# राष्ट्रीय औद्योगिक इंजिनीअरी संस्थान NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING विहार सरोवर, मुंबई - Vihar Lake, Mumbai 400 087.



कार्य हेतु 🗆 🗆 🗆 🗅 दस्तावेज - TENDER DOCUMENT FOR THE WORK

# Providing compound wall, fencing along with storm water drain for part portion of – Survey no.34.

कुलसचिव कार्यालयके सामने निविदा बॉक्समें सुबह 11.00 बजे 18/05/2022 से पहले पहुच जानी चाहिए

Tenders to be reached on 18/05/2022 before 11.00 A.M. in Tender Box in front of Registrar's Office.

#### NOTICE FOR INVITING TENDER

То		

Dear Sir (s)

The wax sealed/tampers proof tenders in two bid system are invited on percentage rate basis from NITIE empanelled contractors and from the other contractors having PWD/CPWD/MES/RAIL WAY/IIT registration of appropriate class for the following work on behalf of Director, NITIE Mumbai - 87. The intending agency should have carried out at least one work costing 80% or two works costing 60% or three works costing 40% of the estimated cost of similar nature during last three years, certificate of which should be submitted along with application. Tender forms can be obtained from the office of Executive Engineer, NITIE, Mumbai - 400 087. Tel No. 28035214/28035379. The complete tender documents should reach on or before the date and time of submission Tender without wax sealed will be summarily rejected.

Name of Work : Providing compound wall, fencing along with storm water

drain for part portion of – Survey no.34.

**Estimated cost of work put to tender** : Rs.9,55,302.00

Earnest Money Deposit : Rs. 19,100/- (Pay order or DD in favour of NITIE Mumbai

- 87" to be attached).

Cost of tender document : Rs. 1000/- (Non-refundable)

**Period of contract** : 2 months (including monsoon)

**Last date of issue of tender form** : 17/05/2022 up to 3.00 P.M.

**Last date of submission of tender** : 18/05/2022 Up to 10.30 A.M.

**Place of submission of tenders** : Tender Box kept front of the office of Registrar, 1st floor

Admn. Building, NITIE

**Date of opening of Tender** : 18/05/2022 at 11.30 A.M.

Validity period of tenders for

acceptance

: 180 days from date of submission

NITIE reserves the right to reject any or all tenders without assigning any reason thereof. This notice is also available on web-site: www.nitie.edu.

Any corrigendum/clarification will be displayed on <a href="www.nitie.edu">www.nitie.edu</a>./www.nitie.ac.in only Thanking you,

## **UNDERTAKING**

From:		
To The Director National Institute of Industrial Engineering Vihar lake, PO NITIE, Mumbai – 400 087.		
Dear Sir,		
I/We the undersigned have carefully gone through and clearly understood the Tender Drawings and the tender documents comprising of Notice to contractors, general instruction to tenderer, Tender Form, Articles of agreement, general conditions, Material specification, special specifications etc. for above said work prepared by National Institute of Industrial Engineering.		
I/We have also taken into consideration the nature and position of the site and the surrounding and the conditions under which the work will be carried out. I/We do hereby undertake to execute and complete the whole work covered by the tender strictly in accordance with the above tender drawings & documents.		
I/We enclose herewith receipt of earnest money paid in cash at NITIE's account office/Demand Draft No drawn on		
I/We further agree to complete the work included in the whole scheme within Two Months of the date of commencement of the work and subject to agreement liquidated damages of Rs. 500/- (Rupees five hundred only) per day beyond that date for the period for which the work remains incomplete due to my/our default. I/We understand that neither the maximum nor any tender will be necessarily accepted and that no reason shall be given for such non acceptance. In case of my/our tender is accepted, I/We agree to pay all the charges connected with the preparation. Stamping and execution of the contract agreement and I/We shall abide by the terms of contract and such other reasonable terms and conditions the Institute may fix from time to time depending on the circumstances. I/we hereby declare that I/we shall treat the tender documents, drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there from to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.		
Yours sincerely,		
(Tenderer's signature ) Date: Address:		
Witness signature: 1)		

#### GENERAL DIRECTIONS TO TENDERS

- 1. Tenders should be submitted in Wax sealed/tamper proof Cover super scribed with the name of the work. All pages of tender documents, conditions and drawings etc. Shall be initialed by the tenderer at the lower right hand corner. The tender should bear the full signature of the tenderer or of all the partners or the signature of the person holding power of attorney on behalf of the tenderer and in case the tenderer is a Pvt. Ltd. or Public Ltd. Co. by any competent authorized person not below the rank of Director or Chief Executive. Any corrigendum or addendum will also form the part of the tender document and will have to be submitted by the tenderer along with the tender.
- 2. On receipt of the blank tender form the tenderer has to ensure that no correction or overwriting is left to be attested by the concerned officers. In case if clarification is required the tenderer may obtain it personally or in writing well in advance from the Executive Engineer. In any case the tenderer will be responsible to bind himself to the terms and conditions and specifications of the tender once submitted by him.
- 3. Tenderer shall submit the tender and other documents in two separate envelopes namely Technical Bid and Commercial Bid. These envelopes finally submitted in one big size envelope which should be wax sealed/tamper proof.

The Technical bid envelop - I shall contain the following documents.

- i EMD- in the form of DD/Pay order/FDR in favour of "NITIE, Mumbai"
- ii Valid registration certificate
- iii Solvency certificate
- iv GST Registration certificate
- v Work completion certificate of similar nature work executed in last 7 years.
- vi Turnover certificates for last three years through the CA.

All the documents should be duly attested Original must be produced for verification, when demanded.

The second envelope clearly marked as "Commercial /Price Bid" shall contain only the main tender document. The tenderer should quote his offer as item rate / percentage rate at the appropriate place of the tender documents to be submitted only in envelop No.2. He should not quote his offer anywhere directly or indirectly in envelope No.1. The tenderer shall quote for the work based on the details given in main tender. The tender shall be unconditional. Any corrigendum /addendum will also form the part of the tender document and will have to be submitted by the tenderer along with tender. No delays on account of any cause will be entertained for the late receipt of tender, it is the sole responsibility of the tenderer to ensure that the completed tender should be dropped in the appropriate box before the due date and time.

Tenderers down loading tender should submit necessary tender fee in the form of D.D. in favour of "NITIE, Mumbai" along with other required documents as mentioned above in envelope -1 i.e. technical bit.

The envelope -2 "Price bid" will be opened of only those tenderers whose technical bid is qualified, otherwise the envelope -No.2 will be returned to the tenderer Tender does not contain the EMD or do not submit any other documents above, the tender will be summarily rejected.

4. Tenders are required to fill the Bill of quantities and work out the BID AMOUNT. The tenderer write the rates of all the items mentioned in the bill of quantities in figures as well as in words. The amount for each items shall be worked out and the total bid amount should then be worked out. All the corrections must be attested by initials of the tenders. The tenderers have to fill in the rates of all the items on bill of quantities. In case arithmetic mistakes in calculations of amounts, total and percentages, the rates of individual items will be considered as

and the amounts, total and percentage will be reworked. In case of discrepancies between the rates written in words and rates written in figures, the rates written in words will be considered as final, as the case may be of item rate of Percentage rate schedule.

- 5. NITIE reserves the right to accept or reject the tender if the tenderer fails to submit the following original/copies of the documents to be submitted.
  - i. EMD in the form of DD/Pay order/FDR in favour of, NITIE, Mumbai
  - ii. Valid Registration certificate.
  - iii. Solvency certificate
  - iv. GST registration certificate
  - v. Work completion certificate of similar nature work executed in last 7 years
  - vi. Turnover certificates for last three years through the CA
- 6. The earnest money of successful tenderer will be kept as initial contract deposit (ISD) for the execution of contract. The successful tenderer shall have to deposit in cash with the Institute (within fifteen days of receipt of work order) and additional sum towards the initial contract deposit (ICD) such that the total amount deposited towards ICD including the EMD will be equal to 5% of the contract amount (i.e., the awarded cost of work). The ISD will from the part of security deposit to be kept during the course of execution of work and up to the end of defects liability period. This security deposit will not bear any interest. In addition to the ICD additional amount will be recovered from the RA bills at rate of 10% of bill amount such that the total security deposit with the Institute will not be more than the 10% of the contract amount or actual bill amount whichever is more. If the contractor fails to deposit ICD within 15 days of receipt of work order. The same will be recovered from 1st RA Bill / any other dues payable, with panel interest @ 18% P.A. worked out from the date of receipt of work order. This change will be operated excluded Term contracts / Rate Contract.
- 7. The defects liability period for the work will be twelve months from the date of actual completion as specified in clause No.25 of the conditions of contract at page No.17. The total of 10% will be retained as security deposit till the end of defect liability period and will be released to the contractor on satisfactory completion of defects liability period.
- 8. If the tenderer after having been awarded the contract fails to deposit further amount towards initial contract deposit as aforesaid and/or fails to sign and complete the documents and agreement and / or fails to start the work within 15 days from the date of issue of work order. The Institute will be at liberty to terminate the contract/cancel the work order and forfeit the EMD/ICD of the contract without giving any notice thereto. Similarly, the name of such tenderer will be deleted / will be debarred for quoting for a period of 3 years.
- 9. The Price bids shall be inclusive of all taxes, Octroi charges, incidental expenses and all other taxes and charges as may be applicable and are to be paid by the contractor for satisfactory completion of work and any claim for the extra payment on any such occasion shall not be entertained. It is explicitly made clear that even if the prices of material / labour goes up or for any reason the cost of the project work increases the Institute shall not be liable to pay any additional to the contractor. All payments of Govt. duties such as ESIC / PF etc. to be taken care by the contractor.
- 10. Under no circumstances contractor will be entitled to claim enhanced rates for any item in this contract.
- 11. All work shall be measured according to the rules of Indian Standard without reference to any local custom unless otherwise specified.

