

THANE MUNICIPAL CORPORATION THANE

PUBLIC WORKS DEPARTMENT

TENDER DOCUMENT

NAME OF WORK : CONSTRUCTION OF DWELLING UNITS &

INFRASTRUCTURE AT SIDDHARTHNAGAR

UNDER BSUP

THANE MUNICIPAL CORPORATION, THANE PUBLIC WORKS DEPARTMENT

NAME OF WORK :CONSTRUCTION OF DWELLING UNITS
& INFRASTRUCTURE AT SIDDHARTHNAGAR
UNDER BSUP

PRICE : Rs. 50,000/- (Rs. Fifty thousand only) per tender

document.

TO BE RECEIVED ON : On 17/11/2011 upto 16.00 Hrs., in the Citizen

Facilitation Centre , Main Admin. Bldg. Ground Floor

TO BE OPENED ON : On 17 /11/2011 at 17.00 Hrs. if possible, in the

office of the City Engineer, Thane Municipal Corporation, Dr. Almeida Road, Panchpakhadi,

Thane.

PER-BID MEETING : Will be held on 05 /11/2011 at 11.00 Hrs. in office

of City Engineer. Thane Municipal Corporation,

Thane.

CHECK LIST FOR DOCUMENTS TO ACCOMPANY WITH THE TENDER

Sr. Brief details documents required Whether enclosed or not No.

- Earnest money in the shape of receipted challan of TMC, Thane or demand draft drawn on any Nationalized or Scheduled Bank encashable in Mumbai in the name of "TMC E- Tendering" or Bank guarantee of Nationalized or Scheduled bank encashable in Mumbai as per format Annexed. (Earnest money Deposit Exemption certificate issued by State Government Organization shall not be accepted)
 - 2. Tender document fee in the shape of receipted challan of TMC, Thane or demand draft drawn on any Nationalized or Scheduled Bank encashable in Mumbai in the name of "TMC E- Tendering".
- 3. Attested copy by the gazetted officer of valid Certificate as Registered Contractor in Class I (A) or equivalent and above with State Government.
- 4. List of Machinery and plants, centering, form work of any / special nature and type immediately available with the tenderer for use on this work.
- 5. Details of Technical Personnel on the rolls of the tenderer proposed to be deployed on this work.
- Details of other works tendered for & in hand with value of unfinished works on the date of submission of this Tender.

7. Partnership deed/joint Venture with any other Builders /Real Estate Developers (If any)

8. Certificate showing Bidder should have completed similar works of construction of multistoried Residential / Institutional / Commercial / Administrative Building in last three years i.e. 01/04/2008 to 31/03/2011 and the magnitude of single work should not be less than 30% of cost put to tender

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Issued to :			

City Engineer,
Thane Municipal Corporation, Thane

Chapter –I Notice Inviting Tender

THANE MUNICIPAL CORPORATION, THANE.

NOTICE INVITING TENDER

TENDER FOR CONSTRUCTION OF DWELLING UNITS & INFRASTRUCTURE AT SIDHARTHNAGAR UNDER BSUP

Thane Municipal Corporation (TMC) invites online tenders on percentage rate basis in prescribed form for the following work from the contractors registered with PWD, Govt. of Maharashtra / CPWD or other government recognized institute contractor in the class mentioned against the works.

The blank tender forms can be downloaded from the website of TMC www.thanemahapalika.com / tmc.abcprocure.com from 24/10/2011 to 17/11/2011 upto 15.00 Hrs. Online tenders shall be received on the website of TMC www.thanemahapalika.com / tmc.abcprocure.com upto 16.00 Hrs. on or before 17/11/2011 and will be opened on the same day at 17.00 hrs, if possible .Prebid meeting will be held on 05/11/2011 at 11.00 hrs. in the office of City Engineer.

Sr. No.	Name of Work	Estimate cost (Approx.)	Earnest Money Deposit	Tender form fee	Time limit for completion of work	Eligibility Class
1	Construction of Dwelling Units & Infrastructure at Siddharthnagar under BSUP	Rs.29.90 Crores	Rs. 29.90 Lakhs	Rs. 50151.00	18 months excluding monsoon	PWD – Class 1(A) or equivalent
2	Construction of Dwelling Units & Infrastructure at Mahatma Phulenagar, Kalwa under BSUP	Rs.29.90 Crores	Rs. 29.90 Lakhs	Rs. 50151.00	18 months excluding monsoon	PWD – Class 1(A) or equivalent

Terms and Conditions:-

Bidder shall be of valid registration with PWD, GOM or CPWD or other government recognized institute in appropriate Class. and he should have completed similar works of construction of multistoried Residential / Institutional / Commercial / Administrative Building in last three years i.e. 01/04/2008 to 31/03/2011 and the magnitude of single work should not be less than 30% of cost put to tender

- 2) Annual Turnover should not be less than 75 % of the cost put to tender .
- 3) Bidder can make JV with any other Builders / Real Estate Developer.
- 4) It is necessary to attend prebid meeting.
- 5) Conditional tender will be rejected out right.
- 6) Thane Municipal Corporation reserves right to accept any or all tender in full or part without assigning any reason.

Sd/-City Engineer,

Thane Municipal Corporation, Thane.

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Chapter – II

Detail Tender Notice

CHAPTER - II

DETAIL TENDER NOTICE

1. INVITATION:

1.1 Sealed percentage rate tenders in B-1 form are invited for the work of

" CONSTRUCTION OF DWELLING UNITS & INFRASTRUCTURE AT SIDDHARTHNAGAR UNDER BSUP. "

2. INVITATION CONDITIONS:

- 2.1 Tenders hereunder are being invited in accordance with competitive bidding procedures of Thane Municipal Corporation Thane.
- 2.2 All bidders are cautioned that tenders containing any deviation from the contractual terms and conditions specifications or other requirements are liable to be rejected as non responsive.
- 2.3 All tenderers are urged to promptly submit a written request to the City Engineer, Thane Municipal Corporation Thane on matters where clarification or additional information is desire

3. **DESCRIPTION OF PROJECT:**

- 3.1 The project is for " CONSTRUCTION OF DWELLING UNITS & INFRASTRUCTURE AT SIDDHARTHNAGAR UNDER BSUP. "
 - Land: Plot Bearing S.T.No. 1025(Pt.),983(pt.)Siddharthnagar,Kopri,Thane
- 3.2 The Project comprises of the Construction of 8 nos. G+8 type RCC building (10 Flats per floor) out of which 3 nos. already constructed constituting 688 residential tenements (25 sqm min. carpet area) & 75 commercial units with electrification, Passenger lift, UG Water tank and septic tank etc. & Infrastructure work like construction of road, storm water drain, electric poles, pavement, sewerage, fire fighting arrangement, rain water harvesting, solar water heating system, gardening, water supply, electric substation, compound wall & retaining wall, community centre.
- **3.2.1** In building, work upto plinth comprising of foundations, RCC footings, columns, plinth beams.

- 3.2.2 In building, work in the superstructure comprises of R.C.C. framework and brick work masonry with sand faced plaster on the external face and neeru finished plaster on the internal faces. The total structure is Ground + 8 Floors(10 Tenements per floor) per Building.
- **3.2.3** Ceramic tile flooring.
- **3.2.4** Other items as per tender description and specification described in this document.

4. ELIGIBILITY AND QUALIFICATION REQUIREMENTS:

- **4.1** Bidder shall be of valid registration with PWD, GOM or CPWD or other government recognized institute in appropriate Class.
- 4.2 All tenderers shall include a statement of
 - a) Major items of construction, plant and machinery, details of shuttering & formwork available with the tenderer for carrying out the contract in the format prescribed in the chapter-II of tender documents.
 - b) The qualification and experience of key personnel proposed for administration and execution of the contract both on and off site, in the format prescribed in tender documents.
- 4.3 Bidders should have completed similar works of construction of multistoried Residential / Institutional / Commercial / Administrative Building in last three years i.e. 01/04/2008 to 31/03/2011 and the magnitude of single work should not be less than 30% of cost put to tender.
- 7) Annual Turnover should not be less than 75 % of the cost put to tender in last three years.

4.4 OTHER REQUIREMENT

4.4.1 The applicant has to submit Assessed available bid capacity, certified by chartered accountant, of equal to or more than the cost put to tender as on 31 March 2011 for the purpose of this clause.

Assessed available Bid Capacity = $A \times N \times 2 - B$ Where,

A = Maximum audited turn over achieved during last three financial years ending on March 31st 2011 (corrected to current level of value)

N = Execution Period of the proposed contract (1.5 years for this contract) and

B = Value of existing commitments to be completed during the completion period of the proposed contract.

For the purpose of above, the following multiplying factors shall be used for enhancing the costs.

Financial Year	Multiplying Factor
2010-11	1.10
2009-10	1.21
2008-09	1.331

For private works :-

- i) The cost of building will be worked out by multiplying area of building at Rs. 6000/- per sq. mtr. to be increased by 10% every year from year 2007.
- ii) Only 50% of value of work done will be considered. The Builder/ developer should submit occupation and completion certificate from competent municipal authority.
- iii) The Bidder will have to submit T.D.S. certificate, if he has worked as contractor.
- **4.5** E.M.D. exemption certificate issued by P.W.D. or any other authority will not be accepted.
- **4.6** Entire concrete works should be done by Mix -Design Concrete only.
- **4.7** If in any case, any discrepancy is observed in downloaded tender document with printed tender document, the Bidder is bound to accept printed tender document.
- 4.8 In case there is any doubt/omissions regarding the wording in general conditions or special conditions or the scope of work of the specifications and drawing or any other matter concerning the contract, the same shall in good time submit to reach him before scheduled pre-bid meeting date & time, in writing in order that such doubts may be clarified before tendering. Once the tender is submitted the matter will be decided according to tender condition in the absence of authentic pre-clarification.
- **4.10** The Bidder shall have sufficient bid capacity to execute the said work. Such Bid capacity certificate should be got certified by chartered account.

5. ISSUE OF BLANK TENDER FORMS

i) Blank tender will be available on websites <u>www.thanemahapalika.com</u> / tmc.abcprocure.com.

ii) All tenders are cautioned that the tenders containing any deviation from the contractual terms and conditions, specifications and other requirements and conditional tenders will be rejected.

6. PERIOD OF COMPLETION:

The period of completion shall be 18 (**Eighteen**) calender months **excluding monsoon** from the date of order to proceed with the work. The monsoon period will be considered from 7th June to 30th September of the calender year.

7. EARNEST MONEY:

- The amount of Earnest Money Rs. 29,90,000/- (Rs. Twenty Nine Lakhs Ninty Thousand Only) should be in the shape of receipted challan of TMC Thane or demand draft drawn on any Nationalised or Scheduled bank encashable in Mumbai in the name of "TMC E Tendering" or Bank Guarantee drawn from any nationalised or scheduled bank encashable in Mumbai as per Format Annexed.
- ii) Earnest Money in the form of Cheque or any other Mode than prescribed above will not be accepted. Tenders of those contractors who do not deposit Earnest Money in one of the above accepted form shall be summarily rejected.

Tender not accompanied by an Earnest Money Deposit are liable to be rejected as non responsive. If during the tender validity period, the tenderer withdraws his tender, the Earnest money deposit shall be forfeited and the tenderer may be disqualified from tendering for further works in the Thane Municipal Corporation, Thane for the period of one year.

- The Earnest Money Deposit will be returned to the unsuccessful tenderers immediately after issue of work order to successful tenderer or at expiry of validity period if tenderer do not wish to extend validity period. Tenderer to note that EMD of all those tenderers beyond three qualified lowest, will be refunded on the same day in the form they have submitted. A written request to this will be made by tenderer, On receiving written request, engineer incharge shall forward request of tenderer to finance department within three working days. The earnest money deposit of the successful tenderer shall be returned after he furnishes initial security deposit and duly enters into contract.
- Within ten days from the date of receipt by him of the letter of having acceptance of his tender, the successful tenderer shall furnish the required initial Security Deposit and attend the office of the City Engineer, Thane Municipal Corporation, Adv. Almeida Road, Pachpakhadi Thane for execution of the contract document. If the successful tenderer fails to furnish Security Deposit or to execute the contract his earnest money deposit shall be forfeited and the tenderer may be disqualified from tendering for further works in the Thane Municipal Corporation, Thane.

8. LANGUAGE OF TENDER:

The tenders shall be submitted in the prescribed forms in "English" language only. Language for communication may be Marathi.

9. TENDER VALIDITY PERIOD:

Validity of the offer will be **180 days** from the date of opening of tender documents and thereafter unless extended if required to do so, to this consent will be taken from tederers who wish to do so.

10. PRE-BID MEETING & OPENING OF TENDERS:

Pre-bid meeting for the work will be held on 05/11/2011 at 11.00 Hrs. in the office of City Engineer, Thane Municipal Corporation. It is necessary to attend prebid meeting for the willing bidders. Tenders will be opened in the presence of tenderers or representatives of Contractors who choose to remain present at 17.00 hrs. on 17/11/2011 if possible. The tenderer or their representatives, who are present shall sign the register in token of their attendance.

11. WHOM TO CONTACT:

The City Engineer, Thane Municipal Corporation, Thane may be contacted for any further information on the tender.

12. THE TENDER ACCEPTING AUTHORITY:

The acceptance of tender vests with the Municipal Commissioner of Thane Municipal Corporation, Thane who reserves the right to reject any or all tender without assigning any reason thereof. The award of the contract shall be at the discretion of the tender Accepting Authority, TMC also reserved right in case, if felt necessary to make parts of works at least (two), In case tenderer having objection to division he may load his tender and indicate this in price cover.

13. **SECURITY DEPOSIT:**

1) The successful tenderer whose tender is accepted will have to pay the initial Security Deposit 2.5% of Tender amount i.e. **Rs.67,27,500/-** (**Rs. Sixty Seven Lakhs Twenty Seven Thousand Five Hundred Only**) in the form of Bank Guarantee (in the form prescribed by the Thane Municipal Corporation, Thane on Stamp Paper. Specimen form is enclosed in the tender Documents) for the entire period of contract, including defect liability period, of any Scheduled Bank within prescribed time as per Para 7(iv) above and complete the contract agreement .The balance Security Deposit 2.5% of tender amount i.e.(viz.) **Rs.67,27,500/-** (**Rs. Sixty Seven Lakhs Twenty Seven Thousand Five Hundred Only**) will be recovered from the Running Accounts Bills @ 5 % of Gross value of the Bill.

13.1 Refund

After issue of completion certificate to contractor, if contractor desires, can deposit whole Security Deposit i.e. 5% of the value of tender in the form of Bank Guarantee drawn in favour of TMC, on any Nationalized or Scheduled bank having branch in Mumbai in the enclosed format valid till defect liability period. After successfully completion of defect liability period TMC will issue maintenance certificate and contractor thereafter will have to request in writing for release of Security Deposit.

14. TENDER DOCUMENTS:

14.1 Contents of Tender Documents

A set of tender documents issued for the purpose of tendering shall comprise of

- Notice Inviting Tender
- Detailed Tender Notice.
- General Conditions & Additional Conditions of Contract.
- Special conditions of contract.
- Description of work
- Technical Specifications
- Form of Bank Guarantee in lieu of Security.
- Declaration of Contractor.
- Agreement Form 'B-1'.
- Price Variation Clause
- Schedule 'B' and Itemwise Specifications and Drawings.
- Common Set of Deviation if issued after pre bid conference shall also form a part of tender documents.
- 14.2 The tenderer is deemed to have examined carefully all instructions, conditions, forms, terms, technical specifications, Schedule of Quantities and Drawings in the tender documents. Failure to comply with the requirements of tender submission shall be at the tenderer's own risk. Tenders which are not substantially responsive to the requirement of the tender documents are liable to be summarily rejected.
- **14.3** The tenderer shall submit only an unconditional offer which complies fully with the requirements of the tender documents.
- 14.4 All tenderers are cautioned that no alternative or conditional offers, variations or deviations by the tenderers in respect of any item proposed by the tenderers (including advance loan for mobilisation for timely completion, etc.) shall be entertained or considered further in the process of tender evaluation. Further more, any deviation from the conditions of tender or technical specifications or other requirements stipulated in these tender documents other than those specifically clarified/amended in the minutes of the pre-bid meeting shall be summarily rejected as non responsive.

- 14.5 The data furnished in the tender documents are only by way of general information and the department will not entertain any claims due to variation from this data or for any expenses incurred by the tenderer in this connection. The tenderer shall himself obtain all necessary information as to risk and costs and other circumstances which may affect or influence this tender. No extra charges consequent on any misunderstanding or, otherwise shall be allowed.
- 14.6 At any time prior to the deadline for submission of tenders the City Engineer, Thane Municipal Corporation, Thane, may for any reason whether at his own initiative or in response to a clarification requested by a prospective tenderer modify the tender documents by the issuance of an Addendum/corrigendum.
- 14.7 The addendum will be uploaded on website, and will be binding upon them irrespective of whether the prospective tenderers acknowledge receipt of the same or not.
- 14.8 In order to afford prospective tenderers reasonable time to take the Addendum/ corrigendum into account for the preparation of their tenders, the City Engineer, Thane Municipal Corporation, Thane at his discretion extend the deadline for the submission of tenders.

15. MANNER OF SUBMISSION OF TENDER AND ITS ACCOMPAINMENT:

15.1 Tenderer shall submit the tender and documents On-Line as per E-Tendering procedure as below.

TECHNICAL BID(Submitted as per E-Tendering procedure):

The tenderer shall submit the following documents Envelope-1 on line.

- **15.1.1** Earnest money deposits Rs. 29,90,000/- and tender document fees of Rs. 50,151 /- along with the tender should be (Submitted as per E-tendering procedure) deposited on-line as per E-tendering procedure.
- **15.1.2** Attested copy of valid certificate as a registered Contractor with the central Government/ State Govt./ public undertaking/ Corporation in appropriate category mentioned in tender notice for doing building works and solvency certificate –not less than 50% of the cost put to tender.
- **15.1.3** Bidder shall have valid registration with PWD, GOM or CPWD or other government recognized institute in Class 1(A) or equivalent Class and he should have completed similar works of construction of multistoried Residential / Institutional / Commercial / Administrative Building in last three years i.e. 01/04/2008 to 31/03/2011 and the magnitude of single work should not be less than 30% of cost put to tender .All documents pertaining to qualification criteria serially as indicated in notice inviting tender with attestation original document shall be produced at the time of opening of the tender for the verification by Engineer in charge of TMC.
- **15.1.4** The applicant has to submit Assessed available bid capacity, certified by chartered accountant, of equal to or more than the cost put to tender as on 31 March 2011.
- **15.1.5** Annual Turnover of Bidder should not be less than 75 % of the cost put to tender.
- **15.1.6** Contractor should possess Ready mix plant within TMC limit having capacity of at least 30 cu.m./hour & Transit Mixers. It should not be more than 5 years old.
- 15.1.7 List of Machinery and Plants (as per form III & form IV) in position with the tenderer individually. List of plant and machinery tenderer possesses to use for this work. Contractor should state, the present status & use of machinery. If on verification by TMC it is found that machinery is not adequate, TMC shall reject the said tender & not take for further evaluation. In case tenderer desires to use machinery hired from elsewhere same should be notified undertaking agreement to be submitted mentioning in how much time, machinery could be made available and where is the machinery presently under use. To this TMC shall assess about the availability if

found information is not correct the said tender will not be taken for further evaluation. In case hired machinery fail at the execution stage what are the alternative arrangement proposed, this should be supported firm document. Plant and machinery with transit mixers proposed for the work shall not be more than 5 years old. Document of challan/bills/ valid registration should be enclosed. TMC if necessary may call original document for verification. If plant & machinery proposed to be used is more than 5 years old in that case tender will not be considered further.

