or to private footways or roadways.

#### **45. Permit other workmen – Co-operation – Afford Facilities**

45.1 The Engineer,i/c. shall have full power to send workmen upon the premises to execute fittings and other works not included in the contract, for whose operations the contractor is to afford every reasonable facility during ordinary working hours, provided that such operations shall be carried on in such a manner as not to impede the progress of the work included in the contract, but the contractor is not to be responsible for any damage which may happen to or be occasioned by any such fittings or other works, provided he complies with the Engineer,i/c.'s instructions in connections therewith, and provided that the damage is not caused by himself or his workmen.

45.2 The contractor shall, at all times co-operate assist, attend on, and afford facilities for such specialists as maybe employed by the Engineer,i/c. on other works in connection with the building, allowing them free of charge the use of all plant, light and water installed in the works. The contractor shall also cause such special work or protect it as instructed to avoid injury during progress of the works. For failure so to protect, the contractor must make good any damage caused.

45.3 When two or more contractors are engaged on installation or construction work in the same vicinity the Engineer,i/c. shall have authority to direct the manner in which each shall conduct the work so far as it affects other contractors.

#### **46. Holes for water services, gas electrical and Sanitary fittings**

46.1 The contractor shall leave all holes in masonry and floors for the insertion of water services, gas and electrical connections and sanitary fittings in the exact positions indicated by the Engineer,i/c. during the progress of work. These holes must be properly built up in a workman like manner at the contractor's cost, as soon as the fittings have been installed in cases, where the installations are made during the constructions of the building and where in the opinion of the Engineer,i/c., delays in settlement of accounts will not thereby occur.

#### **47. Contract's risk and insurance.**

47.1 The work in University executed by the contractor under the contract shall be maintained at the contractor's risk until the work is taken over by the Engineer,i/c.. The contractor shall accordingly arrange his own insurance against fire, flood, volcanic eruption, earth quake, other convulsions of nature and all other natural calamities and risks arising out of acts of God during such period and that the University shall not be liable for any loss or damages occasioned by or arising out of any such of God"

47.2 Provided however, that the contractor, shall not be liable for all or any loss or damages occasioned by or arising out of acts of foreign enemies invasion, hostilities or war like operations (before or after declaration of war) rebellion military or usurped power.

#### **48. Holidays**

48.1 Subject to any provision to the contrary contained in the contract name of the

permanent work shall save as hereinafter provided be carried on during the night or on Sundays and other holidays without the permission in writing of the Engineer,i/c. or of the officer in-charge of the work, save when the work is unavoidable or absolutely necessary for the safety of life or property or for the safety of the works in which case the contractor shall immediately advise the Engineer,i/c..

## **6. MISCELLANEOUS**

### **49. Sand and Gravel**

49.1 The contractor shall not make any excavations upon the site for the purpose of obtaining gravel, sand or soil other than that shown or implied by the drawings, except with the previous permission of the Engineer,i/c.

### **50. Old Curiosities**

50.1 All old curiosities, relics, coins, minerals, etc., found in excavating or pulling down, shall be the property of the University and be handed over to the Engineer,i/c.. Should any ancient masonry, or other old work of interest be opened up the Engineer,i/c. 's attention shall be called to the same before demolition or removal.

### **51. Assignment or sub-letting**

51.1. The contractor shall not without the written consent of the Engineer,i/c. assign the contract nor sub-let any portion of the same. Ordinarily no sub-letting will be permitted, but in case such should be permitted by the Engineer,i/c., it shall in no way free the contractor from any of responsibilities under any clause of these "Conditions of Contract" or of the "Articles of Agreement"

### **52. Specialists**

52.1 The Engineer,i/c. shall, during the progress of the work have powers to select, nominate or recommend tradesmen or specialists to supply material or execute such portion of the work as he may consider desirable in the interests of the University.

### **53. Ratification of the orders of the Estate Officer**

53.1 Should the acceptance of the tenders be beyond the authorised powers of the Estate Officer as laid down the University Rules, the orders and decisions of such Estate Officer with regard to

(a) extension of time for completing the contract will be subject to the ratification of the Vice-Chancellor for all works for which tenders were accepted by the Vice-Chancellor of University including Estate Officer and

(b) the termination of contract or of employment of specialists for certain portion of the works will be subject to the ratification of the Vice-Chancellor for all works for which tenders were accepted by Engineers of University.

### **54. Order Book**

54.1 An order book shall be kept at the site of the work. As far as possible, all orders regarding the work are to be entered in this book. All entries shall be signed and dated by the Officer in direct charge of the work and by the contractor or by his representative. In important cases, the Estate Officer or the Engineer,i/c. will countersign the entries, which have been made. The order book shall not be removed from the work except with the written permission of the Engineer,i/c..

54.2 No photographs of the site or of the work or any part thereof shall be taken except with the permission in writing of the Engineer,i/c. and no such photographs shall be published or otherwise circulated without the permission of the Estate Officer.

**H. DATE OF COMMENCEMENT,  
COMPLETION, DELAYS, EXTENSION,  
SUSPENSION OF WORK AND  
FORFEITURE**

**55. Date of commencement and  
completion**

55.1 On notification of possession of the site (or premises) being given to the contractor by letter registered for acknowledgement as provided in clause 9.1 supra, he shall forthwith begin the work, shall regularly and continuously proceed with them, and shall complete the same (except for painting or other work which, in the opinion, of the Estate Officer, it may be desirable to delay) by the date of completion, as defined in the "Articles of Agreement" subject nevertheless, to the provisions of extension of time mentioned in the next clause. The contractor shall under no circumstances be entitled to claim any damages from University if he incurs any expenses or liabilities to payment under the contract before the date of commencement defined above. The contractor shall have the right to withdraw from the contract and obtain refund of his security deposit if such intimation of handing over the site is delayed by more than two months from the date of acceptance of the agreement by competent authority.

**56. Delays and extension of time**

56.1 No claim for compensation on account of delays or hindrances to the work from any cause whatever shall be except as hereinafter defined.

Reasonable extension of time will be allowed by the Estate Officer or by the officer competent to sanction the extension for unavoidable delays, such as may result from causes which in the opinion of the Estate Officer are undoubtedly beyond the control of the contractor. The Estate Officer shall assess the period of delay or hindrance caused by any written instruction issued by him at twenty five percent in excess of the actual working period so lost.

If at any time the Estate Officer is of the opinion that there has been avoidable delays and the contractor fails to maintain the rate of progress specified in the articles of agreement, it shall be lawful for the Estate Officer to impose penalty or order forfeiture from the Deposit and sanction the extension of time for such delays, provided however, the penalty and forfeiture shall be governed as per clause 57.2 and 57.3

56.2 In the event of the Estate Officer failing to issue necessary instructions and thereby causing delay and hindrance to the contractor the latter shall have the right to claim an assessment of such delay by the contractor shall lodge in writing to the Estate Officer a statement of claim for any delay or hindrance referred to above within fourteen days from its commencement otherwise no extension of time will be allowed. 56.3 Whenever, authorised alterations or additions made during the progress of the work are of such nature in the opinion of the Estate Officer as to justify an extension of time in consequence thereof such extension of time will be granted in writing by the Estate Officer or other competent authority when ordering such alterations or additions.

**AMENDMENT**

(Issued in Govt. P.W.D., Letter No.  
2163/Y2/95-l/dt.01.09.1996)

In the said preliminary specifications after clause 56.3 the following clauses shall be inserted, namely:

56.4 In cases where the University under the terms of the contract with the contractor are liable to supply any materials, article or things to the contractor for the performance by him of his part of the contract, the Engineer, i/c. may at his absolute discretion extend the time within which such materials, articles or thing maybe supplied by the University, and the University. may supply to the contractor such materials, articles or things within the time so extended without any liability on their part to

compensate the contractor by reason of the extension of time for the supply of the materials, articles or things.