- 12. Deduction on account of Income tax @ 2% or such percentages as may be in force from time to time will be made from all bills whether Running or Final bill and certificate of deductions will be given to the contractor or as per change made by Govt. in the request.
- 13. Receipts for payments made on account of any work when executed by a firm shall also be signed by all partners except where the contractors are described in their tender as a firm in which case the receipts shall be signed in the name of the firm by one of the partners or by some other person having authority to give effectual receipt for the firm.
- 14. The entire work shall be carried out under the supervision of the staff / Person Employed by NITIE.
- 15. The contractor shall take into consideration the relevant standard specifications PWD or ISI codes required for the above referred work and entire work shall be carried out as per the relevant Standard specifications of PWD or ISI codes and by laws and to the satisfaction of the Executive Engineer.
- The contractors without any additional cost shall make the necessary arrangement for water and Electricity for the purpose of execution of this contract. If the same is supplied by the Institute the cost of supply of water and electricity will be deducted from the contractor's running bill (water charges will be 1% of the cost of water consuming items and Electricity at the rate of Rs.13.50 per unit of consumption). Electricity will be provided at one point and contractor to arrange meter and cable etc.
- 17. NITIE will not supply cement to the contractor. The contractors should make their own arrangement to procure and store the cement at their site of work please see the additional conditions for materials.
- 18. All the requisite tests have to be carried by the contractor at his own cost from approved rates of the Institute.
- 19. SAND to be used for the various work items in above referred works shall be river sand (Preferable Vaitarana River) It shall be clean and free of silt and other objectionable materials.
- 20. The items involving hidden measurements should be executed only after specific approval obtained in writing from the Executive Engineer. On confirmation to execute such items the agency has to submit the detailed measurement with locations and then only the work is to be executed. If the agency fails to submit such detailed measurements before executing the item decision of the Executive Engineer will be final and binding on the contractor.
- 21. No work shall be carried out on National Holidays and Institute holidays (including Saturday and Sundays). The work shall be executed during the working hours of the Institute on working days only. For the execution of works on holidays and beyond Institute working hours specific approval should be obtained by the agency. The Permission will be given at the discretion of the Institute authority. No request for extension of time on this issue will be entertained.
- 22. Proportionate Progress of work Time will be the essence of the contract. The contractor shall complete the whole work within the time started in the tender subject to the conditions of contract and shall co-operate with the Institute from time in the preparation of time and progress chart for its use. Broadly 1/4th work in 1/4th times, half the work in half time, 3/4th work in 3/4th time and complete work the stipulated time, if at any stage of work, it is found that the milestones are not adhered to as mentioned above Institute can initiate any or all actions mentioned below.
  - a. Impose the liquidated damaged for the delayed part of work either in terms of Rs.500.00 per day or 1% of balance amount of the stage whichever is more.

- b. Terminate the contract at that stage itself by issuing 7 days' notice and get the balance work done as per clause No.23(B) or general conditions of contract.
- 23. All the work are to be carried out as per relevant IS specifications /PWD red book specifications. The work is to be carried out as per specific requirement.
- 24. All the work are to be guaranteed separately as per specification on appropriate bond paper
- 25. No receipt for any payment alleged to have been made by the contractor in regard to any matter relating to this tender or the contract shall be valid and binding unless it is approved and signed by the owner.
- 26. NITIE reserves the right to accept or reject any tender or all tender without assigning any reasons thereof.

#### **Eligibility Criteria**

- 27. a. General -
- 1) Should be registered in appropriate class in PWD/CPWD/MES/Railways/IIT etc.
- 2) Should have Valid GST registration
- 3) Should have solvency certificate from Nationalized or scheduled bank of 40% of estimated cost
- **B.** Experience i) One work of similar nature costing 80% of estimated cost

OR

ii) Two works of similar nature costing 60% of the estimated cost

OR

iii) Three works of similar nature costing 40% of the estimated coat during last 7 years

#### Certificates of the above should be produced.

C) Financial - i) Should have average annual financial turnover of 50% of estimated cost during the last 3 years ending on 31st March

ARTICLES OF AGREEMENT made the day of		
Between NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING, VIHAL MUMBAI – 400 087.	R LAKE, P O N	IITIE,
( hereinafter called the "Employer" ) of the one part		
Whose registered office is situated at		
(hereinafter called the "Contractor") of the other part.		
WHEREAS the employer is desirous of getting the work ofhas caused drawings and specifications describing the works to be done and -Preparing by		

WHEREAS the contractor has agreed to execute upon and subject to the general conditions an specification of contract works shown upon the said drawings and/or described in the said specifications.

#### NOW IT IS HEREBY AGREED AS FOLLOWS:

- 1. The contractor shall upon and subject to the said conditions execute and complete the works shown upon the said drawings and described in the said specifications and/or the schedule of quantities.
- 2. The said general conditions of contract special conditions of contract and other enclosures thereto shall be read and constructed as forming part of this Agreement and the parties hereto shall respectively abide by and submit themselves to the conditions and perform the agreements on their part respectively in such conditions contained.
- 3. The plans, agreement and documents mentioned herein shall form the basis of this contract and the decision of the said Director NITIE/as mentioned in the conditions of contract, Special conditions of contract in reference to all matters of dispute as to material, Workmanship and account and as to the intended interpretation of the clauses of the agreements or any other document attached shall be final and binding on both parties and may be made a rule of the Court.
- 4. This contract is a contract to carry out work in respect of the entire works.
- 5. The Institute has right of altering the drawings and nature of the woks, adding to or omitting any items of work or having portions of the same carried out through other agency as the Institute deem fit in the interest of the Institute. The Institute in such circumstances shall be entitled to deduct or add proportionately the amount apportioned to such work in this contract, or as may be decided by the Institute.
- 6. The Institute has the right to abandon the work at any stage without any reason thereof and in which case the agreed cost of work will also be changed accordingly.
- 7. Time shall be the essence of the agreement and the contractor hereby agrees to commence the work soon after the site is handed over to him as provided for in the said conditions and to complete the entire work within the stipulated period.
- 8. All disputes arising out of or in any way connected with this agreement shall be deemed to have been arisen in Mumbai and only the Courts of Mumbai shall have jurisdiction to determine the same.
- 9. The parties have thoroughly read and have understood the entire contract and are fully aware of its implications and consequences thereof.

10. The electrical installations and fittings and electric lights and telephone installations also form part of this contract, but the contractor shall afford every reasonable facility for the carrying out of all such works in the manner laid down in the said conditions and shall make good even minor damage done to wall, floors etc. after the completion of such works. The presence of telephone cables/electrical cables/pipelines, glass etc. to be conveyed to the dept.. for removal/diversion etc. before commencement of further works. Any damage to the same will be recovered/replaced from the contractor.

AS SIGNED our hands thisday of20	
1) Owner NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING, VIHAR LAKE, PO NITIE, MUMBAI 400 087.	Signature
2) Contractor	Signature
AS WITNESSED our hands thisday of 20	
	Signature

#### THE GENERAL CONDITIONS OF CONTRACT HEREIN BEFORE REFERRED TO

- 1. <u>INTERPRETATIONS</u> In constructing these conditions, the specifications schedule of quantities and contract agreement the following word shall have the meaning herein assigned to them except where the subject or context otherwise requires:
  - a) 'Owner' shall mean NATIONAL INSTITUTE OF INDUSTRIAL ENGINEERING (NITIE) and shall include their legal representative/s, assign/s or successors.
  - b) 'Contractor' shall mean ------ and shall include his (their) legal representative/s, assign/s or successors.
  - c) '<u>Site</u>' shall mean the site of the contract works viz. NITIE CAMPUS including any construction thereon and any other land (inclusively as aforesaid allotted by the Owner for the contractor's use).
  - d) <u>'This contract'</u> Shall mean Articles of Agreement, the general conditions, special conditions, plan the appendix, the schedule of quantities and / or specification attached hereto and duly signed including any amendment or modification thereof, required to be carried out during the course of this arrangement.
  - e) '<u>Work order</u>' Shall mean letter issued by the Executive Engineer and sent to the selected tendered by regd. Post A/D conveying the decision of the Institute of having selected him / them for the job and asking him/ them to commence the work.
  - f) 'Notice' in written or written notice shall mean a notice in written, typed or printed characters sent (unless delivered personally or otherwise proved to have been received) by regd. Post to the last known private or business address or regd. Office addressee and shall be deemed to have been received when the ordinary course of post it would have been delivered.
  - g) 'Act of insolvency' shall mean any act of insolvency as defined by the Presidency Towns insolvency Act or the Provincial insolvency act amending such original.
  - h) 'Net prices' If in arriving at the contract amount the contractor shall have added to or deducted from the total of the items in the tender any sum either as a percentage or otherwise, then the net price of any time in the tender shall be the sum arrived at by adding to or deducting from the actual figure appearing in the tender as the price of that item a similar percentage or proportionate sum. Provided always that in determining the percentage or proportion of the sum so added or deducted by the contractor the total amount of any Prim cost items and provisional sums of money shall be deducted from the total amount of the tender. The expression 'Net Rates' or 'Net prices' when used with reference to the contractor or accounts shall be held to mean rates or prices so arrived at...
  - i) <u>'Engineer at site'</u> shall mean a qualified Engineer as appointed by the owner to supervise the work at site on his behalf.
  - j) 'Authorized Representative of contractor' shall mean and include person deputized by the contractor before starting the work with authority to accept the instructions from NITIE receive documents sign various papers as a token of acceptance on behalf of the contractor.
- 2. <u>SCOPE OF CONTRACT</u> The contractor shall carry out and complete the said work in every respect in accordance with the contract and as per the specification. The contractor shall execute the whole and every part of the work in the most substantial and workman like manner and both as regards materials and every other respect in strict accordance with the specifications. The contractor shall confirm exactly, fully and faithfully to the designs,

drawings, specifications directions and instructions in writing related to the works. All the unforeseen work items required to be executed for successful completion of the work items and which are allied to the same are to be executed by the contractor. The Executive Engineer may in his absolute discretion issue further drawings and / or written instructions, details, direction and explanations which are hereafter collectively to be referred as the Executive Engineer's instructions in regarding to:-

- a) The variation or modification of the design, quality of work or the addition or omission or substitution of any work.
- b) Any discrepancy in the drawings or between the schedule or quantities and / or drawings and / or specifications.
- c) The removal from the site of any material brought thereon by the contractor and the substitution of any other material there for.
- d) The removal and / or re-execution of any works executed by the contractor
- e) The dismissal from the works of any persons employed thereupon.
- f) The opening up for inspection of any work covered up.
- g) The amending and making good of any defects under clause 19.