- **15.1.8** Details of Technical Personnel on the Rolls of the Tenderer (Form-III) to be appointed on the work.
- **15.1.9** Details of other works Tendered for and in hand with value of unfinished works on the date of submission of this Tender. (Form I)

15.2 Price-Bid Documents submitted as per E-Tendering Procedure:

The tenderer should quote his offer in percentage as appropriate place, online on website www.thanemahapalika.com/www.tmc.abcprocure.com.

Submission of Tender:

The tenderer should quote his price bid on line and submit technical bid document on line.

15.3 The City Engineer, Thane Municipal Corporation, Thane may at his discretion extend the deadline for the submission of tenders by issuing an amendment in accordance with Para 14.6 of these instructions to tenderers in which case all rights and obligations of the City Engineer, Thane Municipal Corporation, Thane and the tenderers previously subject to the original deadline shall thereafter be subject to the new deadline as extended.

15.4 OPENING OF TENDERS:

On due date and specified time following procedure will be adopted for opening of the tender.

Technical Bid:

First of all EMD tender fee submitted by all tenderers on line as per E-tendering procedure or submitted in the sealed Envelope will be opened to verify its contents as per tender requirements.

Technical bid documents submitted by all tenderers on line as per E-tendering procedure will be opened to verify its contents as per tender requirements.

All the tenderer should produce original documents for verifications of online submitted documents by the tenderers at the time of opening of the technical bid; then only price bid will be opened. All tenderer should submit attested copy of the technical bid documents at the time of opening of technical bid.

If the required documents do not meet the tender requirements, it will be recorded accordingly by the tender opening authority and the said tenderer's Price-Bid will not be considered /opened for further action and the reason will be recorded.

15.5 The tenders are liable to reject out right, if -

- **15.5.1** The tenderer proposes any alteration in the work specified in the tender or in time allowed for carrying out work or any other unacceptable condition.
- **15.5.2** Any of the pages of the tender are removed and/or replaced.
- **15.5.3** All corrections and additions are not initialled by the tenderer.
- **15.5.4** The tenderer, does not sign and the signature/signatures (in case of firm each partner or power of attorney holder) is not witnessed by a respectable person in the space provided for in tender form.
- 15.6 Income Tax & work contract tax at the rate in force will be recovered from the gross amount of each bill, whether for measured or advance payment of each bill, and/or secured advance.

- 15.7 Schedule of quantities of contract shows the items of work to be executed, the estimated quantity, the rate, amount of such item as per estimate. The estimate is for reference only & the quantities may vary while execution of work.
- In case, any difference noticed in the unit shown in the column of Unit the Contractor should approach the Executive Engineer well in advance before submission of the tender and get the discrepancy set right. If any discrepancy not pointed out by the Contractor is noticed, later on the City engineer, decision will be final and binding on the tenderer.
 - ii) No addition or alterations in the form of the tender or in the tender and no additions in the shape of special stipulation etc. are permitted. The tenders which do not fulfill all or any of the above conditions or are incomplete in any respect are liable to be summarily rejected.
 - iii) All pages of tender documents, Conditions, Specification and drawings etc. shall be initiated at lower left hand corner and signed where required in the tender papers by the tenderer, all partners in case of partnership firms or person holding a power of attorney authorising him to sign on behalf of the partnership firms or person holding a power of attorney authorising him to sign on behalf of the partnership.
 - iv) The City Engineer, Thane Municipal Corporation, Thane shall have the right to revise or to amend the contract documents prior to the date of receipt or opening of the tenders.
 - The Contractor shall make at his own expenses all preliminary arrangements including site clearance etc. immediately after the contract is awarded to him. He shall also arrange to get water supply connection from the local body and lay all distribution pipe lines, cocks, water meter etc. for water required for construction and, drinking purposes corporation do not guarantee 24 hrs supply however adequate storage arrangement shall be made to meet with such demand. In case distribution system of corporation do not have adequate water then contractor will have to make his own arrangement from nearby

point of corporation. The quoted rates will have deemed to have included this aspect. Bills for use of water as an when raised by TMC shall be paid by contractor promptly, else amount will be deducted from R.A. bills. Present rate at which water will be supplied is Rs.85 per Kilolitre in case of any changed in tariff same shall be applicable.

vi) Similarly the Contractor will have to make his own arrangement at his cost for supply of electricity and water for camp and work site as may be necessary and he will not be entitled to any extra payment whatsoever in this regard.

16. ACCEPTANCE OF THE TENDER:

Acceptance of the tender would be intimated to the Contractor by speed post or courier or Fax.

17. MOBILISATION ADVANCE

Mobilisation advance will be given to the contractor on written request after acceptance of bid by the competent authority on the contract value and to the extent of 5% (Five) of the contract value. This mobilisation shall be given on the following conditions.

The contractor shall submit the bank guarantee of equal amount for the period given. It shall be from the date of commencement of work. Format for bank guarantee is attached along with tender document.

The advance shall carry interest (Simple Interest) at the rate of 13.00 % per annum.. The Contractor has to give undertaking against mobilization advance. Form of Undertaking for Mobilization advance is given along with tender document.

Recovery of the mobilisation advance

The mobilisation advance shall be repaid with interest and percentage deduction from the interim payments certified by the city engineer under the contract. The recovery shall be made at the rate of 10% (ten percent) of the amount of all interim payment certificates until such time as the advance has been repaid.

At any time prior to the deadline for submission of tenders the City Engineer, Thane Municipal Corporation, Thane, may for any reason whether at his own initiative or

in response to a clarification requested by a prospective tenderer modify the tender documents by the issuance of an Addendum/corrigendum.

- The addendum will be sent in writing or by telex or cable to all prospective tenderers who have received the tender documents, and will be binding upon them irrespective of whether the prospective tenderers acknowledge receipt of the same or not.
- In order to afford prospective tenderers reasonable time to take the Addendum/ corrigendum into account for the preparation of their tenders, the City Engineer, Thane Municipal Corporation, Thane at his discretion extend the deadline for the submission of tenders.
- The acceptance of tender may be communicated to the Bidders telegraphically or by fax otherwise either by the tender Opening Authority or any Authority in the Thane Municipal Corporation, Thane
- The successful Bidder will be required to produce within fifteen days to the satisfaction of the specified concerned authority, a valid and concurrent license issued in his favour under provisions of the Contract Labour (Regulations & Abolition) Act, 1979, before starting the work. On failure to do so, the acceptance of the tender is liable to be withdrawn and earnest money forfeited.
- All Bidders are cautioned that the tenders containing any deviation from the contractual terms and conditions, specifications or other requirements and/or conditional tenders shall be rejected.
- Bidder whose tender is accepted has to make agreement & register it by paying required govt fees.

Chapter – III

General Conditions of Contract and Additional Conditions of Contract

CHAPTER - III

GENERAL CONDITIONS AND ADDITIONAL, CONDITIONS

- 1. WORK AND SITE CONDITIONS:
- 1.1 General Description of Work: "CONSTRUCTION OF DWELLING UNITS & INFRASTRUCTURE AT SIDDHARTHNAGAR UNDER BSUP.
 "

The Project Comprises of: Items as in recapitulation sheet, contract Schedule of quantities ,Detail scope of work and specifications mentioned therein.

2. CONTRACTOR TO INFORM HIMSELF FULLY:

2.1 The Contractor shall be deemed to have carefully examined the work and site conditions, land including labour, the general and the special conditions, the specifications, schedules, drawings and shall be deemed to have visited the site of work and to have fully informed himself regarding the local conditions and carried out his own investigations to arrive at rates quoted in the tender. In this regard he will be given necessary information to the best of knowledge of the department but without any guarantee and liability about it.

If he shall have any doubt as to the meaning of any portions of these general conditions or the special conditions or the scope of work or the specifications and drawing or any other matter concerning the contract he shall, in good time, before submitting his tender, set forth the particulars thereof and submit them to the City Engineer, Thane Municipal Corporation, Thane in writing in order that Such doubts may be clarified authoritatively before tendering.

Once a tender is Submitted, the matter will be decided according to tender conditions, in the absence of any such authentic pre-clarification.

2.2 Errors, Omissions and Discrepancies :

- (a) In case of errors and/or disagreement between written and scaled dimensions on the drawing or between drawing and standard specifications etc'. the following order of preference shall supply.
 - (i) Between actual scaled and written dimension or description on a drawing the latter shall be adopted.
 - (ii) Between the written or shown description of dimension in the drawing and corresponding one in the specifications, the latter shall apply.
 - (iii) Between the quantities shown in Schedule of quantities and those arrived at from the drawings, the latter shall be adopted, subject of course, to actual measurement at site.
 - (iv) Between the written description of the item in the schedule of quantities and the detailed description in specifications of the same items, the latter shall be adopted
- (b) In case of discrepancy between amount quoted in figures and words, the lowest of the two will be considered for acceptance of the tender.
- (c) In all cases of omissions and/or doubts for any items or specification, a reference shall be made to the City Engineer, Thane Municipal Corporation, Thane whose elucidation, elaboration or decision shall be considered as authentic. The Contractor shall be held responsible for any errors that may occur in the work through lack of such reference and through lack of such precaution.

2.3 Working Methods:

The work of disturbing present traffic. The contractor has to provide necessary diversion, barricading etc. at his own cost till the completion of work without any claim on the department. Contractor shall submit, within the time stipulated by the

City Engineer in writing the details of actual methods that would be adopted by the contractor for execution of any item as required by Engineer at each of the locations supported by necessary detailed drawings and sketches including those of the Plant and Machinery that would be used, their locations, arrangement for conveying and handling material etc. and obtain prior approval of the Engineer-in-charge well in advance of starting of such item of work. The City Engineer reserves the right to suggest modification or make complete charges in method proposed by the Contractor, whether accepted previously or not, at any stages of work, in order to obtain the desired accuracy, quality and progress of work which shall be binding on the contractor and no claim on account of such changes in method of execution will be entertained by Government so long as specifications of the item remain unaltered.

2.4 Progress Schedule:

- The contractor shall furnish within 7 days on receipt of order to start the work, a progress schedule in quadruplicate indicating the date of actual start, the monthly progress expected to be achieved and anticipated completion date of each major item of work to be done by him, also indicating dates of procurement and setting up of materials, plant and machinery. The schedule should be such as to be practicable of achievement towards the completion of the whole work in the time limit. The progress schedule will be scrutinised and approved with/without modifications by the City Engineer. No revised schedule shall be operative without such acceptance in writing. The City Engineer further empowered to ask for more detailed schedule or schedules say week by week, for any item or items, in case of urgency of work as will be directed by him and the contractor shall supply the same as and when asked for. The contractor will be responsible for maintaining the progress according to schedule laid down in Clause 2 of Tender Form. The progress schedule shall be in the form of Barchart/C.P.M. chart or any other form prescribed by City Engineer.
- (b) The contractor shall furnish sufficient plant and equipment and labour as may be necessary to maintain the progress schedule. The working and shift hours restricted to one shift a day for operations to be done under the supervision shall be such as may be approved by the Engineer Night work which

requires supervision shall not be permitted except when specifically allowed by the City Engineer each time, if requested by the Contractor. The Contractor shall provide necessary lighting arrangements etc. for night work, as directed by the City Engineer at it his own cost.

- (c) Further the contractor shall submit the progress report of work at intervals of one months or as may be specified by the City Engineer
- (d) The contractor shall maintain proforma charts, details regarding machinery, equipment, labour, materials, personnel etc. are actually employed and submit weekly report thereof or as may be specified by the City Engineer.

2.5 Treasure Trove:

In the event of discovery by the contractor or his employees, during the progress of the work of any treasure fossils, mineral or any other article of value or interest, the contractor shall give immediate intimation thereof to the City Engineer and forthwith handover to the City Engineer such treasure things which shall be the property of the Thane Municipal Corporation.

2.6 Agent and Work Order Book:

The contractor shall himself manage the work or engage authorised all time agent on the work capable of managing and guiding the work and understyanding the specifications and contract conditions. A qualified and experienced Project Engineer with the specialized team of 2 Nos.sr. Engineers, 4 Nos.Junior Engineers and reqd. supervisory staff shall be provided by the Contractor as his agent for technical matters in case City Engineer considers this as essential for the work and so directs the contractor He will take order as will be given by the City Engineer or his representative and shall be responsible for carrying, them out. This agent shall not be changed without prior intimation to the City Engineer or his authorised representative on the work site. The Contractor shall supply to the Engineer the details of all supervisory and other staff employed by the contractor and notify changes when made and satisfy the engineer regarding, the quantity and sufficiency of the staff, thus employed. The Engineer will have the unquestionable right to ask for changes in the quality and numbers of contractor's supervisory staff and to order removal from work of any staff member. The Contractor shall comply with such

orders and effect replacement to the satisfaction of City Engineer. A work order book shall be maintained on site and it shall be property of Thane Municipal Corporation, Thane and the contractor shall promptly sign orders given therein by City Engineer his representative on the work and comply with them. The compliance shall be reported by the contractor to the City Engineer in good time so that it can be checked. The blank work order book with machine numbered pages will be provided by the Thane Municipal Corporation free of charge for this purpose. The contractor will be allowed to copy out instruction given therein from time to time.

2.7 Initial Measurement for Record:

Where for proper measurement of the work, it is necessary to have an initial set of levels or other measurement taken, the same as recorded in the authorised field book or measurement book of Thane Municipal Corporation by the City Engineer or his authorised representative and will be signed by the contractor who will be entitled to have a true copy of the same made at his cost. Any failure on the part of the Contractor to get Such levels etc. recorded before starting the work, will render him liable to accept the decision of the City Engineer as to the basis of taking measurements, like wise the contractor will not cover any work which will render its subsequent measurements difficult or impossible, without first getting the same jointly measured by himself and the authorised representative of the City Engineer. The record of such measurements made by the department will be signed by the contractor and he will be entitled to have true copy of the same made at his cost. Whenever there is change in strata during actual execution in respect of item of Schedule 'B' it will be the responsibility of the contractor to intimate this immediately to the Department and get the levels at the change of strata finalised before doing the further work.

2.8 Handing Over the Work:

All the work and materials, before finally taken over by department will be the entire liability of the contractor for guarding, maintaining and making good any damage of any magnitude interim payments made for such work will not alter this position. The Buildingwise partly handing over by the contractor and taking over by the City Engineer or his authorised representative will be always in writing,

copies of which will be going to the City Engineer or his authorised representative and the contractor duly signed by both the parties respectively.

2.9 Assistance in Procuring Priorities, Permits etc. :

The City Engineer on a written request by the contractor, will if in his opinion, the request is reasonable and in the interest of work and its progress, assist the contractor, in securing, the priorities for deliveries, transport permits for controlled materials etc. when such are needed. The Thane Municipal Corporation will not be responsible for the non-availability of such facilities or delay in this behalf and no claim on account of such failures or delay shall be allowed by the Thane Municipal Corporation. The contractor shall have to make his own arrangement for machinery required for the work.

2.10 Samples and Testing of Materials:

- (i) All materials to be used on the work such as cement, lime, bricks, aggregates, steel, stones, asphalt, wood, tiles bitumen etc. shall be got approved in advance form the City Engineer or his authorised representative on work and shall pass the test or analysis
- (ii) The contractor shall establish a field laboratory with "wellfurnished Sample Tenement" at his cost for testing of construction material, compressive strength of concrete cubes, etc. as per specifications and the instructions of the City Engineer or his authorised representatives on work.
- (iii) In addition the contractor shall at his risk and cost make all arrangements and/or shall provide for all such facilities as the City Engineer or his authorised representative on work may require for collecting, preparing and forwarding required number of samples for tests or for analysis to the nearest approved laboratory and bear all charges and cost of testing. Such samples shall also be deposited with the City Engineer or his authorized representative on work.
- (iv) The contractor shall, if and when required, submit at his cost the samples of the materials to be tested or analysed and if so directed, shall not make use of or incorporate in the works any material to be represented by the samples until

the required test or analysis have been made and the materials finally accepted by the Engineer-in-charge.

- (v) The contractor shall not be eligible for any claim or compensation either arising Out of any delay in the work or due to any corrective measure required to be taken on account of and as a result of testing of the materials.
- (vi) The contractor or his authorized representative will be allowed to remain present in the laboratory while testing the samples furnished by him.

2.11 Co-ordination:

When several agencies for different sub-works or the Project are to work simultaneously on the project site there must be full co-ordination and co-operation between different contractors to ensure timely and smooth completion of the project as a whole. The schedule dates for completion specified in each contract shall therefore, be strictly adhered to. Each contractor may make his independent arrangement for water, power, housing etc. if they so desire. On the other hand the contractors are at liberty to make mutual agreement in this behalf and make joint arrangement with the prior approval of City Engineer.

No single contractor shall take or cause to taken any steps or action that may cause, description discontent or disturbance of work, labour or arrangements etc. of other contractors in the project location. Any action by any contractor which the City Engineer in his unquestioned discretion may consider as infringement of the above code, would be considered as a breach of the contract conditions and shall be dealt with as such.

In case of any dispute, disagreement between the contractors, the City Engineer's decision regarding the co-ordination, co-operation and facilities to be provided by the contractors shall be final and binding on the contractor concerned and such a decision or decisions shall not vitiate any contract nor absolve the contractor(s) of his/their obligations under the contract nor consider for the grant for any claim or compensation.

2.12 PAYMENTS:

The Bidder must understand clearly that the rates/offer quoted are for completed work and include all cost due to material labour, scaffolding, plant, machinery, supervision, power, taxes etc.and should also include all expenses to cover the cost of night work if and when required and no claim for additional payment beyond the prices or rates quoted will be entertained.

The mode of measurements has been indicated in specification. However, if there is any ambiguity or doubts in its respect, the decision of City Engineer will be final. Payment will be made as per the schedule of payment given in this tender document.

RUNNING ACCOUNT BILL:

One or Two payments in a month will be granted by TMC, if the progress is satisfactory and the amount of R,.A. Bill is of minimum Rs. 1/18 of contract amount or as decided by Engineer in charge. Bidder should submit bills to the Engineer-in-charge in triplicate in appropriate forms along with all necessary statements and measurements as demanded time to time.

Bidder will take initial Ground levels and final levels in presence of TMC's representative by the usual method.

Bidder may have copies of the measurements and of the bills paid to him at his own cost and his own responsibility by attending the Corporation office. He or his agent may copy down the same in consultation with the Engineer - in - charge.

The bill submitted by the contractor will be checked and verified by Project Management Consultant and Engineer in charge of TMC and it will be recorded by the representative of Engineer in charge of TMC in measurement book supplied by TMC with certification and will have to sign bill and M.B. at appropriate place.

FINAL BILL:

The Bidder should submit final bill within one month after completion of the work and the same will be paid within 3 months, if it is in order. Disputed items and claims if any shall be excluded from the final bill and settled separately later on.

2.13 Patented Device:

Whenever the contractor desires to use any designed devices, materials or process covered by the letter of patent or copy right, the right for such use shall be secured by suitable legal arrangement and agreement with patent owner and the copy of their agreement shall be filed with the City Engineer, If so desired by the later.

2.14 QUARRIES:

No Departmental quarries are available with this Department. The Bidder shall have to arrange the same himself/themselves. The quarrying operations shall be carried out by the Bidder with proper equipment, such as compressors, Jackhammers drill bits; explosives etc. and sufficient numbers of workmen shall be employed so as to get the required outcome. Getting permission from Concerned Department or any statutory body will be the responsibility of Bidder.