56.5 In cases where the University under the terms of the contract are liable to supply any materials, articles or things to the contractor for the performance by him of his part of the contract and the University for any reason are unable to supply such materials, articles or things either within the time specified in the contract or within the time extended under clause 56.4 the Estate Officer,i/c. may at his discretion or at the request of the contractor determine the whole or any part of the contract which cannot be performed by reason of the failure to supply such materials, articles or things and the contractor shall not be entitled to claim any damages or compensation in respect of such determination. The contractor shall however, be paid the value of the work already done by him and the cost of the materials articles or things if any collected by him up to the date of such determined and left unused on the work-spot (Which shall be taken over by the Engineer,i/c. either at the contract rates or at values deducted from the through rates included in the contract) when the contract is determined at the discretion of the Engineer,i/c., he shall give notice in writing to the contractor and the decision of the Engineer,i/c. to determine the contract shall be final and binding on the contractor

Explanation : The expression Through rules means the rate for the finished items of work or the allinrates that is to say, the rates for finished items of work inclusive of the cost of materials and labour

56:6 If, at any time after the acceptance of tender the University shall, for any reason what so ever not required the whole or any part of the works to be carried out, the Engineer,i/c. shall give notice in writing of the fact to the contractor who hare no claim to any compensation or other payments what so ever, on account of any profit or

advantage he might have derived from the Execution of the work in full but which he did not drive in consequence of the termination of the works, he shall be paid at contract rates, for the work executed by him including any additional works such as clearing of site etc. may be rendered necessary by such determination. He shall also be allowed a reasonable payment as decided by the authority which accepted the tender, for any expense incurred by him on account of labour and materials, articles or thing collected, but which could not be utilized on the works as verified by the Engineer,i/c. such decision shall be final and binding on both the parties and shall not be subject to arbitration under clause

**57. Delays in commencement or progress or neglect of work or suspension of works by the contractor and forfeiture of Earnest Money, Security Deposit and withheld amount**

57.1 Time shall be considered as the essence of the contract. If at any time the Estate Officer/ Engineer,i/c. shall be of the opinion that contractor is delaying commencement of the work neglecting or delaying the progress of work as defined in the tabular statement, "Rate of Progress" in the Articles of Agreement or the contractor fails to maintain the Rate of progress in the Articles of Agreement plus any extension of time or the contractor shall suspend the works, or sublet the work or a portion thereof without the sanction of the Estate Officer/ Engineer,i/c. or violates any of the provisions of the contract the Estate Officer/ Engineer,i/c. shall so advise the contractor and at the same time demand compliance. If the contractor neglects to comply with such demand within seven days after receipt of such notice, it shall then or at any time be lawful for the Estate Officer / Engineer,i/c. to impose a penalty or forfeiture on this contractor from the deposit or to determine the contract.

57.2 The penalty or forfeiture referred to in Clause 57. It shall not exceed 5% of the

value of work executed and is imposed in cases where the contractor is allowed to proceed with the whole or part and complete the whole or such part of the works. The penalty or forfeiture imposed by the Estate Officer under this clause is however subject to modification or waiver at the absolute discretion of any authority higher in rank than the Estate Officer.

57.3 It shall be a further right of the Estate Officer to give any part of the work to any other contractor at his discretion or have it done departmentally in order to maintain the rate of progress and the contract shall then be determined for only that portion of the work given to the other contractor or done departmentally. The forfeiture under clause 57.2 will in these circumstances be applied and any excess expenditure incurred on this account shall be recovered from the original contractor.

57.4 Determination of the contract referred to in Clause 57.1 shall carry with it the forfeiture of the Security Deposit. After determining the contract, the Estate Officer shall have the right to give any part of the work to any other contractor in the unexecuted portion of contract, in which case any expenses which may be incurred in-excess of such amount which would have been paid to the original contractor if the whole work had been executed by him shall be borne and paid by the original contractor and may be deducted from any money due to him by University under this contract or any other amount what so ever Provided also that if the expenses incurred by the University are less than the amount payable to the contractor at his agreement rate the difference will not be paid to the contractor.

57.5 In the event of anyone of the above clauses being adopted by the Estate Officer, the contractor shall have no compensation for any loss sustained by him by reason of his having purchased or processed any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the

performance of contract, and in case action is taken under any of the provisions aforesaid, the contractor shall not be entitled to be paid any sum for any work actually performed under the contract unless and until the Estate Officer has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

57.6 In the event of the Estate Officer putting in force all or any of the powers vested in him under the clause 57.4 he may if he so desires after giving a notice in writing to the Contractor take possession of the works and site and all sue' plant and materials thereon (or any ground contiguous there to) and all such plant and materials as above mentioned shall thereupon be at the disposal of University absolutely for the purpose of completing the work. After such notices shall have been given the contractor shall not be at liberty to remove from the site of works or from the ground contiguous thereto any plant or materials belonging to him which shall have been placed thereon for the purpose of the above work. University shall not be liable to make any payment to the contractor on account of use of such plant for the completion of the works under the provisions herein before contained. On taking possession of the materials and stores belonging to the contractor or procured by the contractor and intended to be used for the execution of the work or any part thereof the contractor shall be paid for the same in account, at the contract rates, to be certified there of shall be final. Otherwise the University may give notice in writing to the contractor to remove any of his plant or materials from the site and not required for completion of the works, if such plant and materials are not removed with fourteen days after notice and have been so given, University may remove and sell the same holding the proceeds less the cost of removal and sale, to the credit of the contractor. The certificate of the Estate Officer as to expense of any



such removal and sale shall be final and binding on the contractor.

## **1. PARTICULARS OF PAYMENT**

### **58. Payment on lumpsum basis or by final measurement in unit prices**

58.1 Final measurements need not be taken unless either the contractor or the Engineer,i/c. claims extras to or deductions from the quantities of schedule - A. In case final measurements are claimed, they shall be taken only for those items for which either the contractor or the Engineer,i/c. claims final measurements and the quantities of the remaining items in Schedule-A shall be accepted as correct. The lumpsum amount mentioned in the agreement will then be varied by adding thereto or deducting there from as the case may be, the difference (if any) between the amounts mentioned in Schedule-A for such items and the amounts arrived at by calculation at contract rates based on the revised quantities for the same, obtained by the final measurement aforesaid.

58.2 It shall be accepted as a condition of the contract that the payment of the final bill to the contractor less the withheld amounts and his acceptance thereof shall constitute a full and absolute release of University from all further claims by the contractor under the contract.

### **59. Payment for additions and deductions for omissions**

59.1 No authorised variation shall vitiate the contract, but additions and omissions shall be measured up and dealt with in accordance with clause 58.2'

59.2 If there is no rate in Schedule A for additional work ordered to be carried out by the Engineer,i/c., then prior to execution of the additional work, a rate for the additional work, shall be worked out in accordance with the methods indicated in 59.3 and with the rate agreed upon a supplemental agreement shall be entered in the proper

departmental form signed and dated by the contractor and the Engineer,i/c. and or any other officer for the time being authorised to accept such agreement and supplemental agreement shall on such acceptance form part of the original agreement. A copy of the supplemental slip shall be given to the contractor.

59.3.1 The rate for additional works shall be derived from the rate for similar items of work in the accepted agreement.

59.3.2 In the case of works for which supplemental agreement is to be entered into during the period when the schedule of rates has not changed from the date of execution of the original agreement then the rates for supplemental agreements may be the prevailing schedule or rates plus or minus tender premium in case the rates" cannot be derived from the items in the original agreement. In other case, where the schedule or rates has changed in the intervening period, the rates prevailing as per the schedule of rates at the time of execution of supplemental items will be adopted with, no tender premium over this rate.