The contractor shall forthwith comply with and duly execute any work comprised in such instructions provided always that verbal instructions, directions and explanations given to the contractor or his representative upon the works by the Executive Engineer shall, if involving a variation be confirmed in writing by the contractor within 7(seven) days. If compliance with the Executive Engineer's instructions as aforesaid involves extra work and / or expense and/or loss beyond that contemplated by the contract then unless the same were issued owing to some breach of this contract by the contractor, the owner shall pay to the contractor mutually agreed rates if not already provided for in the tender documents prior to the physical execution of the work involved.

3. **DRAWINGS AND SCHEDULE OF QUANTITIES:** One copy of the contract documents shall remain in the custody of the owner and the second copy in the possession of the contractor and third copy with the Architect. The contractor shall check all drawings carefully and intimate the Institute/Architect/Executive Engineer in writing immediately of errors and discrepancies if any. The contractor shall not change any kind of errors or omission in the drawings supplied to them by their own.

The drawings which form part of this contract will show the work to be done in such details as is possible to do for the present. They will be supplied with or superseded by such additional detailed drawings as may be necessary as the work progress in accordance with these details of or revised drawings as the case may be and at the applicable rates as per contract. Contractor will return all the drawings /specifications issued from time to time after final completion of work. The contractor on the signing hereof shall be furnished by the owner / his Architects free of cost with a copy of the priced Schedule of quantities, one copy of all further drawings issued during the progress of the works. Any further copies of such drawings required by the contractor shall be paid for by him. The contractor shall keep one copy of all drawings on the works and the Architect/Engineer their representative shall at all reasonable time same.

4. **DISCREPANCIES IN DRAWINGS AND SPECIFICATIONS.** The drawings and specifications are to be considered as mutually explanatory of each other. However, in case of any discrepancies following order will be followed. Detailed drawings being followed in preference to small scale drawings and figured dimensions in preference to scale special conditions in preference to general conditions. Detailed specifications as mentioned in the red book of PWD in preference to general preference. ISI specifications in preference to detail

specifications. Should any discrepancies however appear or should any mis-understanding

arise as to the meaning and import of the said specifications or drawings or as to dimensions or the quality of the materials or the due and proper execution of the works or as to the measurement or quality and valuation of the works executed under this contract or extra thereupon the same shall be explained by the Executive Engineer and their explanation shall be binding upon the contractor and contractor shall execute the work according to such explanation and shall also do such works and required things as may be necessary for the proper completion of the works as implied by the drawings and specifications even though such works and things are not specifically shown and described in the said drawings and specifications.

- 5. CONTRACTOR TO PROVIDE FACILITIES & CO-OPERATION. Contractor shall provide everything necessary for the proper execution of the works according to the intent and meaning of the drawings, schedule of quantities and specifications taken together whether the same may not be particularly shown or described therein provided that the same can reasonably be inferred there from and if contractor finds any discrepancy in drawings or between the drawings, schedule of quantities and specifications he shall immediately and in writing refer same to the Executive Engineer who shall decide what is to be followed.
- 6. AUTHORITIES, NOTICES AND PATENTS. The contractor shall confirm to the provisions of any act of the Legislature relating to the works and to the regulations & bylaws of any authority and of any water, lighting & other companies and/or authorities with whose system the structures is proposed to be connected and shall, before making any variations from the drawings or specification that may be necessitated by so confirming, give to the Owner written notice specifying the variation proposed to be amended time receive such instructions he shall proceed with the work, conforming to the provisions, regulations or bylaws in question and any variation so necessitated shall be dealt with under clause No. 13. The contractor shall bring to the attention of the Executive Engineer all notices required by the said acts, regulations or bylaws to be given to any authority and pay to such authority or to any public office all fees that may be properly chargeable in respect of the works & lodge the receipt with the owner. The contractor shall identify the owners against all claims in respect of patent rights, all shall defend all actions arising from such claims & shall himself pay all royalties, license fees, damage, costs penalty legal charges and charges of all and every sort that may be legally incurred in respect thereof including octroi if payable.
- 7. **SETTING OUT WORKS**. The contractor shall set out the works & shall be responsible for the true & perfect setting out of the same & for the correctness of the positions, levels dimensions & alignment of all parts thereof. If at any time any error in this respect shall appear during the progress of the work the contractor shall at his own expense rectify such error if so required to the satisfaction of the Executive Engineer. Before start of work reference lines & bench marks shall be established, permanent base line & cross lines shall be established by the contractor at sufficiently close intervals in consultations with the Executive Engineer. The Contractor shall provide at his expenses all templates, pillars and equipment's (including chain, tape etc.), materials and labour for establishing the grand lines & pillars & shall be responsible for their maintenance during the work period of the constructions. The reference posts/bench marks & pillars already established at site shall be fully guarded. He shall repair/rebuilt the same in case of any damage or otherwise.

#### 8. MATERIALS AND WORKMANSHIP TO CONFORM TO DESCRIPTION.

The contractor shall at his own expense, provide all materials required for works other than those which are to be supplied by the Institute. All materials and workmanship shall so far as procurable be of the respective kinds described in the schedule of quantities and in conformity with the specification and in accordance with the instructions and the contractor shall upon the request of the Engineer furnish them with all invoices, accounts receipts and other vouchers to prove that the materials comply therewith. The contractor shall at his own expense and without delay, supply to the Executive Engineer samples of materials proposed to be used in the work. The Executive Engineer shall within seven days of supply of samples

intimate to the contractor in writing whether the samples are approved by him or not. If samples are not approved, the contractor shall forthwith arrange to supply to the Executive Engineer for approval fresh samples complying with the specification laid down in the contract. The contractor s shall at his own cost arrange for and / or carry out any test of any materials from Govt. authorized labs which the Executive Engineer may require.

- 9. **CONTRACTOR'S SUPERINTENDENT AND REP. OF THE WORKS.** The contractor shall give all necessary personal superintendence during the execution of the works and as long thereafter as the Executive Engineer may consider necessary until the expiration of the "**defects liability period**" stated in the Appendix hereto. The contractor shall also during the whole time the works are in progress employ a competent authorized representative who shall be constantly in attendance at the site while the men are at work. Any directions, explanation instructions or notices given by the Executive Engineer to such representative shall be held to be given to the contractor. The contractor will be asked to stop the work forthwith if his authorized representative is not the site during the progress of the work.
- 10. **DISMISSAL OF WORKMAN.** The contractor may on the request of the Owner/Engineer immediately take disciplinary action against any person employed thereon by him who may in their option is incompetent or indulge in any misconduct and such person shall not be again engaged for the work being carried out at the Institute's premises without the sanction of the Institute. It is expressly agreed and understood between the parties that under no circumstances, the workmen employed by the contractor can be considered as the workmen of the Owner. The contract shall have full and final authority in respect of such contractor's workmen. Similarly, it is expressly agreed that the contractor shall comply with all the requirements of rules and regulations contained in various acts and enactments concerning labour laws. Further he shall maintain day to day attendance cum wage registers, all other records concerning the workmen pay minimum wages, as applicable etc. further any injury caused to any workmen during the course of work or otherwise, the contractor shall alone be responsible for treatment compensation, damage interest etc. under the provisions of workman's compensation Act. 1923 to the extent applicable. The contractor has to obtain at his own cost the license and get himself regd. Under the provisions of the contract labour (Regulation and Abolition) Act. 1970. Under no circumstances, the owner shall be responsible for any lapses on the part of the contractor.

#### 11. ACCESS FOR EXECUTIVE ENGINEER TO WORKS.

The Executive Engineer and their representatives shall at all reasonable time have access to the works and the workshops, factories or other places where materials are lying or from which they are being obtained and the contractor shall give every facility to the Executive Engineer and their representative necessary for inspections and examinations and test of the materials and workmanship. No person unauthorized by the Executive Engineer except the representatives of public shall be allowed on the works at any time.

12. **ENGINEERS AT SITE.** The terms "Engineers at site" shall mean the person appointed and paid by the Institute. The contractor shall afford the Engineer at site every facility and assistance for inspecting the works and materials and for checking and measuring time and materials. The Engineer at site shall not have power to set out the works or to revoke after, enlarge or relax any requirements of the contract or to sanction any day work additions, alterations, deviations or omissions or any extra work whatever except in so far as such authority may be specially conferred by a written order of the Executive Engineer. The Engineer at site or Executive Engineer shall have power to give notice to the contractor or to his representative of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the Executive Engineer is obtained. The works will from time to time be examined by the Executive Engineer the Engineer at site but such examination shall not in any way exonerate the contractor from the

obligation to remedy any defects which may be found to exist at any stage of the works or after the same is completed. Subject to the limitation of this clause the contractor shall take instructions only from the Executive Engineer.