The Bidder shall carry out the works in the quarries inconformity with all rules and regulations already laid down or Thane Municipal Corporation may lay down from time to time. Any cost incurred by Thane Municipal Corporation due to non-compliance of any rules or regulations or due to damages by the Bidder shall be the responsibility of the Bidder. The Engineer-in-charge or his representative shall be given full facilities by Bidder for inspection at all times or working of the quarry, record maintained of stocks that the working records and storage are all in accordance with the relevant rules. The Engineer-in-charge or his representative shall at any time be allowed to inspect the works, building and equipment at the quarries.

The Bidder shall maintain at his own cost the books, registers etc., required to be maintained under the relevant rules and regulations and as directed by the Engineer-in-charge. These books shall be opened for inspection at all times by the Engineer-in-charge or his representative and the Bidder shall furnish the copies or extracts of books or registered as and when required.

The Bidder shall carry out all quarrying operations in an organized and expeditious manner, systematically and with proper planning. The Bidder shall engage licensed blasters and adopt electric blasting or any other approved method, which would ensure complete safety to all the men, engaged in the quarry and its surroundings. The Bidder shall himself

provide suitable magazines and arrange to procure and store explosives, etc. as required under the rules at his own cost. The designs and the location of the magazine shall be got approved in advance from the Chief Inspector of Explosive and the rules and the Bidder as laid down by the Chief Inspector of Explosives from time to time shall strictly adhere to regulations in this connection. It is generally experienced that it takes time to obtain the necessary license for blasting and license for storage of material from the concerned authorities. The Bidder must, therefore, take timely advance action for procuring all such license so that the work progress may not be hampered.

The approaches to the quarrying place for the existing public roads have to be arranged by the Bidder at his own cost and the Bidder at his own cost shall maintain the approaches till the work is over.

The quarrying operations shall be carried out by the Bidder to the entire satisfaction of the Engineer-in-charge and the development of the quarry be made efficiently so as to avoid wastage of stones. Only such stones as are of the required quality shall be used on the work. Any stone, which is in the opinion of the Engineer-in-charge not in accordance with the specifications or of required quality, will be rejected at any time at the quarry or at the site for the work. The rejected stones shall not be used on the work and such rejected materials shall be cleared to the place shown at the Bidder's cost.

Since all earth, murum, stones – excavated quarried from TMC land (site) / quarry (if made available) by the Bidder, including the excavated over burden are the property of the Thane Municipal Corporation no stones or earth shall be supplied by the Bidder to any other agencies or works or allow to be taken away for any other works. All such surplus quarried material should he handed over by Bidder to Thane Municipal Corporation free of cost at land (site)/quarry duly heaped at the spots indicated by the Engineer-in-charge. The Bidder will not be entitled to refund of royalty if any paid by him for such quantity handed over to Thane Municipal Corporation for which If, however the Thane Municipal Corporation does not require such surplus material, the Bidder may be allowed to dispose off or use such material elsewhere with prior written permission of the Engineer-in-charge. Leaving off a quarry face or opening of a new quarry face shall be done only on the approval of the Engineer-in-charge.

Quarrying permission will have to be directly obtained by the Bidder from The Collector of the District, convened for which purpose the corporation will render necessary assistance. All octroi duties and royalty charges will have to be borne by the Bidder.

The Bidder will be permitted to erect sheds at his own risk and cost, if suitable vacant space in campus area is available for the purpose of his own structures for stores, offices etc. at places approved by the Engineer-in-charge. On completion of the work, the Bidder shall remove all the structures erected by him and restore the site to its original condition.

The Bidder shall not use any land in the site either for cultivation or for any other purpose except that required for braking or stacking or transporting stones; Labour sheds, Stores, for camping of machinery etc.

2.15 Temporary Quarters:

(1) The contractor shall at his own expenses maintain sufficient experienced supervisory staff and labourers etc. required for the work and shall make his own arrangement, provide housing for them with all necessary arrangements including the preventive measure etc. as directed by the City Engineer. No labour hutments shall be allowed within the work site.

2.16 ACCIDENT

In the event of an accident involving serious injuries or damages to human life or death of any of his employees and or labours the same shall be reported within twenty-four hours of the occurrence to the Engineer-in-charge and the commissioner of workmen's compensation.

In case of fatal accident or serious non-fatal accidents, Bidder will have to pay compensation to injured worker/dependents of deceased workers as decided by Commissioner Workmen Compensation etc. The amount of compensation likely to be payable will be kept under deposit by withholding that amount from running bills payable to Bidder till the final running bills to Bidder till the final decision is received from commissioner.

2.17 POLICE PROTECTION:

For the special Protection of Camp of the Bidders work, the corporation will help the Bidder as far as possible to arrange for such protection with the concerned authorities if so requested by the Bidder in writing. The full cost of such protections will be borne by the Bidder.

2.18 TESTING & REJECTION OF WORK

If it is found necessary from safety point of view to test any part of the structure, the test shall be carried out by the Bidder with the help of the department at his own cost.

Defective work is liable to be rejected at any stage. The Bidder on no account can refuse to rectify the defects merely on reasons that further work has been carried out. No extra payment shall be made for rectification.

2.19 CHANGE OF CEMENT CONTENT

The tendered rates shall apply to the quantity of cement specified, for the mix for that item in the specification. If, for any reason, required for compensating the deficiencies in the components, the cement content and proportions are altered by the Engineer-incharge at any time or from time to time, the tendered rate will not be changed.

2.20 DRAWINGS:-

The details shown in tendered drawings i.e. layout plan, Building – floor plan and R.C.C. structural drawings with other related information pertaining to the works be treated as indicative and provisional only and are liable to variation as found necessary while preparing, working drawings which will be supplied by the Corporation during execution, if necessary & no claim whatsoever shall be admissible on account of variation, Engineer-incharge's decision in this regard shall be final and binding on Bidder. Maximum 3 sets of all working drawings will be issued to the Bidder free of cost. Additional copies later on will be issued if required at extra cost.

2.21 RECOVERIES:

The recoveries if any due from Bidder will be affected as arrears of land revenue through the Collector of the District.

Protection of underground telephone and aerial Telephone wires and poles, transmission towers, electrical, cable and water supply, sewer lines.

During the execution of work, it is likely that the Bidder may meet with under ground / over head live or dead telephone cable, electrical cables, poles, existing live / dead water supply or sewer's lines etc., it will therefore, be the responsibility of the Bidder to protect them carefully, in All such cases it should be brought to the notice of the Engineer-in-charge by the Bidder and also to the concerned department. Any damage whatsoever done to these cables and pipelines or any type of structures if any, by the Bidder, shall be made good by him at his cost. As directed by engineer in charge.

The Bidder shall remove; shift existing electrical poles / lines, telephones, lines, cables, water supply lines, cables, water supply lines, sewers lines, trees, or any structure coming in the way of construction if any. He shall remove, replace, and reconnect or reconstruct all necessary concerned structures on his own cost. As directed by the engineer-in-charge. Further if any charges are to be paid to the concerned authority may also be paid by the Bidder only.

If any delay caused for shifting of electric poles, telephone lines, water pipe lines, cutting and shifting of trees and other structures obstructing the work, no compensation on account of delay will be entertained.

The Bidder after completion of work shall have to clean the site of all debris and remove all unused materials other than those supplied by the corporation and all plant and machinery, equipment, tools etc., belonging to him within Fifteen days from the date of completion of the work, or otherwise the same shall be removed by the Corporation at his cost and all useful materials' and the Bidder shall not be entitled for payment of any compensation for the same.

2.22 HANDING OVER OF WORK:

All the work and materials before finally taken over by Corporation will be the entire liability of the Bidder for guarding, maintaining and making good any damages of any magnitude. Interim payments made for such work will not alter this position.

2.23 CLAIMS:

Bill for extra work or for any claim shall be paid separately apart from the interim bills for the main work.

The payment of bills for the main work shall not be withheld for want of decision on the extras or claims not covered in the appendices.

Claims for extra work shall be registered within 30 days of occurrence of the event. However, bills for these claims including supporting data/details may be submitted subsequently.

2.24 DISPUTES AND ARBITRATION:

In Case of Disputes or difference of opinion arising between the City Engineer and the Contractor, the Contractor can refer the matter to the Hon. Commissioner through the City Engineer with an advance copy to the Hon. Commissioner and the decision of Hon. Commissioner will be final in this case,

In case of the disputes not solved by both the parties mutually, then the same will be resolved through ARBITRATOR which would be appointed by mutually.

2.25. Site office and Laboratory for the Departmental Staff:

The bidder shall provide semi permanent site office and laboratory of 40 sq. mt. area for the departmental staff with 3 Computers (Pentium 4) and telephone facilities, electrification and necessary electrical accessories and necessary furniture i.e. two tables, two medium size steel cupboards, six chairs along with A.C. meeting room of appximately 15 sq.mt. The contract rate shall include cost on this account.

2.26. Facility for Communication and Record:

The bidder shall provide at his own cost, and maintain three sets of branded computers with laser printer and digital camera at work site of latest configuration with necessary licenced softwares as directed by Engineer in charge with broad-band internet facility to facilitate communication at various levels of state and central Govt. organizations

throughout the project construction period and hand over in good & working condition to TMC before final bill of work

2.27. Working Methods:-

The Bidder has to provide necessary barricading etc. at his own cost till the completion of work without any claim on the department. Bidder shall submit in writing the details of actual methods that would be adopted by the Bidder for execution of any item as required by Engineer-in-charge at each of the locations supported by necessary detailed drawings and sketches including those of the Plant and Machinery that would be used, their locations, arrangement for conveying and handling material etc. and obtain prior approval of the Engineer- in- charge well in advance of starting of such item of work. The Engineer- in-charge reserves the right to suggest modification or make complete changes in method proposed by the Bidder, whether accepted previously or not at any stages of work in order to obtain the desired accuracy. Quality and progress of work which shall be binding on the Bidder and no claim on account of such changes in method of execution.

2.28. Progress Schedule

- (a) The Bidder shall furnish within 7 days on receipt of order to start the work, a progress schedule in quadruplicate indicating the date of actual start. The monthly progress expected to be achieved and anticipated completion date of each major item of work to be done by him also indicating proposed date of each major item of work to be done by him. Also indicating dates of procurement and setting up of materials, Plant and machinery. The schedule should be such as to be practicable of achievement towards. The schedule should be such as to be practicable of achievement towards the completion of the whole work in the time limit. The progress schedule will be scrutinized and approved with without modifications by the Engineer- in- charge. No revised schedule shall be operative without such acceptance in writing. The Engineer- in- charge further empowered to ask for more detailed schedule or schedules say week by week, for any item or items. In case of urgency of work as will be directed by him and the Bidder shall supply the same as and when asked for. The Buildingwise progress schedule shall be in the form of Bar chart / C.P.M chart or any other form prescribed by Engineer- in- charge.
 - (b) Further the Bidder shall submit the progress report of work at intervals of one month or as may be specified by the Engineer- in- charge.

c) The Bidder shall maintain charts, details regarding machinery, equipment, labour, materials, personnel etc. are actually employed and submit weekly report there of as may be specified by the Engineer- in- charge.

The Bidder shall inform the Engineer- in- charge in writing when any portion of the work is ready of for inspection giving him sufficient notice to enable him to inspect the same without affecting the further progress of the work. The work shall not be considered to have been completed in accordance with the terms of the contract until the Engineer- in- charge shall have certified in writing to that effect. No approval of material or workmanship or approval of part of the work during the progress of execution shall bind the Engineer- in- charge or in any way affect him even to reject the work which is alleged to be completed and to suspend the issue of his certificate of completion until such alternations and modifications or reconstruction have been effected at the cost of the Bidder as shall enable him to certify that the work has been completed to his satisfaction.

A detailed programmed for the construction and completion of the works, including preparing and supplying charts showing clearly the important events, mile stones and durations of constructional activities of submission and approval of materials procurement and erection of material equipment etc. And for all activities of the Bidders that are likely to affect the progress of work, including updating of all such activities on the basis of the instructions given at the periodic site inspections or as directed by the Engineer- in- charge.

Any other item of work which is not specifically provided in the specification but which is considered necessary by the Engineer-in Charge for complying with the provisions of the Contract

2.29. COMPLETION CERTIFICATE

The work shall not be considered to have been complete in accordance with the terms of contract until the Engineer- in- charge shall have certified in writing to that effect. No approval of material or workmanship or approval of part of the work during the process of execution shall bind the City Engineer or in any way prevent him from even rejecting the work which is claimed to be complete and to suspend the issue of his certification of completion until such alterations and modification or reconstruction have been effected at the cost of the Bidder as shall enable him to certify that the work has been completed to his satisfaction.

After the work is completed, the Bidder shall give notice of such completion to the City Engineer and within 30 days of receipt of such notice the City Engineer shall inspect the work and if there is no defect in the work, shall furnish the Bidder with a certificate indicating the date of completion. However, if there are any defects noticed. The Bidder after rectification of such defects shall then notify the City Engineer and the City Engineer on his part shall inspect the work an issue the necessary completion certificate within 30 days, if the defects are rectified to his satisfaction and if not he shall inform the Bidder indicating defects yet to be rectified. The time cycle as shown above shall continue.

In case defects noticed by the City Engineer which in his opinion are not rectifiable but otherwise work is acceptable at reduced payment, work shall be treated as completed. In such case completion the City Engineer shall issue certificate within 30 days, indicating the un-rectifiable defects for which he is making specified reduction in payment.

The issue of completion certificate shall not be linked up with the site clearance on completion of the work.

The buildingwise part completion certificate will be given to the bidder.

2.30. NO DEMAND CERTIFICATE: -

This certificate is to be submitted along with the final bill as per format annexed.

2.31. No Claim Certificate for labour :-

This certificate is to be submitted along with the final bill as per format annexed.

2.32. POWER TO VARY WORKS;

a) The City Engineer / consultant, may form time to time during the execution of the contract vary, increase or reduce the contract work or any part thereof and may order any portion of the work executed or partly executed to be removed or altered, and the Bidder shall be bound to carry out the varied work. In case of such removed or altered work, the Bidder shall be bound to carry out the varied work without any financial claims.

2.33. THE CITY ENGINEER OR ENGINEER-IN-CHARGE / CONSULTANT NOT TO BE MADE PARTY TO ANY SUIT.

The City Engineer or the Consultant shall not be made a party to or be required to defend or answer any action suit or proceedings at the instance of the Department or the Bidder nor shall they or either of them be compellable by any proceeding whatever to answer or explain any matter relating to any certificate or award made by the City Engineer or to state or show how or why on what ground he settled, ascertained or determined or to state or show how or why on what ground he settled, ascertained or determined or omitted to settle, ascertained or determined any matter whatsoever, not shall be compliable to state or give his reasons for any proceedings whatever which he may take or direct to be taken in or about premises or show to nay person or persons for any purpose whatsoever any documents, calculations or memorandum whatsoever in his possession or power relating thereto.

2.34. PHOTOGRAPHS:-

The Contactors shall arrange at his cost to take coloured photographs directed as by the City Engineer Consultant during the progress of the work and or after completion of work.

The postcard size copies of each photograph together with the original shall be given to the City Engineer and Consultant free of cost.

2.35. CONSULTANT'S DECISION

The decision taken or the orders issued by the Architect / RCC Consultant/ PTA appointed for this project or his representatives in respect of contracted work, followed by confirmation of Engineer-in-charge shall be implemented by Bidder governed by these General conditions.

2.36. PERT/BAR CHART

The PERT programmed and bar charts shall have detail gainful employment of mobilization and for their flexibility depending upon availability or otherwise of work front.

2.37. APPROVAL OF MATERIAL IN WRITING AND PRESERVATION OF SAMPLES

The first concreting shall be done in the presence of Engineering in charge only and it is to be shown to Engineer In charge after removal of shuttering. After he approves the quality of finish in writing, then further concreting shall be done.

2.38. THIRD PARTY INSURANCE

Before commencing the execution of the work, the contractor (but without limiting with obligation and responsibility) shall insure in the joint names of the employer and the contractor against any damage or loss or injury which may occurred to any property or to any person (including permanent and temporary works) in carrying out of the contract, such insurance shall be affected with an Indian insurance company and in terms approved by the employer (which approval shall not be unreasonably with held) and for the amount of Rs.50. lacs produced to the engineer- in- charge, the **policy or policies of insurance and the receipt for the payment of current premiums has been indicated as liability of any one incident.** This shall be restored back to same value after every incident taking place till the completion of the contract.

3. SAFETY MEASURES AND AMENITIES:

3.1 Safety Measures:

The contractor shall take all necessary precautions for the safety of the workers and preserving their health while working in such job as require special protection and precaution. The following are some of the requirements listed though not exhaustive. The contractor shall also comply with directions issued by the City Engineer in this behalf from time to time and all times.

- **3.1.1** Providing protective footwear to workers, in situations like mixing and placing of concrete, cement mortar or bitumen mix in quarries and places where the work if done under too much wet conditions as also for movements over surfaces infested with oyster growth etc.
- **3.1.2** Providing protective head wear to workers, working in quarries etc. to protect them against accidental fall of materials from above.

- **3.1.3** Taking such normal precaution like providing hand rails at the edges of the floating platform or barges not allowing nails or metal parts or useless timber to spread around etc.
- **3.1.4** Supporting workmen with proper belt ropes etc. when working on any masts, cranes, grabs, hoist, dredgers etc.
- 3.1.5 Taking necessary step, towards training the workers concerned in the use of machinery before they are allowed to handle it independently and taking all necessary precaution in and around the areas where machine hoists and similar units are working.
- **3.1.6** Avoiding bare live wire etc. as would electocute
- **3.1.7** Making all Platforms stagings and temporary structures sufficiently strong so as not to cause inconvenience and risk to the workmen and supervisory staff.
- **3.1.8** Providing sufficient first aid trained staff and equipment to be available quickly at the work site to render immediate first aid treatment in case of accidents due to suffocations, drowning and other injuries.
- **3.1.9** Take all necessary precautions with regard to use of divers.
- **3.1.10** Providing full length gum boots, leather hand gloves with fire proof apron to cover the chest and back, reaching upto knees and protective goggles for the eyes to the labourers working with hot asphalt handling, vibrator in cement concrete and also where use of any or all these items is beneficial in the interest of health and well being of the labourers in the opinion of the Engineer.

3.2 Explosives :

(1) The contractor shall at his own expenses construct and maintain proper magazines, if such are required for the storage of explosives for use in connection with works, and such magazines being situated, constructed and maintained in accordance with Government Rules and Relevant legal provisions applicable in that behalf. The contractor shall at his own expenses

obtain such licence or licences as may be necessary for storing and using explosives. Not withstanding that the location etc. for storage of explosives are approved by the Engineer, the Government shall not be incurring any responsibility whatever in connection with storage and use of explosive on the site or any accident or occurrence whatsoever in connection therwith, all operations in or for which explosives are employed being at the risk of contractor and upon his sole responsibility and the contractor hereby gives to government an absolute indemnity in respect thereof.

3.3 Damage by Floods or Accidents :

The contractor shall take all precautions against damage by floods or from accidents etc. No compensation will be allowed to the contractor on this account or for correcting and repairing any such damage to the work during construction. The contractor shall be liable to make good at his cost any plant or materials belonging to the Government lost or damaged by flood or from any other cause which is in his charge.

3.4 Relation with Public Authorities :

The contractor shall comply with all rules regulations by laws and directions given from time to time by any local or Public Authority in connection with this work and shall himself pay fees or charges which leviable on him without any extra cost to the Department.

3.5 Indemnity:

The Contractor shall indemnify the Thane Municipal Corporation all actions, suits, claims and demands brought or made against him in respect of anything done or committed to be done by the Contractor in execution of or in connection with the work of this contract and against any loss or damage to the Government in consequence of any Suit or action being brought against the contractor for anything done or committed to be done during execution of the work of this contract.