59.3.3 If the rate for a particular item of work is not in the schedule of rates, the prevailing market rate when the work has done shall be adopted.

59.3.4 If the rates cannot be determined as above, the rates shall be fixed on the cost of lab our and materials plus 10 percent thereon, provided the vouchers shall have been delivered to the Engineer,i/c. within 7 days after such work is completed. If the Engineer,i/c. considers that the vouchers are unduly high, the Executive Engineer can valuate the work as reasonable and fair and make payment if the value of payment is less than Rs. 1,000. If the value of additional payment exceeds Rs. 1",000 the contractor shall have the right to submit matter to arbitration.

### **60. No payment for unsanctioned extras**

60.1 It shall be distinctly understood that no payment whatever will be made to the contractor for variations by way of extras, in cases where such variations have been made within the written sanction of Engineer,i/c.

### **61. Accounts Receipts and Vouchers**

The contractor shall at any time upon the request of the Engineer,i/c. furnish him with all invoices account, receipts and other vouchers that he may require in connection with the contract.

### **62. Fraud, willful neglect or default**

62.1 No final or other certificate of payment or of completion, acceptance or settlement of account shall, in any circumstances, relieve the contractor from his liability for any fraud, or willful neglect or default in the execution of the contract or any willful or unauthorized deviations from drawings, specifications, instructions and directions for the time being binding upon him.

### **63. Unfixed materials**

63.1 No payment or advance will be made for unfixed materials when the rates are finished work in situ.

### **64. Payments and Certificate**

64.1 Payments will be made to the contractor under the certificates to be issued at reasonably frequent intervals by the Engineer,i/c. or the Sub-Divisional Officer, within 14 days of the date of each certificate an intermediate payment will be made by the concerned authority of a sum equal to 95 percent of the value of work, as so certified and the balance of 5 percent will be withheld and retained as security for the due fulfillment of the contract. Under the certificate to be issued by the Engineer,i/c. on the completion of the entire works, the contractor will receive the final payment of all the money due or payable to him under or by virtue of the contract except security deposit and the withheld amount equal to 2

1/2 percent of the total value of the work done provided there is no recovery from or forfeiture by the contractor to be made under clause 57. The amount withheld from the final bill will be retained under. Deposits and paid to the contractor together with the Security Deposit after one year reckoned from the date of completion of work or as soon after the expiration of such period of one year as all defects shall have been made good according to the true-intent and meaning thereof whichever shall last happen. In the event the final bill remains unpaid even after the period of six months aforesaid, the security deposit, which includes EMD and also 2 ½ % of the withheld amount may be refunded under the sanction of the Estate Officer, in the case of agreements accepted.

No certificate of Engineer,i/c. shall be considered conclusive evidence as to the sufficiency of any work or materials or correctness of measurements to which it relates nor shall it relieve the contractor from his liability to make good defects and provided by the contract. The contractor when applying for a certificate, shall prepare a sufficiently detailed bill based on the original figures of quantities and rates in the contract Schedule-A to the satisfaction of the Estate Officer to enable the Engineer,i/c. to check the claims and issue the certificate. The certificates as to such of the claims mentioned in the application as are allowed by the Engineer,i/c. shall be issued within fourteen days of the application. No application for a certificate shall be made within fourteen days of a previous application.

64.1 (A) Notwithstanding the above clause, the withheld amount of 2 1/2% from the final bill in respect of contract for construction of original building, will be retained by the University for a total period of one year in lieu of six months period referred to in clause 64.1 above and will be released after the expiry of one year period on execution of an indemnity bond by the contractor to the satisfaction of the Engineer,i/c.. for a

further period of four years to ensure structural stability of the building under clause 26.1 A

64.2 When there are complaints from the labour Department about non-payment of wages to the labourers employed by the Contractor for the execution of works under agreement, the Engineer,i/c., shall have full powers to withheld the bills claimed by the contractor pending clearance certificate from the Labour Department and to act as per the direction given by the Labour Department.

#### **65. Interest on money due to the contractor**

65.1 No omission by the Engineer,i/c. to pay the amount due upon certificates shall vitiate or make void the contract not shall the contractor be entitled to interest upon any guarantee fund or payments in arrear, nor upon any balance which may, on the final settlement of his accounts, be found to be due to him.

#### **66. Acceptance of final measurements**

66.1 The contractor agrees that before payment of the final bill shall be made on the contract, he will sign and deliver to the Engineer,i/c., either in the measurement book or otherwise as demanded a valid release and discharge from any and all claims and demands whatsoever for all matters arising out of or connected with the contract and also produce a certificate from the Income Tax Authorities that all income tax payable by him upto-date has been duly paid provided that nothing in this clause shall discharge or release the contractor from his liabilities under the contract. It is further expressly agree that Engineer,i/c. in supplying the final measurement certificate need not be bound by the proceeding measurements and payments. The final measurements, if any of the Engineer,i/c. shall be final conclusive and binding on the contractor.

#### **67. Recovery of money from contractor in certain cases**

67.1 In every case in which provision is made for recovery of money from the contractor, University shall be entitled to retain or deduct the amount thereof from any money, that may be due or may become due to the contractor under these presents and or under any other contract or contracts or any other account what so ever.67.2 Recovery under Revenue Recovery AQ Whenever any amount has to be paid by the Contractor in view of the determination of the contract by virtue of clause 57 or any amount that may be due from the contractor is under these presents and the contractor is not responding to the demands for the payment of the said amount, then die University shall be entitled to recover the said amount under the provisions of the Revenue Recovery Act.

#### **68. Contractor dying becoming insolvent insane or imprisoned**

68.1 In the event of the death or insanity or insolvency or imprisonment of the contractor, or where the contractor being a partnership or firm becomes dissolved or being a corporation goes into liquidation voluntary' or otherwise, the contract may at the option of the Estate Officer, be terminated by notice in writing posted at the site of the works and advertised in one issue of the local district Gazette and all accepted and acceptable works shall forthwith be measured up and paid for at the rates provided in the contract schedule where such apply, or otherwise, by the most recent schedule of rate of the division approved by competent authority to the person or persons entitled to receive and give a discharge for the payment.

### **J. SETTLEMENT OF DISPUTES**

#### **69. Arbitrations**

69.1 In case of any dispute or difference between the parties to the contract either during the progress or after - the completion

of the works or after the determination, abandonment or breach of the contract, or as to any matter or thing arising hereunder except as to the matters left to the sole discretion of the Estate Officer under clauses 18,20,25-3,27,34,35 and 37 of "General conditions of contract" or as to the with holding by the Engineer,i/c. of payment of any bill to which the contractor may. claim to be entitled, then either party shall forth with give to the other notice of such dispute of difference and such dispute or difference shall be and is hereby referred to the arbitration. The Arbitrator shall give detailed reasons in their awards for their findings and conclusion.

The arbitrator shall give detailed reasons in the awards for their finding and conclusions. Subject as aforesaid to the provisions of the arbitration Act, 1940 or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the Arbitration proceeding under this clause.

Upon every and any such reference, the costs of and incidental to the reference and award respectively shall be discretion of the arbitrator, subject to the condition that the amount of such costs to be awarded to either party shall not, in respect of a monetary claim exceed the percentage set out below of any such award irrespective of the actual fees, cost and expense incurred by either party provided that where a monetary claim is disallowed in full the said percentage shall be calculated on the amount of the claim. The arbitrator may determine the amount of the costs to be awarded or director the same to be fixed as between solicitor and client or as party and shall direct by whom and to whom and in what manner the same shall be borne and paid.