- 13. **ASSIGNMENT AND SUB-LETTING.** The whole of the works included in the contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer assign or underlet the contractor or any part thereof or interest therein without the written consent of the Architect and no undertaking shall relive the contractor from the full and entire responsibility of the contract of from the active superintendence of the works during their progress. In case the whole or a part of the work is subject to any subcontractors or such agents, the contractor shall identify the owner that any claims/damages theft arising out of any acts/omission or commissions of such subcontractor or agents in whatever manner. The responsibility for the satisfactory completion of the work as per this contract shall be entirely his (contractor). If the work is sublet by the contractor at any point of time without informing the Institute, the same shall be terminated by the Institute without giving any notice/period and reasons thereof.
- 14. **VARIATION NOT TO VITIATE CONTRACT.** The quantities of work shown in the tender are approximate and no claim shall be entertained for quantities of work executed being more or less than those entered in the tender or estimate. No revision in rates shall be permitted in any respect of any of the items on account of any variation in the quantities. No alteration, omission or variations shall vitiate this contract but in case the Executive Engineer thinks proper at any time during the progress of the works to make any alterations in or additions to or omission from the works or any alteration in the kind or quality of the materials to be used therein and shall give notice thereof inform in writing under his hand to the contractor, the contractor shall alter, add to or omit from as the case may require in accordance with such notice but the contractor shall not do any work extra to or make any alterations or additions to or omissions from the works or any deviation from any of the provisions of the contract, stipulation specification or contract drawings without the previous consent in writing of the Architect/Executive Engineer and value of such extras alterations additions or omissions shall in all cases be determined as per clause 18 and the same shall be added to or deducted from the contract amount accordingly.

If at any time after acceptance of the tender the Institute shall decide to abandon reduce the scope of works for any reasons whatsoever an hence not require the whole or any part of work to be carried out the Executive Engineer shall inform the contractor in writing to that effect and the contractor shall have no claim to any payment or compensation or otherwise whatsoever on account of loss or any profit or advantage which he might have derived from the execution of the works in full but which did not derive in consequence of the foreclosure of the whole or part of the works. The contractor shall be paid at the contract rates full amount of the work actually executed at site.

15. SCHEDULE OF QUANTITIES: The schedule of quantities unless otherwise stated shall be deemed to have been prepared in accordance with the standard method of measurement of building works by ISI. Any error in description or in omission or items from the schedule of quantities shall not vitiate this contract but shall be rectified and the value thereof as ascertained under clause 18 hereof shall be added to or deducted from the contract amount (as the case may be) provided that there shall be no rectification of errors in the contractor's schedule of rates.

- 16. SUFFICIENCY OF SCHEDULE OF QUANTITIES. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of this tender for the works and of the prices stated in the schedule of quantities and/or the schedule of rats and prices which rates and price shall cover all his obligations under the contract and all matters and things necessary for the proper completion of the works. Any such discrepancy if observed is to be brought to the notice of the Executive Engineer before commencement of the work. However, if any discrepancy is noted during the execution of the works the same shall be decided by the Executive Engineer and their decision shall be final and binding on the contractor.
- 17. MEASUREMENT OF WORK. The Executive Engineer may from time to time intimate to the Contractor that they require the works to be measured and the contractor shall forthwith attend or send a qualified agent to assist the Architect/Executive Engineer in taking such measurement and calculations and to furnish all particulars and to give all assistance by either of them should the contractor not attend or neglect or omit to stand such agent then the measurement taken by the Executive Engineer shall be taken to be the correct measurements of the works. Such measurements shall be taken in accordance with the standard method of measurement of building works last before issued by the Indian Standard Institution unless otherwise provided in this contract. Contractor shall sign all the measurements and documents in token of acceptance. The contractor or his agent may at the time of measurement take such notes and measurements as he may require.
- 18. **PRICES FOR EXTRAS ETC. ASCERTAINMENT OF.** Should it be found during progress of works or after the completion of the works from measurements taken ( in accordance with the previous paragraph ) that any of the quantities or amount of works thus ascertained are less or greater than the quantities or amounts specified for the works in Priced Schedule of and / or Tender or that any additional, altered or substituted item of work is to be or has been executed unless previously or otherwise agree upon valuation of the work shall be made in accordance with the following rules:
  - a) If the rates for additional, altered or substituted item of work is specified in the bill of quantities and rates in the contract the contractor shall carry out the additional, altered or substituted item at the same rate.
  - b) If the rate for additional altered or substituted item of work is not specified in the bill of quantities and rates in the contract, the contractor shall carry out the additional, altered or substituted item at the relevant rates in departmental schedule of rates of PWD prevalent at the time.
  - c) If the rate for additional, altered or substituted item of work can not be determined in the manner specified in a) & b) above than the contractor will be paid at such fair and reasonable rate as worked out by the Executive Engineer on the basis of material, labour etc. required for the item and allowing 10% to cover profits and overhead charges.
    - The measurement and valuation in respect of the contract shall be completed within the "Period of Final Measurement" stated in the Appendix or if not so stated then within six months of the completion of the contract works as defined in clause.
- 19. UNFIXED MATERIALS NOT TO BE TAKEN IN TO ACCOUNT FOR VALUATION OF WORK. Value of the unfixed / unutilized / defective materials will not be taken into account for valuation of work executed and advance for materials will not be paid to the contractor against the cost of material brought h to site.
- 20. **REMOVAL OF IMPROPER WORK.** The Executive Engineer shall during the progress of the works have to order in writing from time to time removal from the works within such reasonable time as may be specified in the order or any material which in their opinion are

not in accordance with the specification the substitution of proper materials and the removal and proper re-execution of any work executed with materials or workmanship not in accordance with the drawings and specification or instructions and the contractor shall forthwith carry out such order at his own cost. In case of default on the part of the contractor to carry out such order the owner shall have the power to employ and pay other persons to carry out the same and all expenses consequent or incidental thereto as certified by the Architect shall be borne by the Contractor or may be deducted by the Owner from any moneys due or that may become due to the Contractor.

**DATE OF COMMENCEMENT.** The Contractor shall be allowed admittance to the site 21. on the "Date of Commencement" stated in the Appendix. As aforesaid the work order will be issued by the Executive Engineer by regd. Post A/D and a period of four days shall be considered as period of postal transit. The work order would be deemed to have been received by the selected tenderer on fifth day after the issue of work order letter and the conditions of contract would come into force immediately from the day on which work order is deemed to be received and would be binding on the Institute and on the contractor a separate contract may or may not be signed thereafter. A period of five days will be considered as the mobilization period and the period of work will be deemed to be commenced at the end of the mobilization period. This date of commencement shall be mentioned in the work order as well as in the appendix in the contract document. The contractor shall thereupon and forthwith begin the works and shall regularly proceed with and complete the same on or before the date of completion stated in the work order and appendix in the contract document subject nevertheless to the provision of the extension of time limit hereinafter contained. The contractor shall submit within 7 days after receipt of the work order the program of execution of the work- week wise and shall endeavor to follow the targets. Any backlogs due to unforeseen should be made good in following week.

#### 22. CERTIFICATE OF VIRTUAL COMPLETION.

On completion of works the contractor shall remove the site all surplus materials, debris, construction waste materials etc. out of the Institute campus or dump it and level at the places indicated by the Institute at his own cost, remove the scaffoldings and dismantle any sheds he may have constructed clean the site of all dirt, oil, paints spotting, mortar spellings etc. wash the area and hand over the site clean and free from any encumbrances. The date of completion will be considered as the day on which he hands over the site as mentioned above and not when he completes the civil works. The works shall not be considered as completed until the Executive Engineer has certified in writing that they have been virtually completed after taking over the site and the defects liability period of 12 moths shall commence only from the date of such certificate. The completion certificate shall indicate a) date of completion b) the defects if any to be rectified by the contractor c) items for which part payment shall be made at reduced rates if the contractor fails to comply with any of the requirements of this conditions as aforesaid, on or before the date of completion of work, the Institute may at the expense of the contractor fulfill such requirements and dispose of all the surplus materials, scaffolding materials and rubbish etc. in the manner as it thinks fit and contractor shall have no claim whatsoever in respect of such materials and will be liable to pay the amount towards expenditure incurred by the owner.

23. **DAMAGES FOR NON-COMPLETION**. If the Contractor fails to complete the work and clear the site and hand it over to the Institute before the contract or the extended date(s)/period(s) of completion, he shall without prejudice to any other right or remedy of the Institute on account of such breach, pay as compensation the sum named in the Appendix as

"Liquidated Damages" for the period during which the said works shall so remain incomplete and the Institute may deduct such damages from any money due to the contractor under this or any other contract with the Institute. The Institute may also take any or all of the following actions without assigning any reason viz. I) The Institute may remove the tenderer from its list and may debar him from participating in any further tender floated by the Institute for a particular or indefinite period. II) The Institute can terminate the contract and direct the contractor to vacate the site and get the balance work executed through any other agency and can recover the differential amount from the selected tenderer up to the quantity shown in the original schedule of works put to tender. III) The Institute can make recoveries in addition to liquidate damages from any of the amount payable to the contractor of such percentage of value of unfinished work at the time of expiry of the completion period as may be decided by the Institute subject to maximum of 10% of the above value.

24. A. **DELAY AND EXTENSION OF TIME.** The work contract allotted to any Contractor shall be required to be completed within the time so stipulated. The time Schedule given to the contractor is required to be and is essence of this contract. In case the contractor desires any extension of time due to any unavoidable circumstances beyond his control he should immediately bring it to the notice of the Executive Engineer in writing. It is explicitly made clear that labour unrest or financial difficulties shall not be considered as reasons beyond the control of the contractor. The Institute is free to take appropriate decision and on such terms and conditions it may so impose on the Contractor in case any request in writing is made for extension of time and the conditions so imposed by the Institute shall be final and binding on the contractor. The condition may include penalty compensation interest payment etc.

If in the opinion of the Executive Engineer the works be delayed

- a) by force major or
- b) by reasons or any exceptionally incitement weather or
- by reasons of proceeding taken or threatened by or dispute with adjoining or neighboring owners or public authorities arising otherwise than through the contractor's own default or
- d) by reason of civil commotion, local combination of workmen or strike or lock-out affecting any of the building traders or
- e) In consequence of the contractor not having received in due time necessary instruction from the Architect/Institute for which he shall have specifically applied in writing.
- f) Any other reason which in the absolute discretion of the Executive Engineer is beyond the contractor's control the Executive Engineer may make a fair and reasonable extension of time for completion of the individual items or groups of item of works to keep the contract active recommendations / Decision of the Executive Engineer to grant such extension. If any with or without levy of compensation shall be final and binding on the contractor.