3.6 Labour and General Laws:

Labour Regulations:

3.6.1 The contractor shall employ labour sufficient numbers either directly or through sub-contractors to maintain the required rate of progress and of quality to ensure

workmanship of the degree specified in the contract and to the satisfaction of the City Engineer.

- **3.6.2** The contractor shall not employ in connection with the works any person who has not completed his eighteenth year of age.
- **3.6.3** The contractor shall furnish to the City Engineer fortnightly distribution return of the number and description by trades of works people employed on the works.
- 3.6.4 The contractor is required to report immediately to the City Engineer any accident or unusual occurrence connected with the work and now he/they acted upon. The contractor shall also submit to City Engineer a true statement showing in respect of the second half of the preceding month and the first half on the current month.
 - (1) The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury cause by them and
 - (2) The number of female workers who have been allowed benefit under Maternity Benefit Act, 1961 or Rules made thereunder and the amount paid to them.
- 3.6.5 The contractor shall pay to the labour employed by him either directly or through sub contractor wages not less than fair wages as defined in the contract labour regulations as contained hereinafter in regards to all matters provided therein.
- 3.6.6 The contractor shall comply with the provisions of the payment Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1937, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947 and the Maternity Benefit Act, 1961, the contract Labour (Regulation & Abolition) Act, 1970, and the Interstate Migrant workman (Regulation of employment and conditions of service) Act, 1979, or any modification thereof or any other law relating thereto and rules made thereunder from time to time.
- **3.6.7** The contractor shall indemnify Thane Municipal Corporation payments to be made under and for the observance of the Regulations aforesaid without prejudice to his right to claim indemnify from his sub-contractors.

3.6.8 The decision of the City Engineer in matters relating to the reports from the Inspecting Officers, as defined in "Contractor Labour Regulation" (Contained hereinafter) shall be final and binding and deductions for recovery of any liquidated damages in this respect may be made from any amount payable to the contractor.

3.7 Model Rules for Labour Welfare:

The contractor shall at his own expenses comply with or cause to be complied with the Model Rules for Labour Welfare as contained hereafter or rules framed by Department from time to time for the protection of health and for making sanitary arrangements for workers employed directly or indirectly on the works. In case the Contractor fails to make arrangements as aforesaid, the Engineer in-charge shall be entitled to do so and recover the cost thereof from the contractor.

3.8 Safety Code:

The contractor shall at his own expense arrange for the safety provisions indicated hereafter or as required by the City Engineer in respect of all labour directly or indirectly employed for performance of the works and shall provide all facilities in connection therewith. In case the Contractor fails to make arrangements and provide necessary facilities as aforesaid the City Engineer shall be entitled to do so and recover the cost thereof from the contractors.

3.9 Nuisance:

- 3.9.1 The Contractor shall not at any time do, cause or permit any nuisance on the site or do anything which shall cause unnecessary disturbance or inconvenience to owners, tenants or occupants of other properties near the site and to the public generally.
- 3.9.2 The contractor shall save, harmless and indemnify the Department in respect of all claims, demands, proceedings damages, costs, charges and expenses what so ever arising out of or in relation to any such matters in so far as the contractor is responsible therefor.

3.10 Contract Labour Regulations :

Definitions:

In these regulations unless otherwise expressed or indicated the following words and expressions shall have the meaning hereby assigned to them.

- (a) Labour would mean "Workmen" as defined in Chapter-I of the Contract Labour (Regulation and Abolition) Act, 1970 as amended from time to time.
- (b) "Fair Wage" means Wages, which shall include wages for weekly day of rest and other allowances whether for time or piece work after taking into consideration prevailing market rates for similar employments in the neighbourhood and shall not be less than the minimum rites of waces fixed under the minimum Waces Act.
- (c) "Contractor" for the purpose of these Regulations shall include an agent or subcontractor employing labour on the work taken on contract.
- (d) "Inspecting Officer" means any Labour Enforcement Officer, or Assistant Labour Commissioner of the Chief Labour Commissioner Organisation.
- (e) "Form" means a form appended to these Regulations.

3.11 NOTICE AND COMMENCEMENT:

The contractor shall within seven days of commencement of the work, furnish in writing to the Inspection Officer of the area concerned the following information under intimation to the Engineer-in-charge.

- (a) Name and situation of the work.
- (b) Contractor's name and address.
- (c) Particulars of the Department for which the work is undertaken.
- (d) Names and Addresses of sub-contractors as and when they are appointed.
- (e) Commencement and probable duration of the work.
- (f) Number of workers employed and likely to be employed.
- (g) "Fair Wage" for different categories of workers.

3.12 (i) Number of hours of work which shall constitute normal working day:

The number of hours which shall constitute a normal working day for an adult shall be 9 hours. The working day for an adult worker shall be so arranged that inclusive of intervals, if any, for rest shall not spread over more than twelve hours on any day. When an adult worker is made to work for more than 9 hours on any day or for more than forty eight hours in any week he shall in respect of overtime work be paid wages at double the ordinary rate of wages.

NOTE: The expression ordinary rate of wage means the fair wage the worker is entitled to.

(ii) Weekly day of Rest:

Every worker shall be given a weekly day of rest which shall be fixed and noticed at least 10 days in advance. A worker shall not be required or allowed to work on the weekly rest day unless he has or will have a substituted rest day on one of the five days immediately before or after the rest, provided that no substitution shall be made which will result in the worker working for more than 10 days consecutively with out a rest day for a whole day.

Where in accordance with the foregoing provision a worker works on the rest day and has been given a substitute rest day he shall be paid wages for the work done on the weekly rest day at the overtime rate of wages.

3.13 Display of Notice regarding wages weekly day of rest etc.

The Contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clean and legible condition in conspicuous places on the works, notices in English and in a local Indian Language spoken by majority of workers, giving the rates of fair wages, the hours of works for which Such wages are payable, the weekly rest day, workers are entitled to and name and addresses of the Inspecting Officer. The contractor shall send a copy of each of such notice to the Inspecting Officer.

3.14 Fixation of Wage Periods:

The Contractor shall fix wage periods in respect of each wages that shall be payable. No wage period shall normally exceed one week.

3.15 Payment of Wages:

- (i) Wages due to every worker shall be paid to him directly All wages shall be paid in current coins or currency or in both.
- (ii) Wages of every workers employed on the contract shall be paid, where the wage period is the week within three days from the end of the wage period, and in any other case before the expiry of the seventh day or tenth day from the end of the wage period according as number of workers does not exceed one thousand or exceeds one thousand, respectively.
- (iii) When employment of any worker is terminated by or on behalf of the Contractor, the Wages earned by him shall be paid before expiry of the day, succeeding the one on which his employment is terminated.
- (iv) Payment of wages shall be made at the work site on a working day except when the work is completed before expiry of the wage period, in which case final payment shall be made at the work site within 8 hours of last working day and during normal working time.

NOTE: The term "working day" means a day, on which work, on which labour is employed is in progress.

3.16 Register of Workmen:

A Register of workmen shall be maintained in Form-1 and kept at the work site or as near to it as possible, and the relevant particulars of every workman shall be entered therein within there days of his employment.

3.17 Employment Card:

The Contractor shall issue an employment card in Form-II each worker on theday of worker's entry into his employment. If a worker has already any such card with his issued by the previous employer, the Contractor shall clearly endorse that employment card with relevant entries. On termination of employment the employmentcard shall be again endorsed by the Contractor and returned to the worker.

3.18 Register of Wages etc:

- (i) A Register of wages cum muster roll in Form-II shall be maintained and kept at the work site as near to it its possible.
- (ii) A wage slip Form-IV shall be issued to every worker employed by the Contractor at least a day prior to disbursement of wages.

3.19 Fine and deductions which may be made form wages:

Wages of worker shall be paid to him without any deductions of any kind except the following:-

- (a) Fines.
- (b) Deductions for absence from duty i.e. from the place or the places where by the term of his employment he is required to work. The amount of deduction shall be proportionate to the period for which he was absent.
- (c) Deduction for damage to or loss of goods expressly entrusted to the employed persons for custody or for loss of money which he is required to account for, where such damage or loss in directly attributable to his neglect or default.
- (d) Deductions for recovery of advances or for adjustment of every payment of wages. Advance granted shall be entered in a register and
- (e) Any other deduction which the Department may form time to time allow.
 - (ii) No fines shall be imposed on any worker save in respect of such act and omission on his part as have been approved of by the Chief Labour Commissioner.
 - (iii) No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given on opportunity of showing cause against such fines or deductions in writing.

- (iv) The total amount of fines which may be imposed in any one wage period on a worker shall not exceed an amount due to him in respect of that wage period.
- (v) No fine imposed on a worker shall be recovered from him in installments or after expiry of sixty days from the day on which it was imposed. Every fine shall be deemed to have been imposed on the day of the act or commissions in respect of which it was imposed.
- (vi) The Contractor shall maintain both in English and the local Indian Language a list, approved by the Chief Labour Commissioner clearly stating the acts and commission for which penalty or fine may be imposed on a workmen and display it in good condition in a conspicuous place on the work site.

3.20 Preservation of Registers

The register of workman and the register of wages cum muster roll required to be maintained under these Regulation shall be preserved for 3 years after the date on which the last entry is made therein.

3.21 Enforcement:

- (i) The Inspecting Officer shall either on his own motion or on a complaint received by him carry out investigations and send a report to the City Engineer specifying the amounts representing workers dues and amount of penalty to be imposed on the Contractor for breach of these Regulations, that have to be recovered from the Contractor, including full details of the recoveries proposed and the reasons therefore. It shall be obligatory on the part of the City Engineer on receipt of such a report to deduct such amiunts from payments due to the Contractor.
- (ii) The penalty for every default and breach of these Regulations shall, however be a sum not exceeding Rs.5000/-. In the event of the Contractor's default continuing in this respect, the penalty may be enhanced to Rs. 50/- per day for each day default subject to maximum of one percent of the estimated cost of the work put to tender.

3.22 Disposal of amount recovered from the Contractor:

The City Engineer shall arrange payment to workers concerned within 46 days from receipt of report from Inspecting Officer except in cases where the Contractor has made an appeal under Regulation 15 of these Regulations. In case where there is an appeal payment of worker's dues Would be arranged by the City Engineer wherever such payments arise, within 30 days from the date of receipt of the decision of the Regional Labour Commissioner (R.L.C.).

3.23 Welfare Fund:

All moneys that are recovered by the City Engineer by way of worker's dues which could not be disbursed to workers within the time limit prescribed above, due to reasons Such as where about of workers not being known, death of a worker etc., and also amounts recovered as penalty shall be credited to a fund to be kept under the custody of R.L.C. for Such benefit and welfare of workmen employed by Contractors are prescribed by the Chief Labour Commissioner.

3.24 Appeal against decision of Inspecting Officer

Any persons aggrieved by decision of the Inspecting Officer may appeal against such decision to the Reaional Labour Commissioner concerned within 30 days from the date of the decision forwarding, simultaneously a copy of his appeal to the City Engineer. The decision of the Regional Labour Commissioner shall be final and binding upon the contractor and the workmen.

3.25 Representation of Parties :

- (i) A workmen shall be entitled to be represented in any investigation or enquiry under the regulations by an officer or a registered trade union of which he is a member or by any Officer or a federation of trade union to which the said trade union is affiliated or where the workmen is not a member of any registered trade union, by an officer of a registered trade union connected with or by any other workmen employed in the industries in which the workmen is employed.
- (ii) A Contractor shall be entitled to be represented in any investigation or/enquiry under these regulations by an officer of an Association of Contractors of

which he is a member or by a an officer of a federation or Associations of contractors to which the said Association is affiliated or where the contractor is not a member of an association by an Officer of association of employers, connected with or by any other employer engaged in the industries in which the contractor is engaged.

(iii) No party shall be entitled to be represented by legal practitioner in any investigation or enquiry under these regulaitons.

3.26 Inspection of Books and other Documents

The Contractor shall allow Inspection of the registers and other documents prescribed under these regulations by Inspecting Officer and the City Engineer his authorised representative at any time and by the worker or his agent no receipts of due notice at a convenient time.

3.27 Amendments:

Thane Municipal Corporation may from time to time add to or amend these regulations and issue such directions as it may consider necessary for the proper implementation of these regulations or for the purpose of removing any difficulties which may arise in the administration thereof.

<u>FORM - I</u> <u>REGISTER OF WORKMEN</u>

(Regulation - 7)

i) Name and Address :

of the Contractor

ii) Number and Date of :

the Contract

iii) Name and Address of :

the Department awarding

the Contract

iv) Nature of Contract :

and Location of work

v) Duration of the

Contract

Sr.No.		Age &			Permanent Home		
	of the Worker	Sex	Name	Employment / Designation	Address of Employees		
1	2	3	4	5	6		

Present Address	Date of	Date of	Signature or	Remarks
	commencement of	Termination or Thumb		
	Employment	leaving Impression of		
		Employment	Employee	
7	8	9	10	11

FORM - II EMPLOYMENT CARD (Regulation - 8)

i) Name and sex of worker
ii) Father's/ Husband's Name
iii) Address
iv) Age and Date of Birth
v) Identification Marks

Particular's of next of kin (wife/husband) and children, if any, or of dependant next of kin in case the worker has no wife/husband or child.

Name:-

Full address of Dependants

(Specify village, District & State)

Sr. No.	Name & Address of Employer (Specify whether contractor or a Sub-Contractor)	Particular's of location of work site and description of work done	Total period during which employed From	Actual number of days worked.
1	2	3	4	5

Leave taken (No. of days should be specified)	Nature of Work done by the worker	Wage Period	Wage Rate (with particulars of unit in case of piece	Total wage earned by the worker during the period	Remarks of the Employer	Signature
			work	shown under Col.5		
6	7	8	9	10	11	12

N.B. For a worker employed at one time on piece work basis and at another on daily wages relevant entries in respect of each of employment should be made separately.

FORM - III REGISTER OF WAGES CUM MUSTER ROLL

(Regulation)

i) Name and Address of the Contractor :

ii) Number and Date of the Contract :

iii) Name and Address of the Department :

awarding the Contract

iv) Nature of contract and Location of work :

v) Duration of the Contract :

vi) Wage period

:

Sr.	Name	Father's/Husband's	Sex	Designation and	Daily attendance	Total attendance
No.	Surname of	Name		Nature of work	(No. of units	Unit
	the worker			1,2,3	worked)	
				upto 31)		
1	2	3	4	5	6	7

Fair Wages available		Wage	es paid	Overtime worked		Total Wages paid	
Basic	D.A. &	Basic D.A. &		Date	No. of	Overtime	
	Other	Other			hours	wages	
	allowance		allowance			earned	
8	9	10	11	12	13	14	15

	Dedu	ction from	Wages	Net	Date of	Signature	Remarks	
Fines	s Deduction House Recovery Other		Wages	Payment	or thumn			
	for Rent deduction				impression			
	damages						of worker	
16	17	18	19	20	21	22	23	24

Reasons to be recorded in column 24.

FORM - IV (Regulation 9)

i) Name of the Contractor :

ii) Place :

1) Name of worker with father/husband's name

2) Nature of Employment :

3) Wage period :

4) Rate of Wage Payable :

5) Total attendance/units of work done :

6) Dates of which overtime worked :

7) Overtime wages :

8) Gross wages payable :

9) Total deductions (including nature of deductions)

10) Net wages payable :

Contractor's Signature/
Thumb impression

Employee's Signature/ Thumb impression

3.28 Definitions:

(a) Work Place:

"Work Place" means a place at which on an average 20 or more workers are employed.

(b) Large workplace:

"Large Work Place" means a place at which on average 500 or more workers are employed.

3.29 First Aid :

At every work place, there shall be maintained in a readily accessible place first aid appliances including an adequate supply of sterilized dressings and sterilized cotton wool as prescribed in the factory rules of the State in which the work is carried on. The appliance they shall be placed under the charge of responsible person who shall be readily available during working hours.

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

Where large work places are remotely situated and far away from regular hospitals indoor wards shall be provided with one bed for every 250 employees.

Where large work places are situated in cities, towns or in their suburbs and no bed are considered necessary owing to the proximity of city to town hospitals, suitable transport shall be provided to facilitate removal of urgent cases to those hospitals. At other work places some conveyance facilities shall be kept readily available to take injured person or persons suddenly taken seriously ill, to the nearest hospital.

At large work places there shall be provided and maintained an Ambulance room of the prescribed size of such medical and nursing staff as may be prescribed. For this purpose the relevant provisions of the Factory Rules of the State Government of the Area where the work is carried on may be taken as the prescribed standard. 3.30 Accommodation for Labour :

The Contractor shall during the progress of the works provide, erect and maintain necessary temporary living accommodation and ancillary facilities for labour at his

own expenses and to standards and scales as approved by the City Engineer.

3.31 Drinking Water:

In every working places there shall be provided and maintained at suitable places, easily accessible to labour a sufficient supply of cold water fit for drinking. Where drinking water is obtained from an intermittent public water supply each work place

shall be provided with storage where drinking water shall be stored.

Every water supply storage shall be at a distance of not less than 15 meters from any latrine, drain or other source of pollution where water has to be drawn from an existing well, which is in proximity of latrines, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. Allsuch wells shall be entirely closed in and be provided with a trap door

which shall be dust and water proof.

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

3.32 Washing and Bathing Places:

Adequate washable and bathing places shall be provided separately for men and women. Such places shall be kept in a clean and drained condition.

3.33 Scale of Accommodation in Latrines and Urinals :

There shall be provided within the premises of every work place, latrines and urinals in an accessible place, and the accommodation separately for each of these, shall not be less than at the following scales

No. of Seats

(a) Where number of persons does not exceed 50.

2

(b) Where number of persons exceeds 50 but does not exceed 100.

3

(c) For additional persons

3 per. 100 or

part thereof.

In particular cases, the Engineer-in-charge shall have the power to vary the scale, where necessary.

3.34 Latrines and Urinals:

Except in work places provided with water flushed latrines connection with a water borne sewage system, all latrines shall be provided with receptacles on dry earth system which shall be cleared at least four times daily and at least four times daily and at least twice during working, hours and kept in a strictly sanitary condition. Receptacles shall be tarred inside and outside at least once a year.

If Women are employed, separate latrines and Urinals, screened from those for men and marked in the vernacular in conspicuous letters, "FOR WOMEN ONLY", shall be provided on the scale laid down in rule 6. Those for men should be similarly marked "FOR MEN ONLY". A poster showing the figures of a men and of a women shall also be exhibited at the entrance to latrines for each sex. There shall be adequate supply of water close to latrines and Urinals.

3.35 Construction of Latrines :

Inside wall shall be constructed of masonry or other non absorbent materials and shall be cement washed inside and outside at least once a year. The dates of cement washing shall be noted in a register maintained for the purpose and kept available for inspection, latrines shall have at least thatched roof.

3.36 Disposal of Excreta:

Unless otherwise arranged for by the local sanitary authority arrangement for proper disposal of excreta by incineration at the work place shall be made by means of suitable incinerator approved by the local medical, health and municipal authorities.

The Contractor shall, at his own expenses, carry out all instructions issued to him by tile City Engineer to effect proper disposal of excreta and other conservancy work in respect of contractor's work people or employees on the site. The contractor shall be responsible for payment of any charges which may be levied by municipal authority for execution of such work on his behalf

3.37

Provision of Shelter during Rest:

At every work place there shall be provided free of cost four suitable sheds, two for meals and two others for rest separately for use of men and women labour. Height of each shelter shall not be less than 3 meters from floor level to lowest part of the roof Shed shall be kept clean and the space provided shall be on the basis of at least 0.5 sq. meter per head.