The percentage above referred to in this clause are 5% on any such monetary award which does not exceed Rs. 10,000.3% on the next Rs. 40,000 or any part thereof 2% on the next Rs.50,000 or any part thereof

and 1% on any excess over Rs.1,00,000/- provided that the University shall not be liable to any claim in respect of any such dispute or difference until the liability and the amount thereof shall have been referred to and decided by the Arbitrator.

69.2 The fees for Arbitrators shall be levied based on the value of claims referred to for arbitration. The fees shall be calculated at 5% of the first Rs. 10000/- at 3% of the next Rs.40000/-

## **APPENDIX No. I.**

### **SAFETY CODE**

General Rules as to Scaffolds;

1. Suitable scaffolds shall be provided for workman for all works that cannot be safely done from a ladder or by other means. When a ladder is used an extra Mazdoor shall be engaged for holding the ladder and the ladder shall be given an inclination not settper the 0.25 to 1 (0.25 horizontal to 1 vertical) When the ladder is used for carrying materials as well, suitable foot holds and hand holds shall be provided on the ladder.

2. A scaffold shall not be constructed taken down or substantially altered, except (a) under the supervision of competent and responsible person; and (b) as for as possible by competent workers possessing adequate experience in such work. ,

3. All scaffolds and appliance connected therewith and all ladders shall .

a) be of sound material

b) be of adequate strength having regard to the load strain to which they will be subjected and

c) be maintained in proper condition

4. Scaffolding or staging more than 3.5 metres above the ground or floor shall have a guard rail properly attached, bolbraced and otherwise secured at least 0 metres

above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

5. Scaffolds shall be so constructed that no part thereof can be displaced in consequence of normal use.

6. Scaffolds shall not be overloaded and so far as practicable the load shall be evenly distributed.

7. Before installing lifting gear of scaffolds special precautions shall be taken to ensure the strength and stability of the scaffolds.

8. Working platform, gangways and stairways should be so constructed that to part there can save unduly or unequally. If the height or the platform or the gangway or the stairways is more than 3.5 metres above ground level or floor level they should be closely boarded should have adequate width and should be suitably fenced as described in (4 above)

9. Every opening in the floor of a building or in a working platform shall be provided with suitable fencing or railing for a minimum height of 0.9 metre to prevent the fall of persons or material.

10. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 metres in length while the width between side rails in rung ladder shall in no case be less than 30cm for ladder upto and including 3 metres in length. For longer ladders this width should be increased at least 20 mm for each additional metre of length. Uniform step spacing should not exceed 30 cm. Adequate precautions should be taken to prevent danger from electrical equipment. No materials on the site of work shall be so stacked or placed as to cause danger or

inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the Public from accidents and shall be bound to bear the expenses of the defense of every suit, action or other proceedings at law that may be brought by any persons for injury sustained owing of the defense of every suit, action or other proceedings at law that may be brought by any persons for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action or proceedings to any which may be awarded in any such suit, action or proceedings to any such persons or which may with the consent of the contractor be paid to compromise and claim by any such person.

### **Excavation and trenching**

11. Trenches -1.2 metres or more in depth, shall at all times be supplied with at least one ladder for each 30 metres in length or fraction thereof. Ladder shall be extended from bottom of the trench to at least 0.8 metre above the surface of the ground. The sides of trenches which are 1.5 metres or more in depth shall be stepped back to give suitable slope or hold securely by timber bracing, so as to avoid the danger of sides to collapse.

12. Demolition - Before any demolition is commenced and also during the process of the work -

a) All roads and open areas adjacent to the work site shall either be closed or suitably protected.

b) No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.

c) All practical steps shall be taken to prevent danger to persons employed from risk or fire or explosion or flooding. No floor, roof or other part of the building shall be so

overloaded with debris or materials as to render it unsafe.

13. All necessary personal safety equipment as considered adequate by the Engineer, i/c. shall be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment by those concerned. .

a) Workers employed on mixing asphaltic materials cement and lime mortars shall be provided with protective footwear and protective goggles.

b) Those engaged in white-washing and mining or stacking of cement bags or any materials which is injurious to the eyes shall be provided with protective goggles.

c) Those engaged in welding works shall have protective goggles and protective clothing and seated at sufficiently safe intervals.

d) Those engaged in welding works shall be provided with welder's protective sight ligs.

e) When workers are employed in sewers and man holes which are in use, the contractor shall ensure that the manholes covers are opened and are ventilated atleast for an hour before the workers are allowed to get into the manholes , and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.

f) The contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precautions shall be taken.

(i) No paint containing lead and lead products shall be used except in the form of paste of ready-made paint.

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

(iii) Overalls shall be supplied by the contractors to workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.

(iv) When workers are employed in dangerous occupations like work with hot bitumen, drilling operations etc., which are likely to prove dangerous resulting in physical damage and causality, adequate protection of the workers should be provided.

14. When the work is done near any place where there is risk of drowning all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatments of all injuries likely to be sustained during the course of the works.

15. a) Hoisting machines and tackle including their attachments anchorages and supports shall be good mechanical construction sound materials and adequate strength and free from patent defect and shall be kept in good repair and in good working order. Every rope used in hoisting or lowering materials or as a means of suspension shall be of suitable quality and adequate strength and free from patent defect.

b) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in control of any hoisting machine, including the scaffold winch or give signals to the operator.

c) In the case of every hoisting machine and of every chain ring hook shackle level and pully block used in hoisting or lowering or as a means of suspension, the safe working

load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load, in the case of hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any hoisting machine or of any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

16. Motors, gearing, transmissions, electric wiring and other dangerous parts of hoisting appliance shall be provided with efficient safeguards, Hoisting appliance shall be provided with such means as will request to a minimum the risk of the accidental descent of the load. Adequate precautions shall be taken to reduce to a minimum the risk of any part of a suspended load becoming accidentally displaced.

When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel such as gloves, sleeves and boots as may be necessary should be provided. The workers and carry keys or other materials which are good conductors or electricity.

17. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at workshop. The person responsible for the compliance of the safety code shall be named by the contractor.

18. To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the contractor shall be open to inspection by the Labour Officer, Engineer,i/c. of the Department or other representative.

19. Notwithstanding the above clauses (1) to (18) there is nothing in these to exempt the contractor from the operations of any other Act of rules in force in the Republic of India.

Model Rules for provision of Health and Sanitary arrangements for workers employed by the University and their contractors

The contractor's special attention is invited to relevant clauses of the "General conditions of contract" in the Tamilnadu Building Practice and he is requested to provide at his own expense the following amenities' to the satisfaction of the Engineer,i/c.. - <

., Application : These rules shall apply to all building and construction works in charge of University.

2. Definition : (i) "Work place" means a place at which an average fifty or more workers are employed in connection with construction work. •

ii) "Large work place" means a place at which at an averaged 500 or more workers are employed in connection with construction work.

3. First Aid : (a) At the work site there shall be maintained in a readily accessible place, first aid appliance and medicines including an adequate supply of sterilized dressing, and sterilized cotton wool. The appliances shall be kept in good order. They shall be placed under the charge of a responsible person who shall be readily available during working hours.

(b) At large work places where hospital facilities are not available within easy distance of the works first-aid posts shall be established and be run by a trained compounded.

(c) Where large work places are remote from regular hospitals an in-door ward shall be provided with one bed for every 250 employees.

(d) Where large work places are situated in cities towns or in their suburbs and no beds are considered necessary owing to the proximity of city or town hospitals, suitable

transport shall be provided to facilitate removal of urgent cases to these hospitals. At other work places some conveyance facilities, such as a car shall be kept readily available to take injured persons or persons suddenly taken seriously ill to the nearest hospital.