#### B. <u>ACTION FOR DELAY IN COMPLETION OF WORK</u>

 The Institute will issue work order to the selected tenderer and the conditions of the contract would come in force immediately and would be binding on the Institute and on the selected tenderer.

- II) Time taken in postal transit will be assumed to be four days and work order would be deemed to have been received by the selected tenderer by allowing the time taken in postal transit.
- III) If the tenderer fails to complete the work within the time limit mentioned in the Institute will be free to take any or all of the following actions without assigning any reason.
  - a) The Institute can remove the name of selected tenderer from the its list and can debar him from participating in any tender floated by the Institute either for an indefinite period or for a particular period.
  - b) The Institute can make recoveries from any amount payable to the selected tenderer on such percentage of the value of unfinished work at the expiry of the said time as may be decided by it.
  - c) The Institute can direct the selected tenderer to vacate the site and can get the balance work executed at the tenderer's risk and cost.

# 25. <u>VIRTUAL COMPLETION, DEFECTS LIABILITY PERIOD AND DEFECTS AFTER COMPLETION.</u>

The contractor will be responsible to submit a completion certificate as soon as the work is completed in all respects as per the terms and specification laid down in the contract or might have been modified in the course of execution by mutual agreement in writing. This will be verified by the Executive Engineer after taking into account the retention of money towards shrinkage etc. & final payment shall be allowed. The defects liability period will be of 12 (Twelve) calendar months from the date of completion as mentioned in the completion certificate issued by the Executive Engineer. Any defects or other faults which shall appear within the "Defects Liability Period" and which are due to materials and workmanship not being in accordance with this contract shall be verified by the Executive Engineer in schedule of defects which he shall deliver to the contractor no later than 14 days after the expiration of the said defect liability period. The Contractor shall be make good all the defects and faults specified by removing, rectifying and or reconstructing within a reasonable time after receipt of such schedule of defects and other faults entirely at his own cost and expenses not withstanding that the same may have been in advertently passed, certified and paid for. The Executive Engineer may also whenever he considers it necessary so to do issue instructions requiring any defect or other fault which shall appear during the construction or reconstruction or within the defects liability period which is due to materials and workmanship not in accordance with this contract to be made good by removing, rectifying and or reconstructing and the contractor shall within a reasonable time after receipt of instructions comply with the same entirely at his own cost and expenses notwithstanding that the same may have been made good he shall issue a certificate to that effect and completion of making good defects shall be deemed for all the purposes of this contract to have taken place on the day named in such certificates. In the event of the contractor failing to rectify the defects within the period as specified by the Executive Engineer in the notice issued the Institute may rectify or remove or reconstruct or re-execute the work by other means at the risk and cost of the contractor and all damages loss and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor and such damage, loss and expenses shall be recoverable from him by the Institute or may be deducted by the Institute from the money due to the contractor under this or any other contract between the contractor and the Institute with a liberty to claim the balance amount if any, by resorting to means available under the provision of law. If any defective work has been done or defective materials supplied by any subcontractor employed on the works by the contractor the contractor shall be liable to make good in the same manner as if such work or material had been done or supplied by the Contractor and been subject to the provisions of this clause. The Contractor shall remain liable under the provisions of this clause not withstanding the signing by the Executive Engineer of any certificate or passing of any accounts.

- **CERTIFICATES AND PAYMENTS.** The contractor shall be paid by the owner from time to time by installments. The contractor has to submit a related measurement sheet in implicate on 15<sup>th</sup> and 30<sup>th</sup> of every month for the works completed till such date. At the end of every month the contractor has to submit his R A bill together with the detailed measurement sheets, interim certificates will be issued after the measurements submitted by the contractor are checked and verified jointly by the contractor's representative, the NITIE's Engineer at site and on account of the works executed in accordance with this contract, subject however to the minimum value of the certificate that can be issued as specified in the Appendix hereto as "Minimum value of the interim certificate" and also subject to a retention of the percentage of such value named in the Appendix hereto as "Retention percentage for interim Certificates" until total amount retained shall reach the sum named in Appendix as "Total Retention Money". And the contractor shall be entitled to the payment of the Final balance in accordance with the final certificate to be issued in writing duly verified by the Executive Engineer at the expiration of the period referred to as "the defects liability period" in the appendix hereto from the date of virtual completion as soon after the expiration of such period as the work shall have been finally completed and all defects made good according to the true intent and meaning which ever shall last happen provided always that the issue of any certificate during the progress of the works or at after their completion shall not relieve the contractor of his liability under any clause nor relieve the contractor of his liability in case of fraud, dishonesty or fraudulent concealment relating to the work or materials or to any matter dealt within the certificate and in case of all defects and in-sufficiency's in the works or materials which a reasonable examination would not have disclosed. No certificate of the Executive Engineer shall of itself be conclusive evidence that any works or materials to which it related are in accordance with the contract Executive Engineer shall have power to withhold any certificate including the final certificate if the works or any parts thereof are not being carried out to their satisfaction and in compliance with the conditions laid down. Executive Engineer shall have powers to retain total amount or part amount of the value of any work item(s) in which defects have been pointed out to the contractor before issue of certificate and pending rectification the contractor.
- 27. **SECURITY DEPOSIT AND RETENTION MONEY**. The contractor shall deposit during the course of work, a sum equal to ten percentage of the value of works executed as security for due fulfillment of the contract. The security deposit will be made of initial contract Deposit and retention amount retained from R A bills of the contractor. The mode of making this deposit is as under:

Initial deposit or contract deposit: This will be in following manner.

- Earnest money deposit equal to amount as specified in the notice inviting tender to be paid in cash or as demand draft in name of Institute at the time of submission of Tender. On issue of the work order, the EMD of the contract who has been awarded the work will be treated as a part of ICD.
- b) The Contractor will have to deposit within fifteen days of receipt by the contractor of intimation in writing of acceptance of tender (i.e. work order) issued by the Institute an additional sum towards the initial contract deposit (ICD) such that the total amount deposited towards the ICD including the EMD will be equal to 5% of the contract amount (i.e. the awarded cost of work).

28. **RETENTION AMOUNT.** In addition to ICD an amount equal to 10% of value of the RA bill certified will be retained from each RA bill. This amount retained will be treated as a part of the Security Deposit. This amount retained from RA bill together with ICD made as aforesaid shall not exceed in the aggregate 10 (ten) percentage of the value of work carried out in such cases excess will not be refunded back to the contractor and it will not bear any interest.

The total amount so withheld from the contractor shall be termed as retention amount and shall be retained till the end of defects liability period in order to safeguard against the defects and pending claims if any against the contractor. This retention amount may be released to the contractor if he/she submit Fixed Deposit Receipt (FDR) of equal amount in favour of Director, NITIE for the entire period of defect liability.

However, if in the opinion of the Executive Engineer that in order to safeguard against the defects and pending claims if any against the contractor. It is necessary to retain more than the amount retained as retention money, the said shall be done after giving due notice to the contractor in writing specifying the reasons thereof. All compensation or other sums of money payable by the contractor under the terms of this contract and or any other contract whatsoever may be deducted from this security deposit or from any other security deposits held under other contracts with the Institute or any other sums which may be due or become due to the contractor by the Institute on any account whatsoever. In event of his security deposit/retention money being reduce by reasons of any such deductions the contractor shall within 7 (seven) days of receipt of notice of demand from the Executive Engineer make good the defect. On satisfactory expiry of the defects liability period or on payment of the final bill payable in accordance with of clause 26 whichever is later the Institute on demand from the contractor refund to him the remain portion of the security deposit/retention money provided that the Executive Engineer is satisfied that there is nor demand outstanding against the contractor under this contract or any other contract.

29. OTHER PERSONS ENGAGED BY OWNER. - The owner reserves the right to use the premises & any portions of the site for the execution of any work not included in this Contract which he may desire to have carried out by other person & the contractor is to allow all reasonable facilities for the execution of such work but he is not required to provide any or materials for the execution of such work except by special arrangement with owner. Such work shall be carried out in such manner as not to impede the progress of the works included in the contract & the contractor is not to be responsible for any damage or delay which may happen to be occasioned by such work.

#### 30. INSURANCE IN RESPECT OF DAMAGE TO PERSONS AND PROPERTY.

The contractor shall be responsible for all injury to persons, animals or things & for all structural & decorative damage to the property which may arise from the operation or neglect of himself or of any contractor's employees, whether such injury or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this contract. This clause shall be held to include any damage to the buildings immediately adjacent to or otherwise & any damage caused to the bldg. works forming the subject of this contract by flooding, frost or other inclemency of weather. The contractor shall indemnify the owner & hold him harmless in respect of all &any expenses arising from any such injury or damage under the act of Govt. or otherwise & also in respect of any award of compensation or damages consequent upon such claim. The contractor shall reinstate all damage of every sort mentioned herein to the entire satisfactions of the owner so as to deliver

up the whole of the contract work complete in every respect & so as to make good or otherwise satisfy all claims for damage to the property of third parties. The contractor shall indemnify the owner against all claims which may may be made against the owner by any member of the public or other third party in respect of anything which may arise in respect of the woks or in sequence thereof and shall at his own expense arrange to effect and maintain, until the virtual completion of the contract with an approved office a policy of insurance in the joint names of the owner & contractor against such risks & deposit such policy or policies with the owner from time to time during the currency of this contract. The contractor shall similarly indemnify the owner against all claims which may be made upon the owner whether under the workmen's compensation act or any other status in force during the currency of this contract or at common law in respect of any employee of the contractor or any subcontractor and shall at his own expense effect and maintain, until the virtual complete on of the contract with an approved office a policy of insurance in the name of the Owner & Contractor against such risks & deposit such policy or policies with the owner from time to time during the currency of the contract. The contractor shall be responsible for anything which may be excluded from the insurance policies above referred to & also for all other damages to any property arising out of & incidental to the negligent or defective carrying out of this contract. He shall also indemnify the owner in respect of any costs, charges or expenses arising out of any claim or proceedings & also in respect of any award or compensation of damage arising therefrom. The owner shall be at liberty and is hereby empowered to deduct the amount of any damage compensation, costs, charges & expenses arising or accruing from or in respect of any such claim or damage from any sums due or to become due to the contractor.