3.38 Creches:

> At a place at which 20 or more women workers are ordinarily employed, there shall be provided at least one hut for use of children under the age of 6 years, of such 1 women.

> Huts shall not be constructed of a standard lower than that of thatched roof, mud floor and walls with wooden planks spread over mud floor and covered with matting. Huts shall be provided with suitable and sufficient opening for light and ventilation. There shall be adequate provision of sweepers to keep the places clean. There shall be two "Dais" in attendance. Sanitary utensils shall be provided to the satisfaction of local medical, health and municipal or cantonment authorities. Use of huts shall be restricted to children, their attendants and mothers of children.

> Where the number of women workers is more than 25 but less than 50, the Contractor shall provide at least one Hut, one Dai to look after the children of women workers, size of the creche(s) shall vary according to the number of women workers employed. Creche(s) shall be properly maintained and necessary equipment like toys etc., provided.

3.39 Canteen:

> A cooked food canteen on a moderate scale shall be provided for the benefit of Workers wherever it is necessary.

3.40 Planning sitting and erection of the above mentioned structures shall be approved by the City Engineer and the whole of such temporary accommodation shall at all times during the progress of the works be kept tidy and in a clean and sanitary condition to the satisfaction of the City Engineer and at the Contractor's expenses. The Contractor shall confirm Generally to sanitary requirements of local medical, health and municipal or cantonment authorities and at all times adopt, such precautions as may be necessary to prevent soil pollution of the site. On completion of the works the whole such temporary structures shall be cleared away, all rubbish burnt, excreta or other disposal pits ortrenches filled in and effectively scaled off and the whole of site left clean and tidy to the entire satisfaction of the City Engineer at the Contractor's expenses.

3.41 Anti Malarial Precautions:

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

3.42 Nothing payable for extra facilities :

These are minimum facilities required to be provided. If the contractor gives any extra facility, the Thane Municipal Corporation will not compensate him for that.

3.43 Enforcement:

The inspecting Officer or any other officer nominated in this behalf by the City Engineer shall report to the City Engineer all cases of failure to comply with the provisions of these Rules either wholly or in part, specifying the penalties to be levied for such breach of these provisions.

3.44 The sum to be levied as penalty shall, however, be fixed in accordance with provision of clause 13(ii) of safety code.

4 **DEFINITIONS**:

Unless excluded by or repugnant to the context.

- (a) The expression "TMC" as used in the tender papers shall mean the Thane Municipal Corporation, Thane.
- (b) The expression "Department" as used in the tender papers shall mean the Public Works Department of the Thane Municipal Corporation, Thane.

- (c) The expression "City Engineer" as used any where in the tender papers shall mean City Engineer, of the Public Works Department, Thane Municipal Corporation Thane who is designated as such for the time being in whose jurisdiction the work lies or the officer to whom the function of the City Engineer may be subsequently transferred.
- (d) The expression Plant as used in the tender papers shall mean every machinery necessary or considered necessary by the City Engineer to execute; construct complete and maintain the works and used in altered, modified, substituted and additional work, ordered in the time and manner herein provided and all temporary materials and special and other articles of appliances of every sort, kind and description whatsoever intended or used therefor.
- (e) "Drawing" shall mean the drawings referred to in specifications and any modifications Of such drawings approved in writing by Engineer and such other drawings as may from time to time be furnished or approved in writing by the City Engineer.
- (f) "City Engineer's Representative" shall mean an assistant of the City Engineer i.e. rank of Executive Engineer who will be called as Engineer-in-charge of work notified in writing to the Contractor by the City Engineer.
- (g) The "Site" shall mean the lands and /or other places on, under, in or through which the work is to be executed under the contract including any other lands or place which may be allotted by Thane Municipal Corporation or used for the purpose of contract.
- (h) Part(s) thereof as the case may be and shall include all extra or additional, altered or substituted works as required for performance of the Contract.
- (i) The "Contract" shall mean the notice of tender, the sealed quotation and the tender documents including the tender and acceptance thereof together with the documents referred to therein, and the accepted conditions with annexure mentioned therein including any special conditions, specifications, designs, drawings, priced schedule/bill of quantities. All these documents taken

together shall be deemed to form one contract and shall be complementary to one another.

- (j) The "Contractor" shall mean the individual or firm or company whether incorporated or not, undertaking the work and shall include legal representative of such an individual or persons comprising such firm or company as the case may be and permitted, assigns of such individual or firm or company.
- (k) The "Contract sum" shall mean the sum for which the tender is accepted.
- (l) A "Day" shall mean a day of 24 hours from midnight to midnight irrespective of the number of hours worked in that day.
- (m) A "Week" shall mean seven consecutive days without regard to the number of hours worked in any day in that week.
- (n) "Excepted Risks" are risks due to riots (other wise than among contractor's employees) and civil commotion (in so far as both these are un-insurable) war (whether declared or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military or usurped power, any acts of God, such as earthquake, lightening and un-precedented floods over which the contractor has no control.
- (o) "Temporary works" shall mean all temporary works of every kind required in or about the execution completion or maintenance of the works.
- (p) "Urgent works" shall mean any measures which, in the opinion of the City Engineer, become necessary during the progress of the works to obviate any risk or accident or failure or which become necessary for security of the work or the persons working, thereon.
- (q) Where the context so requires, word importing the singular number only also include the plural number and vice-versa.

(r) Wherever there is mention of "Schedule of rates" or simply D.S.R. or Schedule Rates in this tender it will be taken to mean as The Schedule of the rate of Thane Public Works Circle, Thane.

5 LEVELLING INSTRUMENTS:

If measurement of items of the work are based on volumetric measurements calculated from levels taken before and after construction of the item, a sufficient number of levelling, instruments, staves, tapes etc. will have to be kept available by the contractor at the site of work for this purpose including theodite. All instruments must be kept as site available for use to TMC staff. Lack of such levelling instruments, staves, tapes etc., in required numbers may cause delay in measurements and the work. The contractor will therefore to keep sufficient number of these readily available at site.

6. COLLECTION OF MATERIALS:

- (i) The contractor or piece worker shall make his own arrangements to obtain the material from existing or a new quarries but before starting collection the quarry shall be got approved by the City Engineer or his representatives. The contractor or piece worker shall pay all royalty charges, compensation etc. No claims or responsibility on account of any obstructions caused to execution of the work by difficulties arising out of private owners of land, will be entertained.
- (ii) No material shall be removed from the land touching it without the written permission of the City Engineer or his authorised representative. If any material is unauthorisedly obtained from such places, the contractor or piece worker shall have to make good the damage and pay such compensation, in addition as may be decided by the City Engineer and will have to stop further collection.
- (iii) Any material that falls on any Thane Municipal Corporation Road from the carting truck or other plant etc. during, conveyance shall be immediately picked up and removed by the contractor or piece worker, failing which it be got removed departmentally at his cost. No heap shall be left prior to stacking

even temporarily on the road surface or in any way so as to cause any obstruction or danger to the traffic. The contractor or the piece worker shall be liable to pay claims or compensation etc. arising out of any accident etc. Any such materials causing obstruction or danger etc. will be got removed departmentally at his cost and no claims for any loss or damage to the material thus removed will be entertained. The contractor shall also be responsible for the damage or accident etc. arising out of any material that falls on the road or track not in charge of the department and shall attend to any complaints which may be received.

- (iv) The materials shall not be collected in place where it is liable to be damaged or lost due to traffic passing over it, to be washed away by rain or floods to be buried under the land slide etc. or to slip down of embankment or hill side etc. No claims for any loss due to these and similar cause will be entertained.
- (v) Rubble/metal shall be free from all earth, rubbish, vegetable matter and other extraneous substances and in the case of metal, screened to gauge, if so directed when ready, it shall be collected entirely clear of the roadway, on ground which has been cleaned of vegetation and levelled.
- (vi) The size of the stacks like rubble shall be of such size as may directed by the City Engineer and all stacks shall be of the same uniform size and shall be uniformly distributed over whole lengths.
- (vii) The representative of the Engineer-in-charge shall supply the contractor with statement showing Sub Km., wise quantities that will be required in the order in which the utilisation is to be done. Any excess quantity shall be removed at the expenses of the contractor before the material in the length is finally measured.
- (viii) If directed, the material shall be collected in the following order according to availability of space: (1) Rubble (2) Metal (3) Soft Murum and (4) Hard Murum, shall be collected on the side opposite to that on which soft murum has been collected. Similarly metal collected for petty repairs shall be stacked on the opposite to metal for new layer.

(ix) All Building materials shall be examined before it is spread. The labour for measurements (and check measurements wherever carried out) shall be supplied by the contractor or piece worker. If the contractor or piece worker fails to attend the measurements of material after receiving the notice from the Engineer's representative or his subordinate stating date and time of intention of measuring the work, the work shall be measured exparte and no complaint in this respect will be entertained later on. If the contractor or piece worker fails to attend the measurement of material after receiving the notice form the Engineer's representative or his subordinate stating date and time of intention of measuring the work, the work shall be measured exparte and no complaint in this respect will be entertained later on. If the contractor or piece worker fails to supply sufficient labour or the materials required at the time of measurements or check measurement, after due notice has been given to him, the expenses incurred on account of employing departmental labour or material etc. shall be charged against his account.

7. MISCELLANEOUS

- 7.1 Rates shall be inclusive of Work Contract Tax, Sales Tax and all other taxes etc. and octori as stated in para 2.12 of this chapter.
- 7.2 In case it becomes necessary for the due fulfillment of contract for the contractor to occupy land outside the department limits, the contractor will have to make his own arrangements with the land owners and to pay such rent if any payable as mututally agreed between them.
- 7.3 The special provision in detailed specifications or wording of any item shall gain precedance over corresponding contradictory provision, (if any), in the specifications, the Maharashtra P.W.D. Standard specifications where reference to such specifications is given without reproducing the details in contract.
- 7.4 It is presumed that the contractor has gone carefully through the specifications Maharashtra P.W.D, Standard specifications, and the schedule of rate and Studied the site condition before arriving at rates quoted by him.Decision of the City Engineer shall be final as regards interpretation of specification.

- 7.5 The collection and storage of construction materials at site shall be in such a manner as to prevent deterioration intrusion, of foreign matter and to ensure the preservation of their quality, properties and fitness for the work. Suitable precautions shall be taken by the contractor to protect the material against atmospheric actions, fire and other hazards. The materials likely to be carried away by wind shall be stored in suitable stores or with suitable barricades and where there is likely hood of subsidence of soil, such heavy materials shall be stored on paved platforms.
- 7.6 The contractor shall be responsible for making good the damages done to the existing property or work during construction by his men.
- 7.7 If it is found necessary from safety point of view to test any part of the structure, the test shall be carried out by the Contractor with the help of the department at his own cost.
- 7.8 Defective work is liable to be rejected at any stage. The contractor, on no account can refuse to rectify the defects merely on reasons that further work has been carried out. No extra payment shall be made for rectification.
- 7.9 In the absence of specific directions to the contrary, the rates and prices inserted in the items are to be considered as the full inclusive rates and prices for the finished work described there under and are to cover all labour, materials, wastage, temporary work, plant, overhead charges and profits, as well as the general liabilities, obligations and risks arising out of the General Condition of Contract.
- 7.10 The quantities set down against the item in the Schedule "B" are only estimated quantities of each kind of work included in the contract and are not to be taken as a guarantee that the quantities .in the schedule will be carried out or required or that they will not be exceeded or reduced.
- 7.11 All measurements will be made in accordance with the methods indicated in the specifications and read in conduction with the General, Conditions of Contract and as elaborated in the Technical specifications, incorporated in the tender document.

- **7.12** Protection of underground telephone cable and aerial telephone wires and Poles, transmission towers, electrical cables and water supplying lines is the responsibility of the contractor.
- 7.13 During the execution of work, it is likely that the contractor may meet with telephone cable, electrical cables, water supply lines, effluent pipe line, oil pipe line etc. it will therefore be the responsibility of the contractor to protect them carefully. All such cases should be brought to the notice of the City Engineer by the contractor and also to the concerned Department. Any damage whatsoever done to these cables and pipe lines by the Contractor shall be made good by him at his cost.

8 LINING OUT:

The Contractor shall provide free of charge all labour and material and instruments required for lining out, surveying, inspection decided by the City Engineer as considered necessary for the proper and systematic execution of the work.

The Department will render necessary assistance. Likewise, only one Bench Mark with definite value of R.L. will be shown to contractor who shall have to provide for a network of temporary bench mark all along the road and near C.D. works for executing the work. The contractor shall be responsible for the provision, accuracy and maintenance of temporary Bench Mark. He shall be responsible for the correctness of the position, levels, dimension and alignments of all parts of the building works and provisions of necessary instruments and labour in connection with related works. Any errors in position, levels, dimension and alignment, etc. shall be rectified, by contractor at his expenses. The checking or inspection of any setting out of any line or level or work by City Engineer or his representative shall not in any way relieve the contractor of his responsibility for correctness thereof. The contractor shall carefully protect and preserve all bench mark, side rails pegs and stones etc., marking out the centre lines of C.D. works, necessary approaches etc. shall be done by the contractor at his own cost as directed by the City Engineer or his representative.

9. PRIORITIES OF WORK TO BE EXECUTED:

Priorities for items to be executed shall be determined periodically keeping in view the final time limit allowed for the work.

10. TESTS:

- 10.1 The contractor shall at his own cost arrange to carry out the all tests of materials which are to be used on the work. The tests will have to be carried out either in the field laboratory or in an T.M.C laboratory. Routine Test shall mean testing of various grade of ready mix concrete on compressive strength machine.
- 10.2 Department will also carry out some of above mentioned tests independently in Laboratory and testing charges thereof will be borne by the contractor. Also the work portion where test results are not satisfactory will have to be removed and redone at the cost of the contractor.
- In case of materials procured by the Contractor, testing as required by the codes and specifications, the same shall be arranged by him at his own cost. Testing shall be done in the presence of an authorised representative of the City Engineer at the nearest approved Laboratory. If additional testing other than as required by specification is ordered, the testing charges, shall be borne by the contractor.
- 10.4 15 % of the rate of the item shall be withheld and shall be released only after receipt of satisfactory test results whenever specified.

11 ELECTRIC POWER & TELEPHONE FACILITY:

- 11.1 Arrangements for obtaining Electric Power connection will have to be made by the contractor at his own cost for construction purpose.
- 11.2 Telephone facility on site should be provided upto the completion of work in the site office by the contractor at his own cost.

12 PRELIMINARY ARRANGEMENTS:

12.1 The Contractor except as provided in schedule "B" which follows, shall, if necessary construct, temporary roads and maintain these in proper condition till the

completion of the work at his own cost. If necessary, he shall also, at his own expenses make necessary arrangements for acquisition of land required by him in connection with execution of the work.

- 12.2 The Contractor shall have to make at his own cost all preliminary arrangements for labour, water, electricity and materials etc., immediately after getting the work order. No claim for any extra payment or application for extension of time on the grounds of any difficulty in connection with the above matter, will be entertained.
- 12.3 The contractor shall at his own expenses engage watchman for guarding the materials and plants and machinery and the work during day and night against any pilferage or damages and also for prohibiting trespassers or damage to them.
- 12.4 The Contractor shall have to make his own arrangements for water required for watering the embankment or for any other purpose.

13. INSPECTION:

- 13.1 The contractor shall inform the City Engineer in writing when any portion of the work is ready for inspection giving him sufficient notice to enable him to inspect the same without affecting the further progress of the work. The work shall not be considered to have been completed in accordance with the terms of the contract until the City Engineer shall have certified in writing to that effect. No approval of materials or workmanship or approval of part of the work during the progress of execution shall bind the City Engineer or in any way affect him even to reject the work which is alleged to be completed and to suspend the issue of his certificate of completion until such alternations and modifications or reconstruction have been effected at the cost of the contractor as shall enable him to certify that the work has been completed to his satisfaction.
- 13.2 The contractor shall provide at his cost necessary ladders and such arrangements as to provide necessary facilities and assistance for proper inspection of all parts of the work at his own cost.
- 13.3 The contractor after completion of work shall have to clean the site of all debris and remove all unused materials other than those supplied by the Department and all

plant and machinery, equipment, tools etc., belonging to him within one month from the date of completion of the work, or otherwise the same shall be removed by the Department at his cost and the contractor shall not be entitled for payment of any compensation for the same.

14 PLANT:

All constructional plant, provided by the contractor shall when brought on to the site be deemed to be exclusively intended for the construction of this work and contractor shall not remove the same or any part thereof (say for the purpose of moving it from one part of the site to another or the repairs etc.) without the consent in writing of the City Engineer which shall not be unreasonably withheld.

15 AUTHORITIES TO THE CITY ENGINEER REPRESENTATIVE:

- 15.1 The duties of the representative of the City Engineer are to watch and supervise the work till to test and examine any materials to be used or workmanship employed in connection with the works.
- 15.2 The City Engineer may from time to time, in writing delegate to his representative any powers and authorities vested in the City Engineer and shall furnish to the contractor a copy of all Such delegations of powers and authorities. Any written instructions of approval given by the representative of the City Engineer to the contractor within the terms of Such delegations (but not otherwise) shall bind the contractor and the department as though it had been given by the City Engineer provided always as follows:-
- 15.3 Failure of the representative of the City Engineer to disapprove any work or materials shall not prejudice the power of the City Engineer thereafter to disapprove such work or materials and to order the pulling down, removal or breaking up thereof.
- 15.4 If the contractor shall be dissatisfied with any decision of the representative of the Engineer-in-charge, he shall be entitled to refer the matter to the Engineer incharge, who shall there upon confirm reverse or vary such decision.

16. EXCEPTED RISKS:

- 16.1 The contractor shall be under no liability whatsoever by way of indemnity or otherwise for or in respect of destruction of or damage to the works (save work condemned under the provisions of specifications and conditions of this tender prior to the occurence of any excepted risk hereinafter mentioned) or temporary works or to property whether of the Department or third parties or in respect of injury or loss of life which is the consequence whether direct or indirect, war hostilities (whether war be declared or not) invasion, act of foreign enemies, rebelition, revolution, insurrection or military of usurped power, civil war or riot, commotion or disorder otherwise than among the contractor's own employees or his piece worker and subagencies (hereinafter comprehensively referred to as "the said excepted risks") and the Department shall indemnify and save harmless the contractor against and from the same and against and from all claims, demands, proceedings, damages, costs charges and expenses, whatsoever arising thereout or in connection therewith and shall compensate the contractor for any loss of or damage to property of the contractor used for intended to be used for the purpose of the works and laying at site of work and occasioned either directly or indirectly by the said excepted risks.
- 16.2 If the works sustain destruction or drainages by reasons of any of the said excepted risks, the contractor shall be entitled to payment for any permanent works and for any materials so destroyed or damaged and shall be paid by the department the cost of making good tiny such destruction or damages whether to the works or Temporary works and for replacing,, or making good Such materials so far as may be necessary for the completion of the works on a prime costs basis as the City Engineer may certify to be reasonable. The contractor shall lodge his claim, in writing, supported by City Engineer immediately, but not later than 30 days of such occurrence of damage to works by excepted risk.
- 16.3 Destruction, damage injury or loss caused by the explosion or impact whenever and wherever occurring of any mine, bomb, shell, grenade or other projectile missile or ammunition or explosive orwas resulting from action described in 19.1 above shall be deemed to be a consequence of the said Excepted Risks.