#### 4. Drinking Water :

a) Water of good quality fit for drinking purposes shall be provided for the work people on a scale of not less than 15 litres per head per day.

b) Where drinking water is obtained from an intermittent public water supply each work place shall be provided with storage tank where such drinking water shall be stored.

c) Every water supply storage shall be at a distance of not less than 15 metres from any latrine, drain or other source of pollutions. Where water has to be drawn from an existing well, which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and water proof.

d) A reliable pump shall be fitted to each covered well the trap door shall be kept locked and opened only for cleaning or inspection which shall be done atleast once a month.

5. Washing and bathing places : Adequate washing and bathing places should be provided, separately for men and women such places shall be kept in clean and drained condition. Bathing or washing should not be allowed in or near any drinking water well.

6. Latrines and Urinals: There shall be provided within the precincts of every work place, latrines and urinals in an accessible place and the accommodation, separately for each of them, shall be on the following

scale or on the scale so directed by the Engineer,i/c. in any particular cases.

(i) Where the number of persons employed does not exceed 50..... 2 seats

(ii) Where the number of persons employed exceed 50 but does not exceed 100 .....3 seats

If women are employed separate latrines and urinalsscreened from those for men shall be provided on the same scale.

Except in work places provided with water flushed latrines connected with a water borne sewage system, all latrines shall be provided with receptacle on a dry earth system which shall be cleaned at least four times daily and at least twice during the working hours and kept in strictly sanitary conditions. The receptacles shall be tarred inside and outside atleast once a year.

The excreta from the latrines shall be disposed off at the contractor's expense, in outway pits approved by the local Public Health Authority. The contractor shall also employ adequate number of scavengers and conservancy staff to keep the latrines and urinals in a clean condition.

7. Shelters during rest : At every work site there shall be provided free of cost, two suitable sheds one for meals and the other for rest separately for men and women for the use of labourers.

8. Creches: (a) At every workplace at which 50 or more women workers are ordinarily employed, there shall be provided two huts of suitable size for the use of children under age of 6 years belonging to such women, one hut shall be used for infants games and play and the other as a bed room. The huts shall not be constructed on a lower standard than the following

i) Thatched roofs

ii) mud floors and walls.



iii) Planks spread over the mud floor and covered with matting.

The huts shall be provided with suitable and sufficient opening for light and ventilation. There shall be adequate provision of sweepers to keep the places clean. There shall be two Dais in attendance. Sanitary utensils shall be provided to the satisfaction of the Health Officer of the area concerned.

The use of the huts shall be restricted to children, their attendants and mothers of the children.

b) Where the number of Women workers is more than 25 but less than 50, the contractor shall provide at least one hut and one Dai to look after the children of women workers.

c) The size of crèche or crèches shall vary according to number of women workers.

d) The crèche or crèches shall be properly maintained and necessary equipment like toys, etc., shall be provided.

9. Canteens : A cooked food canteen on a moderate scale shall be provided for the benefits of workers if it is considered expedient

10. Sheds for workmen : The contractor should provide at his own expense shed for housing his workmen. These sheds shall be on a standard not less than the cheap shelter type, to live in which the work people in the locality are accustomed to.

A floor area of about 1.8 metres x 1.5 metres for two persons shall be provided. The sheds to be in rows with 1.3 metres clear space between sheds and a 9 metres clear space between rows if conditions permit. The work people's camp shall be laid out in units of 400 persons, each, each unit to have a clear space of 12 metres around.

# APPENDIX - IX – XXXVIII

## MONTHLY REPORT OF CONSTRUCTION EMPLOYEES UNDER CONTRACTORS

- 1 Name, location and type of work :
- 2 Name of Contractor :
- 3 Works engaged in :
- (i) University - TANUVAS. :
- (ii) P.W.D. Work :
- (iii) Government work other than PWD :
- (iv) Other works :
- 4 Name and address of Manager(s) of works :
- 5 Value of contract :
- 6 Employment earnings :

Category	Men	Women	Employees boys	Girls
1	2	3	4	5

- . I Total number of employees during months :
- II Number of employees in the works on the last working day of the month :
- III Total wages paid for :
- IV Total numbers of working days during the month :
- V Length of normal wage period

Date :

Place :

To

Signature of the Contractor or Manager

1. The Employment Officer, District Employment Office,  
2. The Executive Engineer, Division.

### **Instruction to complete the Proforma**

1. The Contractor means the person who has contracted to execute the works.
2. Manager means any person who manages, supervises the work(s) on behalf of the contractor.
3. Item-6(i) The cumulative total of daily employment on all days in a Calendar month, if the last day of the Calendar month is a holiday, the working day immediately previous to the holiday. Item 6 (ii) Wages means basic wage, dearness allowance project allowances etc. including work benefits paid in cash or kind. Item 6 (iii) Columns 2 and 3 refer to adults who are 18 years of age or over. Item 6 - Columns 4 and 5 refer to others not covered by columns 2 and 3.
4. Returns should cover a calendar month.
5. Completed returns to reach the employment exchanges concerned on or before 5th of the month succeeding the month to which the return relates.

## THE SCHEDULE

**Name of work : Construction of Standard Unit Design Seed Processing Plant cum Seed store under Seed Hub Scheme at ICAR - Krishi Vigyan Kendra, Kattupakkam.**

- a) The quantities given here are those upon which the lump sum work tender cost of the is based but they are subject to alterations, omissions, deductions, additions, as provided for in the conditions of this contract and do not necessarily show the actual quantities of work to be done. The unit rates noted below are those governing payment for extra or deductions or omission according to the conditions of the contract as set forth in the preliminary specification of the Tamil Nadu Detailed Standard Specifications and other conditions or specifications of this contract.
- b) It is to be expressly understood that the measured work is to be taken net (notwithstanding any custom or practice to the contrary) according to the actual quantities when in place and finished according to the drawing or as may be ordered from time to time by the Estate Officer and cost calculated by measurement or weight at the respective prices, without any additional charge for the necessary or contingent works connected therewith. The rates quoted are for works in site and complete in every respect.

Sl. No.	Quantity (In Figure and Words)	Description of Work	TNBP No. or other special specification No., If any	Rate ( In Figure and Words)	Per	Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Rs. P.		Rs. P.
1.	60.00 M <sup>3</sup> (Sixty cubic meters)	<b>Earth work excavation</b> for foundation in all soils and sub-soils and to full depth as may be directed except in hard rock requiring blasting inclusive of shoring, strutting and baling out water wherever necessary, refilling the sides of foundation with excavated earth in layers of not more than 15cm thick well rammed consolidated and depositing the surplus earth within the compound in place shown by the departmental officers within an initial lead and lift and clearing, leveling the site etc., complete complying with standard specifications.	SS 23 & 24		1 M <sup>3</sup> (One cubic meter)	

Contractor

**Correction in Rates :-**  
**Omission in Rates :-**  
**Overwriting in words :-**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Rs.	P.	Rs. P.
2.	30.00 M <sup>3</sup> (Thirty cubic meters)	<b><u>Plain Cement Concrete 1:5:10 (One Cement, five sand and ten aggregate) using 40 mm size</u></b> hard broken granite stone jelly for foundation and flooring including dewatering wherever found necessary and laid in layers of not more than 15 cm thick, well rammed, consolidated and curing etc. complete complying with standard specification	SS 28			1 M <sup>3</sup> (One cubic meter)
3.		<b><u>Reinforced Cement Concrete 1:2:4 (One Cement, two sand and four hard broken stone jelly)</u></b> using machine broken 20 mm gauge hard broken granite stone jelly for all RCC item of works excluding cost of reinforcement grill, fabricating charges, centering and shuttering but including laying, vibrating with mechanical vibrator, finishing, curing, etc., complete and providing fixtures like fan clamps in the RCC floor/roof slab wherever necessary and bearing surfaces of wall, beam etc. shall be finished smooth with cement mortar 1:3 (One Cement and Three Sand) 12mm thick and kraft paper laid over it without claiming extra, etc., complete complying with standard specification as directed by the departmental officers	30V, VI (2), 5VI (S4) VII			