31. **FIRE INSURANCE**. The contractor shall at the time of signing the contract insure the works & keep them insured until the virtual completion of the contract against loss or damage by fire with approved Govt. Insurance Co. in the joint names of the owner & contractor ( the name of the former being placed first if called in the Policy) for the full amount of contract and for any further sum if required to do so by the owner the premium of such further sum being allowed to the contractor as an authorized extra. Such policy shall cover the property of the owner only, fees by for assessing the claim & in connection with his services generally therein & shall not cover any property of the contractor or of any subcontractor or employee. The contractor shall deposit the policy and receipt for the premises with the owner within twenty-one days from the date of signing the contract unless otherwise instructed by the owner. In default of the contractor insuring as provided above the owner may so insure and may deduct the premium paid from any money due or which may become due to the contractor.

#### 32 TERMINATION OF CONTRACT BY OWNER.

If the contractor being an individual or a firm commit any "Act of Insolvency". Or shall be adjudged an insolvent or being an incorporated company shall have an order for company winding up made against it or pass an effective resolution for winding up voluntarily or subject the supervision of the Court and of the official assistance of the Liquidator in such acts of insolvency or wing up shall be unable within seven days after notice to him requiring him to do so, to show to the reasonable satisfaction of the Executive Engineer that he is able to carry out and fulfill the contract and give security therefore, if so required by the owner. Or if the contractor (whether an individual, firm, incorporated company) shall suffer execution to be issued or shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the contractor.

Or shall assign or sublet this contract without the consent in writing of the Institute first obtained.

Or shall charge or encumber this contract or any payments due or which may become due to the contractor hereunder.

Or if the owner is satisfied that the contractor 1) has abandoned the contract or 2) has fare to commence the works or has without any lawful excuse under these conditions suspended the progress of the work for 14 days after receiving from the Executive Engineer written notice to proceed 3) has fare to remove materials from the site or to pull down and replace work for seven days after receiving from the Executive Engineer under this conditions. 4) has neglected or failed persistently to observe the perform all or any of the acts, matters or things by this contract to be observed and performed to the contractor for seven days after written notices shall have been given to the contractor requiring the contractor observe or perform the same or has to the detriment of the good workmanship or in defiance of the Executive Engineer instructions to the contrary sub let any part of the contract.

Often and any of the said cases the Institute may not withstanding any previous waiver after giving seven days notice in writing to the contractor terminate the contract forthwith. The obligations and liabilities of the contract the whole of which shall been so terminated and as if the works subsequently executed had been executed by or on behalf of the contractor. And further the Institute may enter upon and take possession of the works and all plant, tools, scaffoldings, sheds, machinery, steam & other power utensils and material lying on the premises or may employ the same by means of his own servants and workman in carrying on and completing the works or by employing any other contractors or other persons to complete the works or by employing any other contractors or other persons to complete the works and the contractor shall not in any interrupt or do any act matter or thing to prevent or hinder such other contractor or other person or persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient the owner shall give a notice in writing to the contractor to remove his surplus materials and plant and should the contractor fails to do so within a period of 4 days after receipt thereof by him the owner shall give a notice in writing to the contractor fails to do so for a period of 14 days after receipt thereof by him, the owner shall sell the same by public auction and it give credit to the contractor for the amount so realized after adjusting the expenses so incurred in subject thereof. The Executive Engineer shall thereafter ascertain and certify in writing under his hand what (if thing) shall be due or payable by the owner for the value of the said plant and materials so taken the concession of by the owner and the expense or loss which the owner shall have been put to in procuring the works to be completed and the amount if any, owing to the contractor and the amount which shall be so certified shall thereupon be paid by the owner to the contractor or by the contractor to the owner as the case may be and the certificate of the Executive Engineer shall be final and conclusive between the parties.

TERMINATION OF CONTRACT BY CONTRACTOR. The payment of the amount 33. payable by the Owner shall be in arrears and up-paid for thirty days after notice in writing requiring payment of the payment as aforesaid shall have been given by the contractor to the owner or if the owner interferes with or acts the issue of any such certificate or the owner commits any "Act of Insolvency" or if the owner going on individual or firm) shall be adjudged insolvent or (being an incorporated company) shall have an amount made against him or pass an effective Resolution for winding up either compulsorily or subject to the revision of the court or voluntarily, or if the official Assignee or the Liquidator in any such winding up shall able within fifteen days after notice to him requiring him so to do, to show to the reasonable satisfaction of contractor that he is able to carry out and fulfill the contract an to make Contractor, to give security of or if the works be stopped for all payments due and to become due there under and, if required by or by injunction or other order of any court of law, then and in any of the said cases the contractor shall be liberty to determine the contract by notice in writing to the owner and he shall be entitled to recover from the owner payment for all works duly executed and for any loss he may sustain upon any plant or materials supplied or purchased or prepared for the purpose of the contract. In arriving at the amount of such payment the net rates contained in the contractor's original tender shall be followed, or where the same may not apply valuation shall be made in accordance with clause 17 hereof

ADHERENCE TO LABOUR LAWS

- a) The Contractor shall obtain a valid license under the Contract LABOUR (R & A) Act, 1970 and the Contract labour (Regulation and Abolition) Central Rules 1971 before the commencement of the work and continue to have a valid license until the completion of the work. Any failure to fulfill this requirement shall attract the panel provisions of the Contract arising out of the resultant non-execution of the work.
- b) The Contractor shall not employ in connection with Work any persons who is below eighteen years of age. Contractor shall employ labour in sufficient numbers to maintain the required rates of progress and quality to the satisfaction of the Engineer -In- charge.
- c) The Contractor shall comply with or cause to be complied with the Contractors Labour Regulations in regard to all matters provided therein and shall pay to labour employed by him either directly or through sub-contractors, wages not less than fair wages as defined in the Contractor's Labour Regulations as appended which shall also include the provisions of the contract labour(Regulations and Abolition) Act 1970 and Contract labour (Regulations & Abolition) Central Rules 1971 wherever applicable.
- d) The contractor shall be liable to pay his contribution and the employees contribution to the State Insurance Scheme in respect of all labour employed by him for the execution of the Contract, in accordance with the provision of the Employees State Insurance Act, 1948 as amended from time to time. In case the Contractor fails to submit full details of his account of labour employed.

#### SPECIAL CONDITIONS OF CONTRACT

- 1) The entire work shall be carried out under the supervision of the staff person employed by NITIE.
- 2) The contractor shall take into consideration the relevant standard Specifications of PWD or ISI coded required for the above referred work and entire work shall be carried out as per the relevant standard specifications or PWD or ISI codes and bye-laws and to the satisfaction of the Executive Engineer or his representative.
- 3) The necessary arrangement for water electricity for the purpose of execution of this contract shall be made by the contractors without any additional cost. If the same is supplied by the Institute the cost of supply of water and electricity will be deducted from the contractor's running bill (water charge will be 1% of the cost of water consuming items and electricity at the rate of Rs.6/- per unit of consumption) The contractor has to submit separate applications for getting above facilities from NITIE.
- 4) NITIE shall not supply cement to the contractor at NITIE stores and the contractor will have to make their own arrangement to get the cement issued from the go-down, load transport to the site of work an unload the same at their own cost and expenses. The contractors should make their own arrangement to store the cement at their site or work The contractor will not be allowed to take surplus cement out of NITIE campus and will have to return the same to NITIE go-down at his own cost. Empty cement bags will be property of the contractor.
- 5) The items involving hidden measurement should be executed only after specific approval obtained in writing from the Institute Authorized representative. On confirmation to execute such items the agency has to submit the detailed measurements with locations and then only the work to be executed. If the agency fails to submit such detailed measurements before executing the item, decision of the Institute 's Authorized representative will be final & binding on the contractor.
- 6) No work shall be carried out on the Institute holidays (including Sat/Sun & other holidays) The work shall be executed during working hrs. of Institute on working days only. For execution of works on holidays/beyond office hrs. specific approval should be obtained by the agency. The permission will be given at the discretion of the Institute Authority. No request for extension of time on this issue will be entertained.
- 7) Earnest money deposit may be accepted by the Institute also in form of fixed deposit receipt in favor of the Institute.
- 8) All the works are to be carried out as per relevant IS specifications/PWD red book specifications or as per instructions issued from time to time by Executive Engineer or his authorized representative. The work is to be carried out as per specific requirement.

The quotation for the work shall remain open for a period of 90 days from the date of opening of quotations. The Institute shall without prejudice to any other night or remedy, be at liberty to forfeit 50% of the earnest money if any tendered withdrawn his tender before the said period or makes any modification in the terms and conditions of the tender which are not acceptable to the department and to forfeit the whole of the earnest money if the tenderer whose tender is accepted fails to commence the work specified in the NITIE (along with changes in the scope, if any)within fifteen days of issue of work order or abandons the work before its completion.

#### **GENERAL SPECIFICATION**

**NOTE:** The construction work shall generally include the work as per general specification hereunder and as mentioned in the schedule of quantities and rates of this contract but necessarily limited to the same. The general specification may or may not contain the description of some or all the items in the schedule of quantities and rates of this contract. However the work has to be executed as per the standard specifications of PWD as mentioned in their red book and as per relevant Indian standard specifications. The contractor shall execute all incidental works necessary for due execution and completion of work item.

The description given in schedule of items bill of quantities is a brief description and may not cover the entire description of the work item. For detail specifications refer the standard specifications of PWD /CPWD. The relevant item Nos. and codes of the items have been given in the schedule of items/ bill of quantities. The work has to confirm to the standard specifications as mentioned above A copy of the standard specification is available for reference in the Estate department of NITIE.