17. ADDITIONAL WORKS SPECIFICACTIONS:

- During the course of the execution, payment for certain items such as R.C.C. works and the like which are done in stages, shall be made at part rates which shall be decided by the City Engineer. Similarly in case if certain component or components of an item are decided to be deleted, payment for the remaining parts of the items shall be made at reduced rates for such items which shall be decided by the City Engineer, either on the basis of market rates or schedule rates or accepted tender rates whichever are lowest for such component or components.
- 17.2 It is to be definitely and clearly understood that the specification stipulated shall be rigidly enforced and no relaxation shall be allowed. Extra charges or claims in respect of extra works shall not be entertained unless they are clearly outside the scope of the item and its specifications to which they relate or unless such works are ordered in writing by the City Engineer and claimed for in specified manner before the same is taken in hand.
- 17.3 If additional work is executed then payment will be made for the additional work.

18 CONTRACTOR'S LIABILITY AND INSURANCE:

- 18.1 From commencement to completion of the works, the Contractor shall take full responsibility for the care thereof and for taking, precaution to prevent loss or damage to the greatest extent possible and shall be liable for any damage or loss that may happen to the works or any part thereof from any cause whatsoever (save and except the Excepted Risks) and shall at his own cost repair and make good the same so that at completion, the works shall be in good order and condition and in conformity in every respect with requirements of the contract and instructions of the City Engineer.
- 18.2 Without limiting his obligations and responsibilities under clause 25.2 the contractor shall insure in the joint name of the Thane Municipal Corporation and the contractor against all loss or damage from whatever cause (other than the Excepted Risks) for which he is responsible under the terms of the contract and in Such manner that the Thane Municipal Corporation and the contract are covered during the period of construction of the works and the defects liability period for loss or damage arising from a cause occurring prior to the commencement of the damage caused by the Contractor in the course of any operation carried Out by him

for the purpose of complying with his obligations under clause 20 of Printed B-1 Tender Form (regarding Defect Liability).

- (i) The works and the temporary works to the full value of such works executed from time to time.
- (ii) The materials, constructional plant and other things brought to site by the in contractor to the full value of such material, constructional plant and other things.
- 18.3 The Contractor shall indemnify and keep indemnified the Thane Municipal Corporation against all losses and claims for injuries or damages to any person of contractor & TMC supervising the work or any property whatsoever which may arise out of or in consequence of the construction and maintenance of the works and against all claims, demands, proceedings, damages, accidents, costs, charges and expenses whatsoever in respect of or in relation thereto provided always that nothing herein contained shall be deemed to render the contractor liable for in respect of or to indemnify the Department against any compensation or damage caused by "EXCEPTED RISKS".
- 18.4 Before commencing execution of the work, the contractor shall, without in anyway limiting his obligations and responsibilities under the conditions, insure against any damage, loss or injury which may occur to any property (including that of Department) or to any person (including any employee of Department) by or arising out of carrying out of the Contract.
- 18.5 The contractor shall at all times indemnify the Department against all claims, damages of compensation under the provisions of payments of wages Act, 1936, Minimum Wages Act, 1948, Employment Liability Act, 1938, Industrial Disputes Act, 1947, and the Maternity Benefit Act, 1961 and Inter State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979 or any modifications thereof or any other law relating thereto, any rules made there under from time to time or as a consequence of any accident or injury to any workmen or other person in or about the works, whether in the employment of the contractor or not, save and except where such accident or injury has resulted from any act of the Department, their agents or servants and also against all costs, charges and expenses

or any suit, action or proceedings arising out of such accident or injury and against all sum or sums which may with the consent of the contractor be paid to compromise or compound any such claim without limiting his obligation and liabilities as above provided the contractor shall insure against all claims, damages or compensation payable under the workmen's Compensation Act, 1923 or , any modifications thereof any other law relating thereto.

- 18.6 All the aforesaid insurance policies shall provide that they shall not be canceled till the City Engineer has agreed to their cancellation.
- 18.7 The contractor shall prove to the City Engineer his authorised representatives from time to time that he has taken out all the insurance policies referred to above and has paid the necessary premium for keeping the policies alive till the expiry of the Defects Liability period.
- 18.8 The Contractor shall ensure that similar insurance policies are taken out by his sub-contractor (if any) and shall be responsible for any claims or losses to department resulting from their failure to obtain adequate insurance protection in connection thereof. The Contractor shall produce or cause to be produced by his sub-contractors (if any) as the case may be relevant policy or policies and premium receipts as and when required by the City Engineer.
- 18.9 If the Contractor and/or his Sub-contractor (if any) shall fail to effect and keep in force the insurance referred to above or any other insurance which he/they may be required to effect under the terms of the contract then in any such case department may without being bound and to effect and keep in force any such insurance and pay such premium or premium as may be necessary for that purpose and from time to time deduct the amount so paid by the department from any moneys due or which may become due to the contractor or recover the same as a debt due from the contractor.

19 PRESERVATION OF PROPERTY:

The contractor shall take all reasonable precaution for the protection and preservation of any or all existing road side trees, drains, sewers or other surface drain pipes, conduits and any other structure under or above ground which may be affected by the constructions, operations and which in the opinion of the Engineer shall be continued in use without any change. Safegaurds taken by the contractors in this respect shall be got approved by him from the engineer. However, if any of these objects is damaged by reason of the contractor's negligence, it shall be replaced or restored to the original condition at his expense.

20 LIGHTING OF EXCAVATION:

All excavations, trenches, obstructions, materials etc. taken, except or deposited in connection with the works would be sufficiently lighted at night in order to guard against any damage or danger to the traffic and to take all precautions to keep all the lamps lighted all night for the guidance of the traffic in the following manner

- 1. All lamp must be kept at a height of about 1 m to 1.25 m (3' to 4' at strategic points).
- 2. All lamps should be red in colour.
- 3. All lamps across, directions of traffic should be spread at a distance of not more than 2 m (7') apart.
- 4. All lamps alone the line of traffic should be spaced not more than 9m to 15m (30' to 40') app.
- 5. To take such other measures as may be directed by the engineer from time to time for the safety of the traffic.
- 6. The contractor shall make all proper provisions for protecting the work by providing portable barricades with flashers otherwise known as blinkers. Specifications of blinkers are as follows
 - a) Series 6100 blinker unit consisting of a solid state osillator dryer circuit using silicon transistor, tropicailised printed circuit card, driving a 2.4 watt filament lamp in a screw holder-.
 - b) The unit contains 4 flash light cells (type 1.5 v) in a battery compartment in the base removable bottom to facilitate quick battery change.
 - c) The assembly housed in a specially shaped handy box, ms fabricated, printed in attractive traffic yellow with regulation slips on the visible

base, bakelite handle on top for carrying. The side fitted with prefocussed moulded polystyrene lenses red or aiiiber having prismatic inner surfaces for efficient light transmission. Visibility approximately 150 meterss on dark night.

In the event of the contractors not complying with the provisions of the clauses, the engineer may without notices to the contractor put up the barricades or improve upon the same or provide or improve the lighting to adopt such procedures as may be adopted by the engineer shall be born by the contractor shall be charged a penalty of Rs. 100/- per day till compliance of these requirements.

Chapter-IV

Special Conditions of Contract

CHAPTER - IV

SPECIAL, CONDITIONS OF CONTRACT

1. SPECIAL CONDITIONS:

The lumpsum rates quoted by the contractors should, unless otherwise specified also include compliance with conditions of the contract and the supply of the following:-

- A General works such as out clearance of site before commencement and after the completion of the work. Helping to Slum dwellers to shift from hutment to Transit camp & Transit camp to Building.
- B. A detailed programme for the construction and completion of the works, including preparing and supplying charts showing clearly the important events, mile stones and durations of constructional activities and for the activities of submission and approval of materials procurement and erection of special material/equipment etc. And for all activities of the contractors that are likely to affect the progress of work, including updating of all such activities on the basis of the instructions given at the periodic site inspections or as directed by the City Engineer.
- C. Testing of ready-mix cement concrete or cement concrete as required under their specifications and furnishing test reports/certificates.
- D. The sand to be used for construction work shall be got tested as directed by the City Engineer before commencement of work.
- E. The rubble to be used in the rubble work to be got approved from Engineer-incharge.
- F. Any other data which may be required as per these specifications or the conditions of contract or any other annexure/schedules forming part of the contract.

G. Any other item of work which is not specifically provided in the Bill of Quantities but which is considered necessary by the City Engineer for complying with the provisions of the Contract.

2. SUSPENSION OF WORKS:

The Contractor shall, on the written order of the City Engineer, suspend the progress of the works of any part thereof for such time or times in such manner as the City Engineer may consider necessary and shall during such suspension properly protect and secure the work, so far as it is necessary in the opinion of the City Engineer.

If the suspension in sub-clause is ordered for no fault of the Contractors. the Contractor shall be entitled to a reasonable extension of time.

3. **DEFECT LIABILITY:**

If during the period of 24 Twenty Four months from the date of completion as a) certified by the City Engineer pursuant to clause 14 of the Contract or 24 Twenty Four months after commissioning the work whichever is earlier in the opinion of the City Engineer the said work is defective in any manner whatsoever the Contractor shall forthwith on receipt of notice in that behalf from the City Engineer duly commence execution and completely carry out at his cost in every respect all the work that may be necessary for rectifying and setting right the defects specified therein strictly in accordance with and in the manner prescribed and under the supervision of the City Engineer. In the event of the Contractor failing or neglecting to commence execution of the said rectification work within the period prescribed thereof in the said notice. The City Engineer shall get the same executed and carried out departmentally or by any other agency at the risk on account at the cost of the Contractor and the Contractor shall forthwith on demand pay to the Thane Municipal Corporation of which the certificate of the City Engineer shall be final and binding on the Contractor. Such cost charges and expenses shall be deemed to be arrears of land revenue and in the event of the Contractor failing or neglecting to pay the same on demand as aforesaid, without prejudice to any other rights and remedies of the Corporation the same may be recovered from the contractor as arrears of land revenue. The Corporation shall also be entitled, to deduct the same from any amount which may then be payable or which may thereafter become payable by the Corporation to the Contractor either in respect of the said work or any other work whatsoever or from the amount of the Security Deposit retained by the Corporation.

b) If any time before the Security Deposit or any other part thereof is refunded to the Contractor it shall appear to the City Engineer or his subordinate in charge of the work, that any work has been executed with unsound, or of a quality inferior to that contracted for, or are otherwise not in accordance with the contract, it shall be lawful for the City Engineer to intimate this fact in writing to the Contractor and then not withstanding the fact that the work, materials or articles complained of, may have been inadvertently passed, certified and paid for, the Contractor shall be bound forthwith to rectify or remove and reconstruct the work so specified in whole or in part, as the case may require or if so required, shall remove the materials or articles at his own charge and cost and in the event of his failing to do so within a period to be specified by the City Engineer in the written intimation aforesaid, the Contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day not exceeding 10 days, during which the failure so continue and in the case of any such failure the City Engineer may rectify or remove and re-execute the work or remove and replace the materials or articles complained of as the case may be at the risk and expense in all respect of the Contractor. The City Engineer should consider that any such inferior work or materials as described above may be accepted or made use of it shall be within his discretion to accept the same at such reduced rates as he may fix therefor.

4. **SUB-LETTING OF WORK:**

The Contractor shall not be permitted to sub-let any of the work without permission of the City Engineer of Thane Municipal Corporation. If City Engineer gives permission for any part of the work to sub-let, the main Contractor will take full responsibility for the quantity of the work before sub-letting the work Contractor must submit the name of the Sub-contractor proposed for the approval of the City Engineer.

5. COMPLETION CERTIFICATE:

The work shall not be considered to have been complete in accordance with the terms of contract until the City Engineer shall have certified in writing to that effect. No approval of material or workmanship or approval of part of the work during the process of execution shall bind the City Engineer or in any way prevent him from even rejecting the work which is claimed to be complete and to suspend the issue of his certificate of completion until such alterations and modification or reconstruction have been effected at the cost of the Contractor as shall enable him to certify that the work has been completed to his satisfaction.

After the work is completed, the Contractor shall give notice of such completion to the City Engineer and within 30 days of receipt of such a notice the City Engineer shall inspect the work and if there is no defect in the work, shall furnish the Contractor with a certificate indicating the date of completion. However, if there are any defects which in the opinion of the City Engineer are rectifiable he shall inform the Contractor the defects noticed. The Contractor after rectification of such defects shall then notify the City Engineer and the City Engineer on his part shall inspect the work an issue the necessary completion certificate within 30 days, if the defects are rectified to his satisfaction and if not he shall inform the Contractor indicating defects yet to be rectified. The time cycle as shown above shall continue.

In case defects noticed by the City Engineer which in his opinion are not rectifiable but otherwise work is acceptable at reduced payment, work shall be treated as completed. In such case completion certificate shall be issued by the City Engineer within 30 days, indicating the un-rectifiable defects for which specified reduction in payment is being made by him.

The issue of completion certificate shall not be linked up with the site clearance on completion of the work.

6. EXTRA ITEM / EXTRA ELEMENT OF WORK :

a) If the Contractor is of the opinion that any work or part of the work is beyond the meaning and spirit of any of the tender items and that it cannot be accommodated within the tender items of the original the Contractor shall before carrying out /

proceeding with such extra work being the fact to the notice of the City Engineer / Consultant, specifying the part particulars of the item / element of item.

The rate for each of such extra work shall be worked out by the City Engineer / Consultant, on the basis of prices of material and labour prevailing at the time of execution of the work plus 10% for Contractor's profit and 5% overheads. The decision of the City Engineer / Consultant, fixing the rate, and as to the prevailing market rates of materials and labour and also the quantum of materials and labour required per unit measurement of such extra work / element of work shall be final and, binding on the Contractor.

7. **POWER TO VARY WORKS:**

- a) The City Engineer / Consultant, may from time to time during the execution of the contract vary, increase or reduce the contract work or any part thereof, and may order any portion of the work executed or partly executed to be removed or altered, and the Contractor shall be bound to carry out the varied work. In case of such removed or altered, and the Contractor shall be bound to carry out the varied work. In case of such variation when any items of work to be executed is not found to be identical or equivalent to any of the tender items, a rate will be worked out by the City Engineer / Consultant, on the basis of the rate of the nearest tender item. The opinion of the Engineer-in-charge, as to whether the rate could be so derived from the nearest tender item shall be final and binding on the contractor. If it is not possible to fix / derive such rates in the manner aforesaid than the rate for such varied item shall be worked out by the City Engineer / Consultant, on the basis of prices of material and labour prevailing at the time of execution of that work plus 10% for Contractor's proft. The decision of the City Engineer / Consultant, as to the prevailing market rate of materials and labour and also the quantum of materials and labour per unit measurement of such varied work shall be final and binding on the Contractor.
- In cases where above procedure cannot be followed, the City Engineer / Consultant, may direct the Contractors in writing to carry out such varied work on day-work-basis which shall be binding on the Contractor. In such an event, the Contractor shall deep a joint daily account of materials consumed and labor utilised, which shall be signed daily by the authorised representative of both the parties. On

completion of such varied work the Contractor shall be entitled to actual payment made by him to the material suppliers and labourers plus 10% for profit, only on his submission of complete account of materials and labour utilised, supported with vouchers of actual payments made by him.

8. MATERIALS AND WORKMANSHIP:

- Samples of all materials shall be got approved by the Contractor from the City Engineer / Consultant, before the order for the materials is place by him or by the sub-contractor with suppliers. If thought necessary by the City Engineer / Consultant, the materials shall be tested by the Contractor at his own cost to find whether they are in accordance with the Specification. All bills, invoices, vouchers and test certificates which is in the opinion of the Incharge Engineer are necessary to convince him as to the qualify of the materials or their suitability, shall be produced for his inspection on requisition. Any materials that hae not been found acceptable by the City Engineer / Consultant, will be rejected forthwith and shall be removed from the site by the contractor at his own cost.
- b) All the work shall be executed with the materials specified or their substitutes accepted by the City Engineer / Consultant, and the workmanship will be of the standard approved by the City Engineer / Consultant. All materials and works considered by the City Engineer / Consultnat, to be unsound or not acceptable must be immediately replaced by the Contractor at his own expenses to the satisfaction of the City Engineer / Consultant. The City Engineer / Consultant, shall be at liberty to suspend any portion of the work, which in his opinion is not being executed properly according to his instructions and/or specifications. The Contractor shall not be entitled to any compensation for loss of time or any additional expenditure therefore. In the event of using a substitute material accepted by the Contractor City Engineer / Consultant, the rate of the item shall be adjusted where necessary after adding or substracting the difference in cost of materials and labour involved as the case may be. The decision of the City Engineer / Consultant, in respect of the difference in the cost of materials and labour, in question, shall be final and bindong on the Contractor.

- c) No materials or stock or implement or tools or plants not connected with the work under the contract shall be brought and kept on the site of work by the contractor or his sub-contractors.
- d) All materials, stock implement, tool and plants brought and delivered on site of work any time after the Contractor's tender is accepted shall and must not be at any time after the Contractor's tender is accepted shall and must not be at any time on any pretext whatsoever be sold or made away with or removed from the site without the previous written permission of the City Engineer/Consultant.
- e) The Contractor shall arrange at his own cost for the transport of all labour and materials to the site of work (except in cases where the Department agrees to deliver must) and, wherever and whenever necessary, he shall construct service roads at his own cost.
- f) Unless otherwise specified the materials to be used and/or tests to be performed shall be as per the latest version of the Indian Standard Specification published.
- g) If it shall appear to the City Engineer/Consultant at any time that any work has been or is being executed by the contractor with unsound, imperfect or unskilled workmanship, or with materials of inferior quality, the Contractor shall, on demand in writing from the City Engineer / Consultant, forthwith rectify or remove or reconstruct the work, remove and replace the materials or the articles of inferior quality and provide other proper and suitable materials of articles with skilled workmanship at his own cost notwithstanding that the same may have been inadvertently passed, certified and pair for. In the even of failure on the part of the Contractor to do so within the period specified by the City Engineer / Consultant, the City Engineer / Consultant may on expiry of the specified period, rectify or remove and execute the work or remove and replace the materials complined of, as the case may be entirely at his discretion the decision of the City Engineer / Consultant as to any question arising under this clause shall be final, conclusive and binding on the Contractor.

9. CONTRACTOR'S SUPERINTENDENT AND WORKMAN:

- a) The Contractor on or after the award of the contract and prior to actual commencement of the work shall name and depute a qualified engineers as specified in Schedule for deployment of Engineer for the work having sufficient experience in carrying out the work as described in the contract as his representative, who shall be deemed to have been duly and proper authorised by the Contractor, in the field as if they have all been performed by the Contractor himself and to sign all field documents on behalf of the Contractor. The said representative shall be present on the site during all working hours and shall be prepared to receive from time to time orders and instructions given by the City Engineer / Consultant and/or his representatives.
- b) The Contractor shall also provide to the satisfaction of the City Engineer / Consultant sufficient and qualified staff to supervise the execution of the work to ensure work of best quality. Additional and properly qualified supervisory staff shall be employed by the Contractor if deemed necessary by the City Engineer / Consultant, without additional charge on account thereof.
- c) If and whenever any of the Contractor's or Sub-Contractor's agents, assistance, foreman or other employees staff including the said representative shall in the opinion of the City Engineer / Consultant be guilty of any misconduct or be incompetent or insufficiently qualified or neglient in performance of their duties or if in the opinion of the City Engineer / Consultant it is undesirable for administrative or any other reason for such person or persons to be employed for the work under the contract, the Contractor if so directed by the City Engineer / Consultant in writing, shall at once remove such person or persons from the wrk and replace him/them immediately at his own expenses by a qualified and competent substitute/s. No claim for compensation for loss or damage shall be raised by the Contractor on this account.