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Rs.	P.	Rs. P.
a.	18.00 M <sup>3</sup> (Eighteen cubic meters)	For foundation and basement.				1 M <sup>3</sup> (One cubic meter)
b.	25.00 M <sup>3</sup> (Twenty five cubic meters)	For superstructure in Ground floor				1 M <sup>3</sup> (One cubic meter)
c.	25.00 M <sup>3</sup> (Twenty five cubic meters)	For superstructure in First floor				1 M <sup>3</sup> (One cubic meter)
d.	14.00 M <sup>3</sup> (Fourteen cubic meters)	For superstructure in Second floor				1 M <sup>3</sup> (One cubic meter)

**Correction in Rates** :-  
**Omission in Rates** :-  
**Overwriting in words** :-

**Contractor**

(1)	(2)	(3)	(4)	(5)		(6)	(7)	
				Rs.	P.		Rs.	P.
4a.	47.00 M <sup>2</sup> (Forty seven square meters)	Supplying and erecting steel shuttering including necessary supports for plain surfaces for reinforced cement concrete works such as <b><u>grade beams, column footing, plinth beam, stair case steps, pedestals bed blocks cover slab etc.,</u></b> using mild steel B.G. 10 sheets of size 90cm X 60cm stiffened with mild steel angles of size 25mm X 25mm X 3mm for boarding laid over silver oak (Country wood) joists of size 10cm X 6.5 cm spaced at about 90cm centre to centre, supported by casurina props of 10cm to 13cm diameter spaced at 75cm centre to centre etc., complete complying with standard specification.	SS 30 & 44H			1 M <sup>2</sup> (One square meter)		
4b.	406.00 M <sup>2</sup> (Four hundred and six square meters)	Supplying and erecting steel centering for sides and soffits including supports and strutting up to a height of 3.29m meter for plain surfaces such as <b><u>RCC slabs, beams TEE or ELL beams, lintels staircases beams etc.,</u></b> with all cross bracings using mild steel B.G. 10 sheets of size 90cm X 60cm stiffened with welded mild steel angles of size 25mm X 25mm X 3mm laid over silver oak (Country wood) joists of size 10cm X 6.5cm spaced at about 90cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at 75cm centre to centre etc., complete complying with standard specification in all floors.	SS 30 & 44H			1 M <sup>2</sup> (One square meter)		

**Correction in Rates** :-  
**Omission in Rates** :-  
**Overwriting in words** :-

**Contractor**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Rs.	P.	Rs. P.
4c.	251.00 M <sup>2</sup> (Two hundred and fifty one square meters)	Supplying and erecting steel centering for sides and soffits including supports and strutting up to 3.29 meter height for plain surfaces such as <b><u>RCC square or rectangular columns, top and bottom slabs of sunshade boxing sill slabs etc.</u></b> , with necessary facia etc., with all cross bracings using mild steel B.G., 10 sheets of size 90cm X 60cm stiffened with welded mild steel angles of size 25mm X 25mm X 3mm for boarding laid over silver oak (Country wood) Joists of size 10cm X 6.5 cm spaced at about 90cm centre to centre and supported by casurina props of 10cm to 13cm dia spaced at 75cm centre to centre etc., complete complying with standard specification.	SS 30 & 44H			1 M <sup>2</sup> (One square meter)
4d.	141.00 M <sup>2</sup> (One hundred and forty one square meters)	Supplying and erecting steel centering for sides and soffits including supports and strutting up to 3.29 meter height for plain surfaces such as <b><u>Vertical slab, side slabs of RCC sunshade boxing, vertical drops, facia, vertical wall etc.</u></b> , with necessary facia etc., with all cross bracings using mild steel B.G., 10 sheets of size 90cm X 60cm stiffened with welded mild steel angles of size 25mm X 25mm X 3mm for boarding laid over silver oak (Country wood) Joists of size 10cm X 6.5 cm spaced at about 90cm centre to centre and supported by casurina props of 10cm to 13cm dia spaced at 75cm centre to centre etc., complete complying with standard specification.	SS 30 & 44H			1 M <sup>2</sup> (One square meter)

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-



(1)	(2)	(3)	(4)	(5)		(6)	(7)	
				Rs.	P.		Rs.	P.
a.	40.00 M <sup>3</sup> (Forty cubic meters)	<b>Brick work in Cement Mortar 1:5</b> (One cement and Five sand) using first class chamber burnt bricks of size 9" x 4 1/2" x 3" for the following including curing, etc., complete complying with standard specification.  For Foundation and basement	SS 31 & similar to 31C			1 M <sup>3</sup> (One cubic meter)		
b.	55.00 M <sup>3</sup> (Fifty five cubic meters)	For Superstructure in Ground floor				1 M <sup>3</sup> (One cubic meter)		

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-

(1)	(2)	(3)	(4)	(5)		(6)	(7)	
				Rs.	P.		Rs.	P.
c.	53.00 M <sup>3</sup> (Fifty three cubic meters)	For Superstructure in First floor				1 M <sup>3</sup> (One cubic meter)		
d.	53.00 M <sup>3</sup> (Fifty three cubic meters)	For Superstructure in Second floor				1 M <sup>3</sup> (One cubic meter)		
6	1600.00 M <sup>2</sup> (One thousand and six hundred square meters)	<b>Plastering of walls in cement mortar 1:5</b> (One cement and five sand) 12mm thick in all floors including provision of cement mortar bands and raised plastering for doorways wherever required and as directed without any extra claim complying with standard specification.	SS 56 & 57			1 M <sup>2</sup> (One square meter)		

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-

(1)	(2)	(3)	(4)	(5)		(6)	(7)	
				Rs.	P.		Rs.	P.
7.	500.00 M <sup>2</sup> (Five hundred square meters)	<b>Plastering of walls in cement mortar 1:3</b> (One cement and three sand) <b>10mm thick</b> in all floors including provision of cement mortar bands and raised plastering for doorways wherever required and as directed without any extra claim complying with standard specification.	SS 56 & 57			1 M <sup>2</sup> (One square meter)		
8.	10.00 M <sup>2</sup> (Ten square meters)	<b>Supplying and fixing of "N" type steel ventilators</b> using <b>M.S. angles</b> of size 25X25X5mm for frame and M.S. Tee of size 25X26X3mm M.S. flat of size 20X3mm for fixing the weld mesh. Special type of hold fast welded to the frame of 45 degree inclined towards centre for wall and fixing the weld mesh fixing the glass pans with necessary clips and putties with required bolts, nuts and washers and one coat of red oxide primer etc., including necessary dismantling making holes in RCC columns beams masonry wherever necessary with power drill to the extent required and made good to the original condition after fixing as directed by departmental officers.	Special			1M <sup>2</sup> (One square meter)		

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-

(1)	(2)	(3)	(4)	(5)		(6)	(7)	
				Rs.	P.		Rs.	P.
9.	20.00 M <sup>2</sup> (Twenty square meters)	<b><u>Supplying and fixing steel window covered with MS sheet openable shutter.</u></b> The outer frame and shutter made out of steel sections confirming to IS7452/1982. The outer frames of windows made out of "Z" section (F7D) of size 20 X 20 X 3mm confirming to IS 7452/1982. Millions are made out (F4B) T section of size 46 X 25 X 3mm confirming to IS 7452 / 1982. The shutters are individual and each of them can be operated separately. Sash bars are made of "T" section (T2) of size 25 X 22 X 3mm, 2 Nos. of sturdy hinges and one number of handle cum ranch of special type are fixed on each openable shutter. Suitable openings is left for its easy operation. One number of window adjustable string with fixing bracket of sufficient length are provided for each shutter 4 Nos. of 40 X 40 X 3mm angle hold facts of 230mm inner face of the window at equal intervals not excluding 10cm spacing the shutter portion be covered with 20 gauge MS sheet. All members are painted with one coat of red oxide primer. The rate is inclusive of each of all materials, labour charges for fixing one coat of primer, welding charges transportation to the site of work loading, unloading and all other incidental charges etc., complete and as directed by the departmental officers.	Special			1M <sup>2</sup> (One square meter)		