# **APPENDIX**

1. Defect liability period	- 12 months from actual date of completion
2. Date of commencement	- From the date of dispatch of work order + (plus) Four days postal transit time / From the date of Issue of written order.
3. Period of Completion	- Two months (including monsoon)
4. Date of completion	- The day after the period of completion from date of commencement of work.
5. Date of submission of the bill by Contractor	- Last working day of every month with detailed measurements.
6. Value of Interim certificate	- 25% of the work order amount
7. Period of Final Measurement and Valuation	- Three months from date of completion
8. Agreed Liquidated Damages	- Rs. 500/- per day for delay in the work

#### LIST OF APPROVED MATERIALS & SPECIALIZED AGENCIES

#### Note:

- 1. The Contractor shall obtain prior approval from the Engineer-in-charge before placing order for any specific material or engaging any of the specialized agencies. The Contractor shall make a detailed submittal with catalogues and highlighted proposed specifications, as well as full details of the works executed by the specialized agency, as specified.
- 2. Wherever applicable, the engineer-in-charge may approve any material equivalent to that specified in the tender subject to proof being offered by the Contractor for equivalence to his satisfaction.
- 3. Unless otherwise specified, the brand / make of the material as specified in the item nomenclature, in the particular specifications and in the list of approved materials attached in the tender, shall be used in the work.
- 4. In case of non availability of the brand specified in the contract the Contractor shall be allowed to use alternate equivalent brand of the material subject to submission of documentary evidence of non-availability of the specified brand. The necessary cost adjustments on account of above change shall be made for the material.
- 5. Only C class TATA make pipes shall be used in G.I. Piping work in case of non availability the Contractor shall be allowed to use alternate equivalent brand of the material subject to submission of documentary evidence of non availability, the necessary cost adjustments on account of above change shall be made for the material.

#### A. MATERIALS:

1.	CEMENT	<ul> <li>Ultratech</li> <li>A.C.C.</li> <li>GUJARAT AMBUJA</li> <li>BIRLA VASVADATTA</li> <li>GRASIM</li> <li>CCI</li> </ul>
2.	WHITE CEMENT	J.K.     BIRLA
3.	CHLORPYRIPHOS	<ul><li>DE NOCIL</li><li>AIMCO</li></ul>
4.	READY MIX CONCRETE	<ul> <li>A.C.C.</li> <li>ULTRATECH</li> <li>UNITECH</li> <li>RMC</li> <li>TARMAC</li> <li>GODREJ</li> <li>ALCON</li> </ul>
5.	SUPER PLASTICIZERS	<ul><li>MC BAUCHEMIE</li><li>SIKA FOSROC</li><li>MBT</li><li>ASIAN LABORATORIES.</li></ul>
6.	WATERPROOFING COMPOUND (LIQUID)	<ul><li>PIDIPROOF LW</li><li>STRUCO EXCEL</li><li>CICO</li><li>FOSROC</li></ul>
7.	GALVANISING	<ul> <li>JENCO</li> <li>STEELLITE</li> <li>KARAMTARA</li> <li>ENGINEERING PRIVATE</li> <li>LIMITED</li> </ul>
8	REINFORCEMENT STEEL	<ul><li>TISCO</li><li>SAIL</li><li>RINL</li><li>IISCO</li></ul>
9	STRUCTURAL STEEL	<ul><li>TISCO</li><li>SAIL</li><li>RINL</li><li>JINDAL</li></ul>
10	COLOURED / WHITE GLAZED CERAMIC TILES	<ul><li>H &amp; R JOHNSON.</li><li>KAJARIA</li><li>BELL</li></ul>

11	CERAMIC TILES	<ul><li>KAJARIA</li><li>H &amp; R JOHNSON.</li><li>BELL CERAMIC</li><li>NITCO</li></ul>
12	VITRIFIED CERAMIC TILES	<ul> <li>MARBONITE OF H. &amp; R. JOHNSON</li> <li>DIAMOND OF NAVEEN</li> <li>ASIAN</li> <li>NITCO</li> </ul>
13	POLYMER MODIFIED CEMENTATIONS GROUT	<ul><li>BAL ENDURA</li><li>FOSROC</li></ul>
14	GLASS MOSAIC TILES	BISSAZZA
15	HARDENERS	<ul><li> IRONITE</li><li> FERROK</li><li> HARDONATE</li></ul>
16	CONCRETE BLOCKS	<ul> <li>CON WOOD</li> <li>GURJARI</li> <li>HINDUSTAN</li> <li>LOK GROUP</li> <li>M/S SAI BLOCKS</li> <li>M/S VED PMC LTD.</li> </ul>
17	GLASS BRICKS / BLOCKS	<ul><li>PITTSBURG CORNING</li><li>FIDENZA VETROARREDO</li></ul>
18	FLUSH DOORS	<ul> <li>KUTTY FLUSH DOORS AND FURNITURE CO. PVT. LTD.</li> <li>ANCHOR</li> <li>KANARA WOOD AND PLYWOOD INDUSTRIES LTD</li> </ul>
19	FRD SHUTTERS	<ul> <li>KUTTY</li> <li>KANARA WOOD AND PLYWOOD INDUSTRIES LTD.</li> <li>SUKRI</li> <li>ANCHOR</li> </ul>

20	NATURAL WOOD VEENERS	<ul> <li>ANCHID</li> <li>ANCHOR</li> <li>DURIAN</li> <li>KANARA WOOD AND PLYWOOD INDUSTRIES LTD.</li> <li>IMPORTED</li> <li>GARNET</li> </ul>
21	PLYWOOD (Conforming to IS:710)	<ul><li>ARCHID</li><li>KITPLY</li></ul>

		<ul> <li>GREEN PLY</li> <li>CENTURY</li> <li>KANARA WOOD AND PLYWOOD INDUSTRIES LTD.</li> <li>GARNET</li> </ul>
22	MELAMINE POLISH	<ul> <li>ASIAN PAINTS MELAMYNE GOLD</li> <li>WUDFIN OF PIDILITE INDUSTRIES TIMBERTONE OF ICI DULUX</li> </ul>
23	ANTI STATIC HIGH PRESSURE LAMINATE	<ul><li>FORMICA</li><li>BAKELITE HYLAM</li></ul>
24	HIGH PRESSURE LAMINATES	<ul> <li>MERINO</li> <li>GREENLAM</li> <li>DECOLAM</li> <li>CENTURY</li> <li>FORMICA</li> <li>ANCHOR</li> </ul>
25	ROLLING SHUTTERS & GRILLS	<ul><li>STANDARD</li><li>SWASTIK</li><li>SHUBDHWAR</li></ul>
26	BALL BEARING HINGES	<ul> <li>JJ (MPORTED) FROM SHALIMAR         OR EQUIVALENT APPROVED         BRAND</li> <li>MAGNUM</li> <li>DORMA</li> <li>HAFELE</li> <li>NEKI</li> </ul>
27	STAINLESS STEEL SCREWS (unless otherwise specified)	KUNDAN     ARROW

28	ALUMINIUM EXTRUSIONS	<ul><li>HINDALCO</li><li>INDALCO</li><li>JINDAL</li></ul>
29	HARDWARE & BRASSWARE	<ul> <li>SHALIMAR</li> <li>INDO-BASS</li> <li>AMARBHOY DOSSAJI</li> <li>EARL BIHARI</li> <li>MAGNUM</li> </ul>
30	ANNEALED FLOAT GLASS	<ul><li>ST. GOBAIN</li><li>MODIGUARD</li><li>HINDUSTAN PILKINGTON</li></ul>

31	FIRE-RATED GLASS (HALF HOUR FIRE RATING) TRANSPARENT CLEAR WIRED GLASS	<ul> <li>PYROSHIELD OF PILKINGTON OR EQUIVALENT</li> <li>SCHOTT</li> <li>FERILITE</li> </ul>
32	SYNTHETIC ENAMEL PAINTS	<ul><li>ICI</li><li>ASIAN PAINTS</li><li>BERGER PAINTS</li></ul>
33	EPOXY PRIMER AND PAINTS	<ul><li>BERGER PAINTS</li><li>ASIAN PAINTS</li></ul>
34	GYPSUM BOARD	<ul><li> INDIA GYPSUM</li><li> BORAL</li></ul>
35	G I PIPE	<ul><li>TATA</li><li>ZENITH</li><li>JINDAL</li></ul>
36	COPPER PIES	<ul><li> IBPL</li><li> RAJCO</li><li> ABC</li></ul>
37	CALCIUM SILICATE BOARD FOR FRD SHUTTERS	<ul> <li>PROMATECT-H OF PROMAT</li> <li>PROMINA</li> <li>SUPALUX</li> <li>MASTER BOARD</li> <li>STARPAN</li> <li>HILUX</li> </ul>
38	INTUMESCENT STRIP FOR FRD SHUTTERS	<ul><li>PROMAT</li><li>PEMKO</li><li>INTUMEX</li><li>ASTOFLAME</li></ul>
39	FALSE CEILING SYSTEM ALONG WITH SUPPORTING GRID AND MINERAL FIBRE TILES	<ul><li>ARMSTRONG</li><li>USG</li></ul>
40	CALSIUM SILICATE BOARD FOR FALSE CEILING	<ul><li>HILUX</li><li>STARPANE</li></ul>
41	FALSE CEILING SYSTEM ALONG WITH SUPPORTING GRID FOR CALCIUM CILICATE BOARD	<ul><li>HUNTER DOUGLAS</li><li>INTERARCH</li><li>LAXMI</li></ul>
42	FALSE CEILING SYSTEM ALONG WITH SUPPORTING GRID AND ALUMINIUM PANELS	<ul><li>HUNTER DOUGLAS</li><li>INTERARCH</li></ul>
43	FALSE CEILING SYSTEM ALONG WITH SUPPORTING GRID AND GYPSUM BOARD	<ul><li> INDIA GYPSUM</li><li> BORAL</li></ul>