10. RIGHT TO WITHHOLD CERTIFICATES:

The City Engineer / Consultant shall have power to withhold any certificate if the works or any part thereof are not being, carried out to his satisfaction, or if the work is taken over by the City Engineer / Consultant as provided hereinabove.

11. EXTENSION OF TIME FOR COMPLETION:

- a) If the completion of the work is delayed on the account of extra / varied / additional work of any kind or other special circumstances such as serious loss or damages by fire, civil comotion, strike, stoppage of work or lock out affecting any of the trades employed in the work, non-availability of raw material to be supplied by undertaking non-delivery of site either complete or partial, non supply of drawings, reduced scope to the contractor is the contractor's execution of the work occurring due to the activities of the other contractors of the Department, as also the activities of Department or of the other public utility concern on the site of work, or on the account of any cause including orders of the City Engineer / Consultant and any other circumstances of any kind which may occur be such as could be adjusted beyond the control of the contractor, fairly entitling the contractor to extension of time for completion, such delay shall not violate the contract and the contractor shall not be entitled for any compensation or loss or damages other than extension of time. The Consultant in concurrence with T.M.C. will determine the amount of such period of extension and grant the same provided the contractor shall have applied for the in writing within 14 days of the happening of such event causing the delay for which the contractor considers himself not to be responsible. No withstanding this, the contractor shall use his best endeavours to prevent or make good the delay and shall do the all that may be reasonably required to the satisfaction of the City Engineer to proceed with the work expeditiously. The City Engineer shall grant such extension from time to time during the progress of work or after completion of the work. Not granting the extension before the stipulated date of completion or extended date of completion shall not violate or invalidate the contract.
- b) The rates quoted by the contractor shall include and cover all the possibilities of delay and interference with the contractor's execution of the work which may occur from any cause, including the orders of the City Engineer / Consultant, and on account of the extension of time granted due to various reasons and all other possible and probable causes of delay, irrespective of the fact whether such causes are beyond the control of the contractor or otherwise.

12. CONTINUED LIABILITY OF THE CONTRACTOR:

In case in which any of the powers conferred upon the City Engineer / Consultant under any of the Clauses of these condition shall have become exercisable and the same has not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding, be exercisable in the event of any further case of default non-observance / non-performance by the contractor for which by any clause or clauses hereof he is liable.

13. THE CITY ENGINEER OR ENGINEER INCHARGE / CONSULTANT NOT TO BE MADE PARTY TO ANY SUIT:

The City Engineer or the Consultants hall not be made a party to or be required to defend or answer any action suit or proceedings at the instance of the Department or the Contractor nor shall they or either of them be compeliable by any proceeding whatever to answer or explain any matter relating to any certificate or award made by the City Engineer or to state or show how or why on what ground he settled, ascertained or determined or omitted to settle, ascertained or determined any matter whatsoever, not shall be compeliable to state or give his reasons for any proceedings whatever which he may take or direct to be taken in or about premises or show to any person or persons for any purpose whatsoever any documents, calculation or memorandum whatsoever in his possession or power relating thereto.

14. PHOTOGRAPHS:

The Contractors shall arrange at his cost to take coloured photographs directed as by the City Engineer/Consultant during the progress of the work and or after completion of work

The postcard size copies of each photograph together with the original shall be given to the City Engineer and Consultant free of cost.

15. CONSULTANT'S DECISION:

The decision taken by the consultant, or the orders issued by him in respect of all contract works governed by these General Conditions shall be deemed to have been taken / issued by the Department.

16. PERT/BAR CHART:

PERT/Bar Chart shall be furnished while submitting the tender and before starting the work, programme shall be got approved from City Engineer of T.M.C. The contractor shall revise PERT programme as well as Bar Charts depending upon site problems and review the same at very close intervals of 15 days. The PERT programme and Bar Charts shall give detail gainsful employment of mobilisation and for their flexibility depending upon availability or otherwise of work front.

There shall be sufficient documentation of the work in the form of test records, registeres, challans survey records of levels, photographs etc. at the cost of contractor. The contractor shall provide necessary registers for recording test results jointly, forms, stationery etc. at his cost. All the test results in field and in the laboraroty shall be signed by representative of contractors.

17. APPROVAL OF MATERIAL IN WRITING AND PRESERVATION OF SAMPLES:

For all the items first samples must be got approved from the Engineer Incharge. Approved samples shall be preserved in sealed plastic containers at the site office in cup-board. No work shall be done unless approval in writing is given by the Engineer for quality of material to be used. The samples of material to be used shall be available in the office. Centering before bringing to site shall be got approved in writing from Engineer Incharge. The first concreting shall be done in the presence of Engineer-in-charge only and it is to be shown to Engineer Incharge after removal of shuttering. After he approves the quality of finish in writing. Then further concreting shall be done.

18. Centering to be used for the R.C.C. work shall be of steel plate or of new marine ply only. No wooden shuttering will be allowed for the concreting of R.C.C. work. Concreting work shall be done with Readymix and vibrator with proper curing arrangements. All the concrete shall be foam finished and no plastering shall be allowed to be done. The slab concrete shall be as per approved mix desing only. The reinforcement bars shall be of tested quality. Proper cover (plastic mould / precast concrete blocks of approved thickness as per requirement of cover for R.C.C. work as mentioned in I.S. specification and as per directions of Engineer-

incharge) shall be provided. The top and bottom surface shall be form finished. Only river sand will be allowed to be used having silt content less than 4%. Honey combed surface will be rejected, strictly.

19. No sub-standard work will be accepted and it will stand rejected if it does not meet specifications of B.I.S. and red book.

20. Posting of Qualified / Experienced Engineers on Site :

The Contractor shall post sufficient number of experienced Engineers on Site. Engineers to be appointed on site shall be with approval of Engineer in charge of the work from T.M.C. The contractor shall appoint the Engineers Out of which at least one shall be Project Manager (B.E.Civil & min.15 years experience in building & Infrastructure works). One Sr. Engineers (B.E.Civil & min.10 years experience in building & Infrastructure works). Two Jr. Engineers (Dip. in Civil & min.5 years experience in building & Infrastructure works). and sufficient qualified supervisory staff as stated in concern chapter for day to day quality and quality control. Checking at all stages of the construction phases etc.

21. Safety of Traffic during execution :

During the construction work proper diversion shall be maintained. Proper indicator board shall be provided for safety of traffic and labour, staff working on site. Proper insurance of staff labour be drawn as indicated in contract. Safety during construction shall be given top priority and to the entire satisfaction of Engineer in charge.

22. APPROVAL FOR CEMENT/STEEL/OTHER BUILDING AND PLUMBING AND SANITATION MATERIALS:

The steel, cement, other building, plumbing and sanitation materials shall be of approved make as per instructions of Engineer incharge in writing.

23. Minimum Cement content shall follows:STANDARD CEMENT CONSUMPTION

Unit	Item		Requirement	
			in bags	
1.	a) Cement concrete (1:2:4) without finishing	6.27		
2.	b) Cement concrete (1:2:4) with finishing	Cum.	6.40	
3.	Cement concrete (1:3:6)	Cum.	4.42	
4.	Cement concrete (1:4:8)	Cum.	3.40	
5.	Cement concrete (1:5:10)	Cum.	2.65	
	REINFORCED CEMENT CONCRETE			
6.	Cement Concrete M (1:2: 4)	Cum.	6.27	
7.	Cement Concrete M-20 (1:1 ½:3)	Cum.	7.60	
8.	Cement Concrete M-25	Cum.	8.50	
9.	Cement Concrete M-30	Cum.	9.50	
10.	Cement Concrete M-35	Cum.	10.00	
11.	Cement Concrete M-40	Cum.	10.50	
	BRICK WORK			
12.	B.B. Masonry in C.M. 1:4 proportion Cum.		1.65	
13.	B.B. Masonry in C.M. 1:5 proportion Cum. 1.5		1.52	
14.	B.B. Masonry in C.M. 1:6 proportion Cum. 1.44		1.44	
15.	B.B. Masonry in C.M. 1:8 proportion	Cum.	1.13	
16.	Half brick Masonry in G.M. 1:4 proportion	Cum.	0.22	
	STONE MASONRY			
17.	U.C.R.S. masonry in C.M. 1:6 proportion	Cum.	1.77	
18.	U.C.R.S. masonry in C.M. 1:5 proportion	Cum.	1.94	
19.	C.R.S. masonry in G.M. 1:5 proportion	Cum.	1.80	
20.	R.S. masonry in C.M. 1:6 proportion	Cum.	1.50	
	DAMP PROOF COURSE			
21.	Providing and laying damp proof course 50mm Sqm. 0.35			

	thick in (1:2:4)			
22.	Finishing the terrace slab 20mm thick in G.M. 1:3	Sqm.	0.20	
	proportion			
23.	Providing water proofing to W.C. and bath	Sqm.	0.276	
24.	Providing water proofing to W.C. thick single coat	Cum.	4.00	
	in C.M. 1:4			
25.	Providing internal cement plaster 6mm thick single	Sqm.	0.045	
	coat in C.M. 1:3			
26.	Providing cement plaster 6mm thick single coat in	Sqm.	0.07	
	C.M. 1: 3			
27.	Providing cement plaster 12mm thick in single coat	Sqm.	0.09	
	in C.M. 1:5			
28.	do in C.M. 1:4 Proportion	Sqm.	0.11	
29.	do in C.M. 1: 3 Proportion	Sqm.	0.14	
30.	Providing Cement plaster 20mm thick in single coat	Sqm.	0.17	
	in C.M. 1:3			
31.	-do in C.M. 1:5 proportion in two coats	Sqm.	0.14	
32.	-do in single coat in C.M. 1:5 proportion	Sqm.	0.14	
33.	-do in two coat in C.M. 1:4 proportion	Sqm.	0.17	
34.	-do in two coats in C.M. 1 :3 proportion Sqm. 0.22			
35.	-do 25mm in two coats in C.M. 1 :3 proportion Sqm. 0.22			
36.	Sand faced plaster in two costs	Sqm.	0.22	
37.	Rough cast plaster in two coats in C.M. 1: 4 Sqm. 0.22		0.22	
	proportion.			
38.	Providing flush grooving pointing in C.M. 1 : 3 for	Sqm.	0.03	
	brick work			
39.	do—to stone masonry in C.M. 1:3 proportion	Sqm.	0.025	
40.			0.05	
41.			0.04	
	stone masonry			
42.	Providing vee pointing for stone masonary in C.M.	Sqm.	0.03	
	1:3			
43.	Providing fine finish 1.5 mm thick over green	Sqm.	0.044	
	surface			

			1	
	PAVING, FLOORING, FINISHING AND DADO			
44.	Providing and laying R.S.H.: Flooring 20mm to	Sqm.	0.135	
	30mm on bed of 1: 6 C.M. and pointing C.M. 1:3			
45.	do 40 mm to 50 mm – do	Sqm.	0.14	
46.	do—50mm to 60 mm - do Sqm. 0.15			
47.	Providing and laying polished Shahabad stone	Sqm.	0.13	
	flooring 25mm to 30mm thick on bed 1:6			
	proportion			
48.	Providing and lying polished tandur stone flooring	Sqm.	0.13	
	25mm to 30mm thick on bed 1:6 proportion			
49.	do—polished Kota stone flooring 25mm to 30mm	Sqm.	0.13	
	thick on bed 1:6 proportion			
50.	Proivding & lying skirting and dado of polished	Sqm.	0.18	
	Shahabad stone 25 to 30mm. with 1:4 C.M.			
51.	Providing and lying skirting of polished tandur	Sqm.	0.18	
	stone – do -			
52.	Providing and lying C.C. flooring 40mm thick with	Sqm.	0.36	
	C.C. 1 : 1 ½ : 4			
53.	do – 50 mm thick – do		0.44	
54.	Providing & laying flooring of plain cement tiles of	Sqm.	0.15	
	25 x 25mm on bed 1 : 6 for flooring			
55.	do for dado and skirting on polished surface 1 :	Sqm.	0.18	
	4 proportion			
56.	Providing and lying colured tiles 25 x 25 mm size	Sqm.	0.15	
57.	do – for dado skirting	Sqm.	0.18	
58.	Providing and laying white glazed tiles 150 x 150	Sqm.	0.22	
	for flooring			
59.	do—for dado and skirting	Sqm.	0.21	
60.	Providing and lying gray cement base mosaic tiles	Sqm.	0.21	
	for flooring 25 x 25 cm.			
61.	do – for dado – do	Sqm.	0.18	
62.	Providing and laying in situ marble mosaic tiles	Sqm.		
	10mm thick			

	(a) Gray Cement,		0.20
	(b) White cement,		0.13
63.	do—for dado – do	Sqm.	
	(a) Gray Cement,		0.20
	(b) White cement,		0.80
64.	Providing and laying in required position flooring of	Sqm.	0.30
	broken China		
65.	Providing and laying polished shahabad stone 25 to	Sqm.	0.18
	30 mm. thick for tread and rise.		

24. Nine concrete cubes shall be tested at the cost in the Government approved lab for seven, fourteen and twenty eight days strength as and when directed as a cross check or as directed in addition to usual testing at site lab. Contractors should process adequate cube moulds and other testing equipments necessary for building works. Specimen will be transported to any Government approved lab by contractor at their own cost.

25. MIX DESIGN:

Mix design of adequate strength as required and specified by the Engineer-incharge shall be done by the contractor. The mix design shall be got changed at the cost of contractor, if quality of materials and gradation are changed revised mix design will have to be prepared after due approval of C.E. it will be permitted. The mix design should confirm to one of the methods specified in I.S. 10262-1982 or as per I.R.C. 44-1976 or A.C.I. method. Contractor Engineer should be qualified and experienced and well versed with concrete mix design and he should be thoroughly acquainted with the construction work with the mix design concrete.

26. NIGHT WORKS:

For night shift working contractors shall provide adequate flood lights arrangements at their own cost. No concreting shall be permitted in the night without the prior permission of Engineer-incharge.

27. WORK ON HOLIDAYS:

No works on holidays shall be permitted without prior permission of Engineer-incharge.

$\boldsymbol{Chapter-V}$

Description of work

CHAPTER - V

DESCRIPTION OF WORKS

1. LOCATION ETC.

The work is situated at Siddharthnagar. Kopari, Thane (E) within Thane Municipal Corporation Limit. The work to be carried out consist generally of the following main components. It should be kept in mind that the details given in paras 1 to 9 below are broad details to get some idea about the type of work involved in the work and general site conditions. For more details regarding levels, grades, cross-sections, specifications, mode of construction, quantum of work etc., please refer various cross sections attached to the tender documents, itemwise specifications, Schedule of quantities and other documents in the contract. The contractors are deemed to have inspected and studied, the site condition regarding the work already done, fresh work to be done, and other structures, and other site and traffic condition etc. before quoting his rate for the work. In case of any variations in respect of technical details, the details given in Schedule of quantities, itemwise specifications and other specifications and conditions given in the contract shall govern. In respect of details given in regarding site condition, the department does not claim that these details are fully correct and exhaustive. The Contractor should verify the site conditions and be thoroughly conversant with all site conditions/details etc. before quoting and no claims on any account due to variations in the informations in the given site conditions etc. will be accepted by the department. The contractors should study and assess these conditions fully before quoting the rates.

2. TYPE OF WORK:

- Work upto plinth shall comprised of raft/step foundation of depth as directed by City Engineer/Consultant, , plinth beams, filling in plinth with specified materials etc. complete as per detailed drawing and itemwise specifications enclosed.
- 2.2 R.C.C. frame work in superstructure shall comprise of R.C.C. columns, beams, slabs, chajjas drop pardis, lintels etc.
- 2.3 Brick work for partitions and external walls.
- 2.4 Internal neeru plastering and painting.
- 2.5 External sand face plastering and painting
- 2.6 Ceramic Tile flooring in rooms & Tandoor tiles in passage etc.
- 2.7 Non Teak wood door frames, flushed doors, louvered windows etc.

- 2.8 Plumbing work comprising of tap fixtures, G.I. supply pipes, underground water tank, over head water tank. soil/storm water / waste water pipes, salt glazed underground drain pipes, inspection chambers, septic tanks, soak pits, etc.
- 2.9 Such other items as mentioned in Schedule of quantities and also as may be instructed as per terms of contract and as per the directions of Architects, Consultants and the Engineer-in-charge.
- 2.10 All works shall be carried out as per detailed drawings supplied by the Consultant and as directed by City Engineer, according to itemwise specifications enclosed.

3. SITE CONDITIONS

The contractors are deemed to have studied the site conditions including the constraints regarding transport this is a heavy traffic road, they should also be familiar with availability of suitable materials, constrains on their storage, availability of labour, weather and climatic conditions, and are deemed to have estimated their rates accordingly.

4. The information here in above and provided elsewhere is given in good faith by the employer but the contractors shall satisfy himself regarding all aspects of site conditions and no claim shall be entertained on the plea that the information supplied by the Engineer is resinous or insufficient.

5. CONTRACT DRAWINGS:

The contract drawings provided for tendering purpose are enclosed with these tender documents and shall be used for reference and guidance only.

Two copies of working drawings on the basis of which actual execution of the work is to proceed, shall be furnished free of cost to the contractor by the City Engineer from time to time as per programme of execution approved by the City Engineer.

The Contract Drawing will also include any other Drawings, which the Engineer may issue from time to time during the currency of the contract.

The tendered rates/prices for the work shall be deemed to include the cost of preparation. supply and delivery of all necessary drawings, prints, tracings and negatives which the contractor is required to provide in accordance with the Contract. No examination or approval by the "Engineer" of any drawing or other documents

submitted by the contractor shall relieve the Contractor of his responsibilities or liabilities under the Contractor.

6. The works specified under this contract shall include all general works preparatory to the construction of roads, drainage work and all other things, requisities and work of any kind necessary for the due and satisfactory construction, completion and maintenance of the works to the intent and meaning of the drawings and the specifications and further drawings and orders that may be issued by the City Engineer from time to time compliance / by the Contractor with all general conditions of Contract, whether specifically, mentioned or not in the Clause of this specifications. All materials, apparatus, plant, machinery, tools, fuel, water, strutting, timbering and tackle of every description, transport, offices, stores, workshop, staff labour and the provision of proper and sufficient protective works, diversion, temporary fencing, lighting and watchmen and safety equipment required for the safety of the public and protection of the works at all stages and after completion of work upto the end of guarantee period and adjoining land, first and equipment, sanitary arrangement for the staff and workmen, the effecting and maintenance of all insurance, the payment of wages, salaries, fees, royalties, duties, taxes, levies or the other charges arising out of the execution of the works and the regular clearance of rubbish, reinstatement and clearing up and leaving perfect completion. The contractors shall pay the environment cess on murum and rubble levied by the competent authorities. The contractors shall also pay the royalties on excavated quantities of earth / murum as directed by the competent authorities.

7. TECHNICAL SPECIFICATIONS:

7.1 Quality Control on Work and Materials:-

The contractor shall be responsible for quality of work in entire construction work within the contract. Quality Control shall be done as per Maharashtra P.W.D. Standard Specifications. The contract rate quoted for various items of work in the bill of quantities shall be deemed to be inclusive of all costs of the provisions indicated in that Clause.

7.2 Surveying and measuring Equipments:-

Equipments for surveying and measurement on the work shall be procured by the Contractor for his use. The same shall also be made available to the Engineer at site for any work connected with the Contract without any additional charge.