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-

(1)	(2)	(3)	(4)	(5)		(6)	(7)	
				Rs.	P.		Rs.	P.
10.	11.00 M <sup>2</sup> (Eleven square meters)	<b><u>Design, fabrication, supply and erection of push and pull type rolling shutter</u></b> with ISI mark at site of work made out of certain using 18G x 3" lath section bright CRCA strip in one piece without any welded joints at 76mm rolling centers interlocked with each other ends locked with heavy type cast iron / MS clips complete with lock plate using 10g MS sheets reinforced with 40mm x 40mm x 6mm MS angles at bottom and fitted with heavy latches and locking arrangements and handle on either side with pulling lock including necessary hood cover using 0.90mm CRCA sheet reinforced with 25 x 25 x 3 MS angles or gate channel. The roller shall be of heavy cast iron pullys, fitted with heavy duty. 'C' class 40mm steel pipe and high tensile carbon coil springs (2 springs should be supplied) with all accessories, etc. complete. The rolling shutters shall be fixed with pressed guide channels of 10G MS sheet and attached to the side brackets with 20mm square bar. Side brackets shall be 10G MS plates and cast iron 'U' clamp shall be riveted to the side brackets. The rolling shutters and accessories should be as per IS 6248 / 1979 specifications. The rolling shutter should be with two numbers of brass side locks and one number of brass centre lock with duplicate keys with necessary guide brackets for the locks, etc. The rolling shutters shall be coated with heavy coat of red oxide primer including inside portion of hood, etc. complete and as per the direction of departmental officers.	Special			1M <sup>2</sup> (One square meter)		

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Rs.	P.	Rs. P.
11.	1600.00 M <sup>2</sup> (One thousand and six hundred square meters)	<b><u>Painting the walls with two coats of cement paint</u></b> over one coat of primer including cost of cement paint, primer including cost of cement paint, primer, cleaning and scrapping the wall, rendering the walls smooth with necessary putty brushes, scaffolding arrangements, labour charges etc., in all floors complying with standard specifications (The colour and shade of the cement paint shall be got approved by the Executive Engineer before use of work)	SS 64			1 M <sup>2</sup> (One square meter)
12.	65.00 Qtl., (Sixty five quintal)	<b><u>Supplying, fabricating and placing in position of steel reinforcements using MS / RTS rods for all RCC works</u></b> as per design given including cost of steel. Binding wire, straightening the rods, welding of rods, dia above 25mm in all floors complying with standard specifications. [The welding should conform to BIS. Wherever required at contractor's expense.]	SS 86 & 86A, 86B			1 Qtl (One quintal)

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Rs.	P.	Rs. P.
13.	150.00 M <sup>3</sup> (One hundred and fifty cubic meters)	<b><u>Supplying and filling in Foundation and basement and trenches etc.,</u></b> with <b><u>filling gravel</u></b> in layers of not more than 15cm thick well rammed watered and well consolidated etc., complete complying with standard specifications. (Excluding cost of gravel should be reduced at free of cost and gravel filling available near well at free cost)	Similar to SS 24 & 25		1 M <sup>3</sup> (One cubic meter)	
14.	20.00 RM (Twenty running meters)	<b><u>Supply and fixing in position steel balustrade</u></b> using 20mm size square bars at 15cm centre to centre and two balusters in single step centrally located and top shall be welded to 40mm X 6mm mild steel flat fix the handrail 40mm dia M.S. pipe as properly welded with steel flat and bottom fixed in the step concrete fixing M.S. flats of size 50mm X 6mm to be provided at the centre of the balustrade connecting all the square bars to the entire length of the balustrade and the square bars well anchor in the floor / step concrete through fish tail splay at bottom including painting the steel member of the balustrade with one coat of red oxide primer etc., complete complying with standard specifications.	Special		1 RM (One running meter)	

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Rs.	P.	Rs. P.
15.	300.00 M <sup>2</sup> (Three hundred square meters)	<b>Providing Granolithic floor</b> finish for <b>25 mm thickness</b> using plain Cement Concrete 1:2:4 (One cement, two sand, and four stone jelly) using 10 to 12mm hard broken stone jelly and the top surface shall be rubbed smooth in all floors, finishing, threading and curing etc., complete complying with standard specification.	SS 39 & 39F			1 M <sup>2</sup> (One square meter)
16.	250.00 M <sup>2</sup> (Two hundred and fifty square meters)	<b>Painting new iron works</b> such as steel doors, windows, ventilators, windows bars, balustrades etc., with <b>two coats</b> of best approved first quality and colour of synthetic enamel paint over the existing red oxide priming coat in all floors etc., complete complying with standard specification. (The make, quality and colour of paint should be got approved by the Engineer,i/c., before use on works).	SS 66 & 66A			1 M <sup>2</sup> (One square meter)
17.	145.00 M <sup>2</sup> (One hundred and forty five square meters)	<b>Supplying and fixing AC sheet roofing</b> with 6mm thick asbestos cement sheets of fully corrugated (grey colour) of approved quality by drilling holes (and not by punching) with necessary 'J' / 'U' bolts and nuts of 8mm dia of suitable length and providing one set of bitumen washers of 25mm dia and 1.60mm thick for each bolt including protruding portion of bolts in roof shall be covered with bitumen compound etc., complete complying with standard specification and as directed	Special			1 M <sup>2</sup> (One square meter)

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-



(1)	(2)	(3)	(4)	(5)		(6)	(7)	
				Rs.	P.		Rs.	P.
18.	16.00 RM (Sixteen running meters)	<b>Supplying and fixing AC ridge sheet roofing</b> with 6mm thick asbestos cement sheets of fully corrugated (grey colour) of approved quality by drilling holes (and not by punching) with necessary 'J' / 'U' bolts and nuts of 8mm dia of suitable length and providing one set of bitumen washers of 25mm dia and 1.60mm thick for each bolt including protruding portion of bolts in roof shall be covered with bitumen compound etc., complete complying with standard specification and as directed.	Special			1 RM  (One running meter)		
19.	2000.00 Kgs., (Two thousand kilograms)	<b>Manufacturing, supplying and erection and fixing in position of M.S. pipes</b> and M.S. angle with fixed M.S. angle trusses, pipe trusses with purlin as per specification given including one coat of red oxide primer etc., complete of approved design etc., complete for bottom tie and purlin including base plate, bolts, buts, cleats and applying a coat of primer etc., complete complying with standard specification and as directed by the Engineer,i/c.,	Special			1 Kg.,  (One kilo-gram)		