44	CEMENT CONCRETE PAVER TILES AND BLOCKS	<ul> <li>SUPER TILES AND MARBLES PVT. LTD.</li> <li>NITCO TILES LIMITED</li> <li>CEMENTILE INDUSTRIES</li> </ul>
45	STEEL FRD SHUTTER	<ul><li>SUKRI</li><li>SHAKTI</li><li>GODREJ</li><li>GLOBAL</li></ul>
46	STUD ANCHORS (HEAVY)	<ul><li>HILTI</li><li>FISSURE</li></ul>
47	STUD ANCHORS	<ul><li>ARROW</li><li>SHAKTI</li></ul>
48	CI COVERS	• NECO
49	C. I. PIPES	<ul><li>ELECTROSPUN</li><li>KESORAM</li></ul>
50	SPUN PIPES	• NECO
51	SANITARY APPLIANCES	<ul><li>PARRYWARE</li><li>HINDWARE</li></ul>
52	SANITARY FITTINGS	<ul><li>JAQUAR</li><li>AQUAPLUS</li><li>ESS ESS</li></ul>
53	STAINLESS STEEL DOOR HANDLES LOCK AND FITTINGS	<ul><li>DORMA</li><li>HAFELE</li><li>NEKI</li><li>UNION</li></ul>
54	FLOOR SRINGS, DOOR CLOSERS, PANIC BARS	<ul><li>DORMA</li><li>HAFELE</li><li>SEVAX</li></ul>
55	CUPBOARDS LOCKS	<ul><li>EBCO</li><li>GODREJE</li><li>EARL BIHARI</li></ul>
56	FLOOR STOPPER	<ul><li>DORMA</li><li>HAFELE</li><li>NEKI</li><li>MAGNUM</li></ul>
57	ROLLED HOLLOW SECTIONS, M.S. TUBES, M.S. PLATES	<ul><li>TISCO</li><li>SAIL</li><li>RINL</li><li>JINDAL</li><li>LOYAD</li></ul>
58	TEXTURE PAINTS	• HERITAGE,

		<ul><li>ACROTEX</li><li>NAVAIR,</li><li>SPECTRUM</li></ul>
59	FALSE CEILING SYSTEM ALONG WITH SUPPORTING GRID AND ACOUSTICAL TILES	<ul><li>ARMSTRONG</li><li>USG</li><li>ECOPHON</li></ul>
60	EPOXY PAINTS ON CONCRETE	<ul><li>TUFF COAT</li><li>ASIAN PAINTS</li><li>BERGER PAINTS</li><li>SHALIMAR</li></ul>
61	METALIC PAINT	<ul><li>ASIAN PAINTS</li><li>BERGER PAINTS</li><li>ICI</li></ul>
62	FIRE RATED PAINTS	<ul><li>ASIAN PAINTS</li><li>BERGER PAINTS</li><li>SHALIMAR</li></ul>

## B. SPCIA\*\*LISED AGENCIES:

1.	ROCK ANCHORS	<ul> <li>FRESSINET</li> <li>BBR</li> <li>VSL</li> <li>DBM GEOTECHNICS &amp; CONST. PVT. LTD.</li> <li>M/S PARESH CONSTRUCTION &amp; FOUNDATION PVT. LTD</li> <li>M/S DYNAMIC</li> <li>PRESTRESS</li> </ul>
2.	ANTI-TERMITE TREATMENT	PCI OR EQUIVALENT
3.	WATERPROOFING WORK	<ul> <li>LIKPROOF INDIA PVT. LTD.</li> <li>MODERN WATERPOOFING CO.</li> <li>OVERSEAS WATERPROOFING CORPORATION</li> <li>INDIA WATERPROOFING CO.</li> <li>NINA INDUSTRIES</li> </ul>
4.	STRUCTURAL GLAZING	<ul> <li>ALUMA YER INDIA PVT. LTD</li> <li>ALUPLEX INDIA PVT. LTD.</li> <li>ALKARMA PVT. LTD</li> <li>PERMESTILISA INDIA PVT. LTD.</li> <li>SP FABRICATORS PVT. LTD.</li> <li>GLASS WALL SYSTEM</li> <li>AHLCON INDIA PVT. LTD.</li> </ul>

5.	ACCESS FLOOR SYSTEM	<ul><li>KINGSPAN (HEWETSON)</li><li>DONN OF USG</li><li>TYCO INDUSTRIES</li></ul>
6	FALSE CEILING SYSTEM	<ul><li>ARMSTRONG</li><li>HUNTER DOUGLAS</li><li>INDIA GYPSUM</li></ul>
7	PLUMBING SANITARY WORKS	<ul> <li>NAGARWALLA ENGINEERING COMPANY PVT. LIMITED</li> <li>SHREE KHODIYAR SANITATION</li> <li>D. S. GUPTA</li> </ul>

- \* Wherever grouting is specified for waterproofing treatment, the grouting shall be done using nonshrink polymeric waterproofing grouting compound
- \* The contractor shall arrange and provide at the site of work all the equipment's for field testing as required like balances, sieves, slump cone, dial gauges, compression testing machines (still the samples shall be tested in an independent laboratory as approved by the Engineer-in Charge), graduated measuring cylinders, steel tapes, venire calipers, micrometer screw gauges, plumb bobs, spirit levels, Schmidt rebound hammer, total station survey equipment, magnifying glass, screw drivers, plastic bags for samples, etc.
- \* Allowing establishing the site laboratory by the contractor shall net absolve the contractor from fulfilling the criteria of getting the tests done in an independent laboratory. The decision of the Engineer-in Charge of allowing any test in the site laboratory or any other laboratory shall be final and binding on the contractor and no claim of any kind whatsoever shall be entertained from the contractor on this account.
- \* Even if the certain items of work are carried out by the specialized contractors, the responsibility for the work shall however rest with the contractor only.
- \* Unless otherwise specified for the item, the maximum water cement ratio for any grade of concrete shall not be more than 0.5. The contractor shall within 15 days of issue of letter for commencement of the work, submit the mix design for various grades of concrete along with 7 days crushing strength reports and writhing 40 days submit 28 days crushing strength reports, for the samples for the mix, nothing extra shall be payable on account of admixing any chemical admixture for achieving any characteristic for the concrete. Concreting shall be commenced only after the approval of the mix design by the Engineer-in-Charge.
- \* Wherever required the M.S. inserts shall be provided during the casting of RCC / PCC. The payment of providing and fixing inserts shall be made under item no. 6.3. However contractor shall have to bear all the incidental costs and expenses on this account.
- \* As far as possible the contractor shall plan that the concreting is carried out during day shift.
- \* Stainless pins & cramps and expansion hold fasteners for fixing dry granite stone cladding shall be of stainless steel grade 304 of Arrow or Shakti make.

- \* The water repellent coating on the RCC and the granite stone slab shall be applied using low-pressure sprays equipment (3-10kg/sqm) or brush applied. Care shall however be taken that the rebound losses are minimum and the material in not wasted on this account.
- \* The contractor shall produce cash voucher and the certificate from the plywood / door shutter manufacturer (including the fire resistant door shutters) for the kiln seasoning, chemical impregnation, glue usage (as specified), fire retardant chemical impregnation etc. other wise the material shall not be accepted.
- \* Timber tone melamine coating of ICI deluxe.

### NITIE Mumbai:87

## **ESTIMATE**

# Name of Work: Providing Compound Wall, Fencing along with Storm Water Drain for Part Portion of Survey no.34.

Sr.	Item	Qty.	Unit	Rate	Amount
no					
1.	Excavation as and where required Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	110.00	Cum	322.36	35,459.82
2.	All kinds of soil.  8" thick soling Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.	33.00	Cum	1,603.27	52,907.78
3.	1:3:6 Grade PCC for base of wall Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:3:6 (1 Cement: 3 coarse sand (zone- III) derived from natural sources: 6 graded stone aggregate 20 mm nominal size derived from natural sources)	8.00	Cum	7,679.38	61,435.04
4.	Uncoursed Rubble Masonry Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually, striking joints on un exposed faces and watering etc. complete.	35.00	Cum	5,893.92	2,06,287.20
5.	Brickwork for provision of SWD  Brick work with common burnt clay  F.P.S. (non-modular) bricks of class	10.00	Cum	7,733.99	77,339.92

	designation 7.5 in foundation and plinth in:				
	Cement mortar 1:4 (1 cement : 4 coarse sand)				
6.	Coping of 1:2:4 Grade Concrete Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:2:4 (1 Cement: 2 coarse sand (zone- III) derived from natural sources: 4 graded stone aggregate 40 mm nominal size derived from natural sources)	6.00	Cum	8121.65	48,729.90
7.	Plastering 12 mm cement plaster of mix: 1:4 (1 cement: 4 fine sand)	200.00	Sqmt	331.35	66,270.49
8.	Foundation Blocks for Steel Sections Providing and laying Cast in situ/Ready Mix cement concrete in M15 of trap/ granite/quartzite/gneiss metal for bed blocks, foundation blocks and such other items including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)	3.00	Cum	7471.17	22,413.51
9.	Structural Steel work- Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	3500.00	Kgs	104.57	3,65,993.57
10.	Painting	125.00	Sqmt	147.72	18,465.00

	Painting with synthetic enamel paint of				
	approved brand and manufacture to give				
	an even shade :				
	Two or more coats on new work				
			To	tal amount	9,55,302.00
(Inclu	ding GST)				
		_			
We he	reby ready to execute the work	% (In wo	ords		
					)
APOVE / PELOW/ AT DAD on the estimate cost put to tender inclusive of all taxes					
ABOVE / BELOW/ AT PAR on the estimate cost put to tender inclusive of all taxes.					
Total Tender Amount quoted after considering the percentage in Figure in Rs					
Total Tender Amount quoted after considering the percentage in Words in Rs					
Grand	Total Including GST (In Words) Rs				
Oranu	Total flictuding OST (III Words) Rs				
Date:					
_					

CONTRACTOR Address & Seal EXECUTIVE ENGINEER (I/c)