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Rs.	P.	Rs. P.
20.	13.00 M <sup>2</sup> (Thirteen square meters)	Manufacturing supplying and fixing of <b>STEEL DOOR</b> with following section. Outer frame 40 X 40 X 3mm Hollow steel special extruded section as at 3.28Kg/RM and shutter frame 40 X 40 X 3mm hollow steel special extruded section as at 3.28Kg/RM. Stiffeners with 32 X 6mm at 1.5 Kg/m MS flat is provided as the lock rail of the door and welded in fact on both ends to shutter frame. 18 gauge CR sheets of best quality is laid as panel in the shutters frames. 18X5mm at 0.7 Kg/m MS flat is welded over the 32X6mm at 1.50 Kg/m MS that on the rear side of the sand witching the CR sheet for rigidly. Additional stiffness with 18 X 5mm at 0.7 Kg/m MS flats are provided diagonally on the rear side of the shutter 2 Nos., of hinges in case of single leaf and 4 Nos., of hinges in case of double leaf shutter is provided 6 Nos., of hold lasts 120mm length spliced at the ends are welded to the outer frames of the door. Tower bolt 2 Nos., one at top and the other at bottom are provided. One aldrop is provided in case of double leaf door at lock rail section in the door. For single leaf doors one more aldrop is provided in the inner side of the door and additional provision for locking arrangements for lock is provided on the near side of the door at in appropriate place, in case of a double leaf door, MS flat 32 X 3mm at 1.10 Kg/m is provided on the edge of one shutter, to conceal the gap between the shutters. A tic bat is provided at the bottom of the outer frame to prevent twisting of frame during transportation of fixing. All members are given a shop coat of red oxide primer etc., as directed by the departmental officers. The rate is include cost of all materials, labour charges, transportation, taxes and all other incidental charges etc., complete.	Special			1M <sup>2</sup> (One square meter)

Contractor

Correction in Rates :-  
Omission in Rates :-  
Overwriting in words :-

## LEAD STATEMENT

### Post Graduate Research Institute in Animal Sciences, Kattupakkam, Kattupakkam

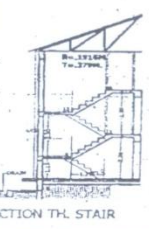
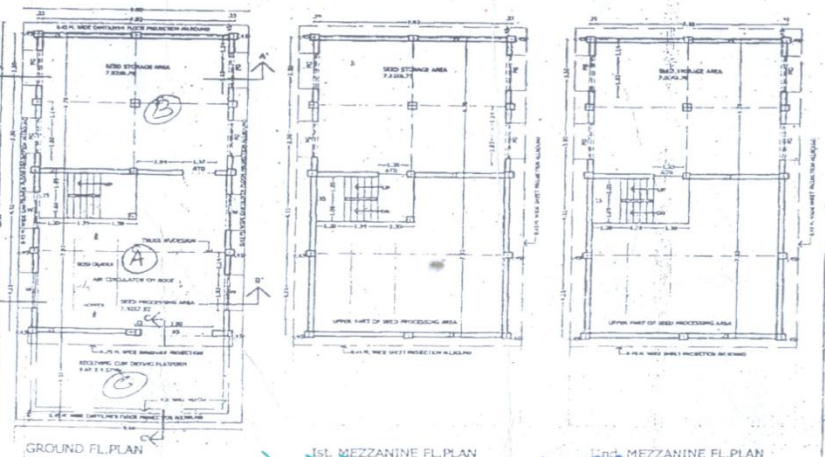
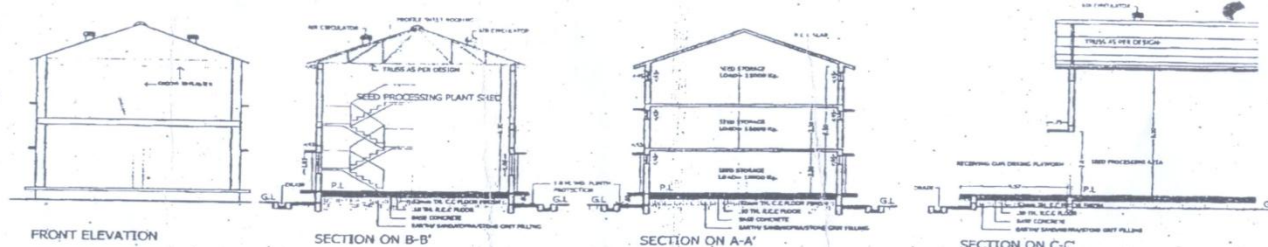
Sl No	Item	Source	Lead in Kms.
1.	Cement	Guduvancheri	6 Kms.
2.	Steel	Chengalpet	17 Kms.
3.	Sand for motor	Palar	26 Kms
4.	Sand for filling	Palar	26 Kms
5.	II <sup>nd</sup> class stock bricks sort 9" X 4 1/2" X 3"	Mamandur	28 Kms
6.	Brick jelly 20mm	Mamandur	28 Kms
7.	Brick jelly 40mm	Mamandur	28 Kms
8.	HBG machine broken 20mm	Nallambakkam	16 Kms
9.	HBG 40mm Hand	Nallambakkam	16 Kms
10.	HBG 10mm and 12mm	Nallambakkam	16 Kms
11.	R.R. for Masonry work	Nallambakkam	16 Kms
12.	Bond Stone	Nallambakkam	16 Kms
13.	Stone dust	Nallambakkam	16 Kms
14.	Lime slaked and screened	Chengalpet	17 Kms
15.	Lime stone	Chengalpet	17 Kms
16.	Gravel	Local	4 Kms
17.	Pressed tiles of size 230 x 230 x 20mm	Chengalpet	17 Kms
18.	Country stock bricks of size 8 3/4" X 4 1/2" X 2 1/4"	Mamandur	28 Kms
19.	Blue Granite chips 6mm to 10mm	Nallambakkam	16 Kms

Note: No change of lead will be entertained after tendering under any circumstances.

CONTRACTOR

R.G.

ESTATE OFFICER,I/C.,  
TANUVAS., CHENNAI-51.



W= 1.80X1.35	FG= 1.80X0.45
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SCHEDULE OF OPENINGS

NO.	DESCRIPTION	NO.	AREA	PERCENTAGE
1	DOOR	1	2.28	0.1
2	WINDOW	1	1.80	0.07
3	SCREEN DOOR	1	1.80	0.07
4	SCREEN DOOR	1	1.80	0.07
5	SCREEN DOOR	1	1.80	0.07
6	SCREEN DOOR	1	1.80	0.07
7	SCREEN DOOR	1	1.80	0.07
8	SCREEN DOOR	1	1.80	0.07
9	SCREEN DOOR	1	1.80	0.07
10	SCREEN DOOR	1	1.80	0.07
11	SCREEN DOOR	1	1.80	0.07
12	SCREEN DOOR	1	1.80	0.07
13	SCREEN DOOR	1	1.80	0.07
14	SCREEN DOOR	1	1.80	0.07
15	SCREEN DOOR	1	1.80	0.07
16	SCREEN DOOR	1	1.80	0.07
17	SCREEN DOOR	1	1.80	0.07
18	SCREEN DOOR	1	1.80	0.07
19	SCREEN DOOR	1	1.80	0.07
20	SCREEN DOOR	1	1.80	0.07
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97	SCREEN DOOR	1	1.80	0.07
98	SCREEN DOOR	1	1.80	0.07
99	SCREEN DOOR	1	1.80	0.07
100	SCREEN DOOR	1	1.80	0.07

NOTE: - SCREEN DOORS SHOULD BE PROVIDED WITH AN OPENING DIMENSION OF 1.80M BY 1.80M. SCREEN DOORS SHOULD BE PROVIDED WITH AN OPENING DIMENSION OF 1.80M BY 1.80M. SCREEN DOORS SHOULD BE PROVIDED WITH AN OPENING DIMENSION OF 1.80M BY 1.80M.

I.C.A.R- INDIAN INSTITUTE OF PULSES RESRSACH  
 KALYANPUR, KANPUR 208 024  
 STANDARD UNIT DESIGN OF SEED PROCESSING PLANT CUM  
 SEED STORE UNDER SEED HUB SCHEME

SCALE - 1:500 (G.F.)	DATE - 18.02.2017	DWG. NO. - 01/2017
DESIGNED BY [Signature]	CHECKED BY [Signature]	DATE OF APPROVAL [Signature]
PROJECT ENGINEER [Signature]	SENIOR ENGINEER [Signature]	MANAGER [Signature]

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Assistant Executive Engineer  
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