7.3.1 Construction Equipment:

- (a) The methodology and equipment to be used on the project shall be furnished by the Contractor to achieve to the City Engineer well in advance of commencement of work and approval of the Engineer obtained prior to its adoption and use.
- (b) The Contractor shall give a trial run of the equipment for establishment its capability to achieve the laid down specifications and tolerance to the satisfaction of the Engineer before commencement of work, if so desired by the Engineer-incharge.
- (c) All equipment provided shall be of proven efficiency and shall be operated and maintained at all times in a manner acceptable to the Engineer-in-charge.
- (d) No equipment or personnel will be removed from site without permission of the Engineer-incharge.

7.3.2 Work programme and Methodology and Construction:-

The Contractors shall furnish his program of construction for execution of the work within the stipulated time schedule together with methodology of Construction of each type of work and obtain the approval of the Engineer prior to actual commencement of work.

7.3.3 Revised Programme of work in case of Slippage:-

Incase of slippage from the approved work program at any stage the Contractor shall furnish revised program to make up the slippage within one month from the date of work order. For this, the contractor shall submit an organization chart of his technical personnel to be deployed on the work alongwith their qualifications, job descriptions defining the functions of reporting, supervising inspecting and approving. The Contractor shall also submit a list of tools, equipment and the machiney and instrumentation which he proposd to use for the construction and for testing in the filed and/or in the laboratory and monitoring. The Contractor shall modify / supplement the organization chart and the list of machinery, equipment etc. as per the directions of the City Engineer and shall deploy the personnel and equipment on the filed as per the approved chart and list respectively. The Contractor shall submit written method statements detailing this exact proposals of execution of the work in accordance with

the specification. He will have to get these approved from the City Engineer. The quality of the work shall be properly documented through certificates, records, checklists and log and books of the result etc. Such records shall be complied from the beginning of the work and be continuously updated and supplemented and this will be the responsibility of the contractor. The forms should be got approved from the City Engineer.

8. Providing of site office for supervisory staff of Department of TMC and Quality Control:

The contractor shall have to make arrangement for providing accommodation for office for the P.W. Department staff and laboratory for quality control etc. as under.

- (i) Office 10.0 M x 5.0 M (Minimum) x 3.0 M. height.
- (ii) Laboratory 6.0 M x 3.5 M (minimum) x 3.0 M. height.

The above structure shall be semi permanent type with electrification and telephone facility.

FOLLOWING SPECIFICATION APPLY TO ALL TYPES OF BUILDINGS OR AS <u>SPECIFIED</u>

S	r. No.	Particulars	Specification
		Excavation:	
1			
	I.	Excavation for	'In earth soil of all types, Sand, gravel & Soft Murum, hard
		foundation, for	murum, hard murum & boulders, soft rock, hard rock, by
		building and all	blasting or by chiseling, wedging, line drilling etc. for any
		other	depth. Removing the excavated material for any lead and
		infrastructures.	lift as necessary and as directed by the Engineer in –
			Charge.
	II	Depth of	Average depth of foundation in natural G.L. is 5 m.or up to
		foundation	soil having bearing capacity 250 KN/sqm. or as directed by
			the Engineer-in-charge. Foundation should not be rested on
			made up ground.
2		Foundation :	R.C.C. footing foundation and U.C.R. masonry as per
			structural design and drawings.
3		Structure:	Framed structures in R.C.C. M-25 Cement concrete by
			mix design and as per design and drawings.
4		Roof & Slab:	R.C.C. M-25 cement concrete as per structural design and
			drawings.
5		Walls:	In Burnt brick masonry
	I	External Walls	230mm thk. B.B.M. in C.M. 1: 4
	II	Internal Walls	Half brick thk. B.B.M. in C.M. 1:4
6		P.C.C. bed	
		concrete	
	I	Plinth & Sub-	P.C.C. 1:3:6 (M10)In plinth protection, or wherever is
		floors	necessary as per drawings.
	II	Below	P.C.C. 1:3:6 In foundations below R.C.C. Footings
		foundations	
7		Chicken mesh:	At a joint of R.C.C. work & brick work from inside and
	1		

			outside faces of wall as per detailed specifications & as
			directed & shall be provided before plastering.
8		Plastering:	
	I	External Walls:	
		a. External	Sand faced cement plaster in C.M. 1: 4 including water
		surfaces	proof compound in two coats and rough cast cement
			plaster in patches for elevation treatment as per drawings
			or as directed.
	II	Internal Walls:	
		a. Partition Walls	12mm thk. Cement plaster in C.M. 1:4 with neeru finish on
			both surface.
		b. 230 mm thk.	12mm thk. Cement plaster in C.M. 1:4 with neeru finish on
		Walls, if any	
	III	Ceiling	6mm thk. Cement plaster in C.M. 1:3 with neeru finish.
9		Flooring:	
	I	Living room,	Ceramic tile flooring of approved make and design with
		kitchen,	size 300mm x300mm in Plain pattern on a bed of 1:6 C.M.
			as directed.
		Bathroom	Tandur stone flooring
		w.c, Toilet	White glazed tile
	II	outside passage	Tandur stone flooring 25mm to 30mm thick on a bed of
			1:6 C.M. as directed.
	III	Staircase / Steps	
	a)	Treads:	Machine cut machine polished Tandur stone 25mm to
		Tiouds.	30mm thick in plain pattern on a bed of 1: 6 C.M. as
			directed .One –Piece stone with Nosing.
	b.	Riser:	Machine cut machine polished Tandur stone 25mm to
	0.	Tabor .	30mm thick in plain pattern on a bed of 1: 6 C.M. as
			John thek in plant pattern on a bed of 1. 0 C.W. as

			direted .One –Piece stone .
	c.	Landing &	Machine cut machine polished Tandur stone 25mm to
		Passage.	30mm thick in plain pattern on a bed of 1: 6 C.M. as
			direted.
10		Skirting:	
		All rooms &	Ceramic tile flooring of approved make and design on a
		commercial	bed of 1:6 C.M as directed.
		premises	
11		Dado	Coloured /White glazed tiles 10 cm x 20 cm x 5 to 6 mm
			thk. On plaster of 1:4 C.M. including neat cement float
			filling the joints with white cement slurry & flushed to wall
			plastered surface.
	I	Bathroom	Coloured /White glazed tiles 0.6m dado.
	II	W.C.	Coloured /White glazed tiles 0.3m dado.
	III	Kitchen Platform	Coloured /White glazed tiles 0.3 m dado
12		Staircase	R.C.C. Staircase with pardi as per details and as directed
13		Pardi and	R.C.C. Pardi with as per drawings
		Railings:	
14		Painting:	
	I	External wall	100% acrylic paint in two coats of approved quality and
		surface	shade on one primer coat
	II	Internal wall	Colour wash in two coats.
		surface	
	III	Ceiling:	White wash in two coats.
	IV	Wood work and	Synthetic enamel paint of approved quality & shade in two
		Steel work	coats on one primer coat as per detailed specifications & as

			directed.
15		Water Proofing:	
	I	Terrace / W.C. /	Water proofing with brickbat coba as per I.S. laid to slope
		bath / Toilet duct	as per detailed specification with 7 year guarantee.
		/ chhajja / roof	
		& wherever is	
		necessary	
	II	Water tank / W.C.	Polymerized water proofing treatment in three coats as
		/ Bath / Toilet &	base coat with 7 years guarantee
		Toilet ducts	
16		Internal	P.V.C. casing and capping patti of white colour as per
		Electrification	approved electrical layout and fittings & P.V.C. insulated
			copper conductor of 1.1 KV grade & as per electrical
			drawing & design.
17		W.C.	White glazed 625 mm Water Closet with fittings complete
			as per drawing.
18		Plumbing:	In ISI marked medium grade G.I. pipe (32,40mm) or
			heavy grade G.I. pipe (15,20,25 mm) including all
			necessary fittings,.
19		Water Tank	R.C.C over head and Underground water tank as per
			designs given.
20		Kitchen Platform	Polished Black Kadappah stone top polished side as
			directed or as per drawings.
21		Sink	Sink with black kadappah side and bottom, with long arm
			Nahani trap with cromium plated detailed as per drawing.
22		Plinth Protection	bed of P.C.C. 1:3:6 as per drawing.
23		Aluminum No.	Indicating Tenement nos. to each tenement's entrance door
		plates	
24		plate with bldg.	To each building 300 x 150 mm size with painted letters.

		no. & type	
25		Chromium plated	Brass Chromium plated in W.C., Bath, Toilet, kitchen,
		water taps	Sink, Wash Basin and as per drawing and design.
		(Bib tap)	
26		Anti Termite	
		Treatment as per	
		Indian Standard	
		Specification	
	I		At foundation Level
	II		At Plinth Level
	III		Around the Periphery
	IV		To wooden frame
27		Reinforced	80mm thick reinforced cement mortar Jali in C.M. 1:2 as
		cement mortar jali	per drawing & approved sample.
28		Doors	
	I	Entrance door	C.C.N.T.W. Door framed with 35mm thick single leaf
			solid core flush door
	II	Internal Doors:	C.C.N.T.W. Door framed with 35mm thick single leaf
		Balcony, Bed	solid core flush door
		Room and	
		Kitchen	
	III	Doors to W.C.	PVC sheet door
		bath, & Toilet	
	IV	Entrance Gate	Collapsible steel gates in two leaves with channel pickets,
			pivoted flat bars including top & bottom guide rollers,
			stoppers, handles, all fittings and accessories, locking
			arrangement and applying one coat of red lead primer & 3
			coats of oil paint etc.
29		Windows:	Living Room – Three track modular aluminum
			Section sliding window 5.5 mm thk clear glass with
			neoprene gasket

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			Kitchen – two track modular aluminum
			Section sliding window 5.5 mm thk clear glass with
			neoprene gasket
			W.C & Bath - Aluminium louvered windows.
30		Fixtures and	
		Fastening	
	I	Entrance door	Brass decorative aldrops and handles as per specifications
			given in the schedule.
	II	Internal door	Brass decorative aldrops and handles as per specifications
			given in the schedule.
31		Window Sill	Approved White /colored marble on both side of wall
			plastered surface & edge rounded as per drawing and as
			directed.
32		Water pumps	Pump of capacity 7.5 HP with alternative back up pump.
			Firefighting pump of required capacity
33		Diesel generator	For operation of Lift & common lights in passage(backup
		set	for elecric power supply)of capacity 10kva

INFRASTRUCTURE WORK

Excavation required for any below mentioned works:

Bidder is required to carry out excavation in any type of strata up to any depth and all other excavation as per requirement including uprooting trees, bushed, dewatering, cleaning etc. Control blasting may be carried out if permitted by the concern authorities.

Earth Filling

All deficiency found in levels in plot shall be made good by the Bidders by filling / cutting existing ground. If additional quantity of murum is required for filling, Bidder shall bring approved quality of murum, from out side at his cost. It should be compacted in layers of 25 cm by power roller, including dressing, consolidating, watering etc. complete as directed by the Engineer in charge.

External Sewerage Work

The scope of work consist of Construction of septic tank, inspection chamber, gully trap laying of pipe lines from building to septic tank. The items will be as per the schedule of items & the work will be carried out as per design, drawings & as directed Engineer- in- charge.

Fire Fighting Work

The scope of work consist of

- 1) Const. of fire fighting auxiliary tank as per detailed drawing.
- 2) P/L below ground 150mm dia. G.I. 'c' class pipe with anticorrosive paint, enamel paint enwrapping with rustek as per spec.
- 3) P/F centrifugal pumps like main hydrant pump, booster pump, sprinkler jockey pump, fire hydrant pump as per requirement with pressure gauge as per drawing & as per the schedule of items.
- 4) P/F valves like air valve with vessel, butterfly valve, N.R.V. foot valve, drain valve as per detailed drawing.
- 5) P/F hose reel of 20mm,63mm dia. rubber hose Dunlop and flexible canvass rubber lined as per drawing.
- 6) P/F 65mm dia. Breaching inlet near building compound wall for connecting to fire fighting tank.

The items will be as per the schedule of items & the work will be carried out as per design, drawings & as directed Engineer- in- charge.

Signature of Contractor

No.of Corrections

City Engineer, T.M.C., Thane

Rain Water Harvesting

The scope of work consist of

- 1) Making arrangement of bore well as per water supply dept. norms for RWH.
- 2) Const. of Recharge pit, overflow pipe chamber and surface water collecting chamber as per detailed drawing.
- 3) P/f 150mm dia. PVC pipe with proper slope as per drawing.
- 7) P/F fire dept. inlets to wet riser near building face for connecting mobile pump.
- 8) P/F fire extinguisher in position with dry chemical powder, Co2 of 9 litr. Capacity also providing & keeping sand buckets with painted in red colour from outside.
- 9) P/F sintex priming tank of 500 litr. Capacity with necessary fitting as per detailed drawing.
- 10) P/F 35mm thk resistant single leaf solid core door at every floor of building.
- 11) Making necessary electrical arrangement as per detailed drawing.

The items will be as per the schedule of items & the work will be carried out as per design, drawings & as directed Engineer- in- charge.

Solar Water Heating System

The scope of work consist of

- 1) P/f SITC of solar water heating system without heat exchanger type 3000 LPD capacity 2 nos. quantity.
- 2) S/E G.I. 40mm dia. 'B' class pipe as per detailed drawing.
- 3) S/E 12mm,16mm,20mm,25mm polyethylene composite pipe duly joined by compression/crimp fitted accessories with internal & external sealing arrangement.
- 4) P/f N.R.V. & sluice valve of gun metal 25mm, 40mm dia. As per drawing.
- 5) 15 mm dia. Tap in bathroom

The items will be as per the schedule of items & the work will be carried out as per design, drawings & as directed Engineer- in- charge.

External Garden

The scope of work consist of

- 1) Providing & laying red soil, manure with required thickness as per drawing.
- 2) Laying lawns of grass & planting trees as per garden depart. Norms for gardening

The items will be as per the schedule of items & the work will be carried out as per drawings & as directed Engineer- in- charge.

External Water supply:

Signature of Contractor No.of Corrections City Engineer, T.M.C., Thane

The scope of work consist of

- 1) laying of G.I. Medium Class / Heavy class lines including direct connection with distribution system.
- 2) Distribution System in G.I. Pipe as per Design details with fire hydrants, Fire Hydrant, Air Values & all necessary fixtures as per standard drawing and design.
- 3) Water supply common stands posts for flower beds and plantations are to be provided wherever is necessary as per drawing. A separate G.I. pipe line of required diameter is to provided.

The items will be as per the schedule of items & the work will be carried out as per drawings & as directed Engineer- in- charge.

Electrical Sub- station

The scope of work consist of

- 1) Const. of 6 no's of sub-station as a load bearing structure type with RCC slab, brick work, terrace water proofing with B.B. coba, internal& external plastering, external paint with 100% acrylic paint, internal paint for walls colour wash & for ceiling white wash, 80mm RCC jail for window, 18/19 gauge rolling shutter as per requirement, necessary internal civil work like trench for cabling, concrete foundation block for transformer as per electrical requirement.
- 2) P/F necessary electrical machines & fittings of required capacity of substation as mentioned in schedule of quantities & as per detailed design drawings.
- 3) Laying of Cables from M.S.E.D.C.L. source to substation.

The items will be as per the schedule of items & the work will be carried out as per drawings & as directed Engineer- in- charge.

Street Light Pole

The scope of work consist of

- 1) P/F street light poles & panel as per detailed drawing.
- 2) Laying of electrical cable from source to electric pole.

Storm Water Drain

The scope of work consist of

- 1) Soling for Foundation 230 mm Thk
- 2) PCC for Foundation 100 mm Thk in C.C.(1:3:6) M:10 Grade
- 3) Concrete pardi in CC M:15 of 230 to 300mm thk,450 to 900mm in depth for 450 to 1000 mm wide drain as per drawing attached.
- 4) RCC slab of 150 to 300mm thk in CC M:20 as per detailed drawing attached
- 5) Reinforcement steel details as per detailed drawing attached.

The items will be as per the schedule of items & the work will be carried out as per drawings & as directed Engineer- in- charge.

C.D. Works

C.D. Works shall be of RCC Box type culverts, as per given drawings, specifications and as directed.

Road Works:

The scope of work consist of

For Bituminous Road

- 1) Wedge Shear Layer of 230mm thk for Foundation.
- 2) WBM 150mm thk consolidated with filling material.
- 3) Tack coat of 60/70 grade spread over BBM/WBM (100 kg / 100 sq.mt)
- 4) BBM of 75mm thk
- 5) Bituminous Macadam 75mm thk over BBM
- 6) Tack coat of 60/70 grade spread over BT Surface (50 kg/ 100 sq.mt)

CC Road

- 1) Wedge Shear Layer of 230mm thk for Foundation.
- 2) WBM 150mm thk consolidated with filling material.
- 3) PCC of 75mm thk in CC(1:3:6) over WBM
- 4) 150mm thk Cement concrete Road in CC M:40

Bidder is required to construct roads of required crust thickness, in desired levels with approved materials, specifications, widths, location and as per drawings, specifications, instructions etc.

Retaining cum Compound Wall

The scope of work consist of

- 1) Soling for Foundation 230 mm Thk
- 2) PCC for Foundation 100 mm Thk in C.C. M:10 Grade
- 3) RCC Raft of 500 mm Thk in C.C. M:25
- 4) RCC Retaining wall of C.C. M:25 at average depth of 5.5 mt
- 5) Brick masonry in cm 1:6 over retaining wall with Brick Pillar (450 x 450) at 3 mt C/c
- 6) 150 Dia. PVC wheep holes @ 1500 C/c Horizontal & Vertical with Filter media (500 x 500) as per Drawing attached.
- 7) Reinforcement steel details as per drawing attached.

The items will be as per the schedule of items & the work will be carried out as per drawings & as directed Engineer- in- charge.

For UCR Compound wall

- 1) Soling for Foundation 230 mm Thk
- 2) PCC for Foundation 100 mm Thk in C.C. M:10 Grade
- 3) UCR masonry wall 750 mm Thk in CM 1:6 at average ht. of 2mt upto G.L.(Upto Strata Found)
- 4) Coping of 150mm thk in C.C. M:10 at the top of UCR wall.
- 5) Brick masonry in cm 1:6 over retaining wall with Brick Pillar (450 x 450) at 3 mt C/c

External Pavement Work

The scope of work consist of

- 1) Area leveling and concreting for plinth protection
- 2) Soling for Foundation 230 mm Thk
- 3) PCC of 100 mm Thk in C.C.(1:3:6) M:10 Grade

The items will be as per the schedule of items & the work will be carried out as per drawings & as directed Engineer- in- charge.

Community Centre

The scope of work consist of

1) Const. of community centre as a RCC framed structure type with slab, brick work, terrace water proofing with B.B. coba, internal & external plastering, external paint with 100% acrylic paint, internal paint for walls colour wash & for ceiling white wash, Ceramic tile flooring for main room, white glazed tile flooring, dado, skirting for bath & W.C., For windows sills & jamb frames of white/color marble, Aluminum two track sliding, openable & Louvered window for main room, bath & W.C., 18/19 gauge rolling shutter as per requirement, non teak wood door frame with 35mm solid core single leaf shutter for main room & 30mm single leaf shutter with PVC sheet for bath & W.C., Necessary plumbing work & Electrical work as per detailed drawing & specification.

NOTE: Above Specifications are tentative & work will be executed as per Schedule of Items & Drawings and as directed by Engineer in charge.

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LIST OF APPROVED MATERIALS

a.	PVC conduit pipe / PVC casing-n-	Precision, Universal, Diamond/Super
	capping	Plast, Modi/Press-fit.
b.	5A & 15A Switches Sockets,	Manikchand, CPL / Elley, Vinay /
	ceiling roses, batten holder / Angle	Anchor.
	holder & accessories.	
0	P.V.C. insulated copper wires	HMT, Pyrofled / Finolex Polycab &
C.	r.v.C. insulated copper wires	Havells / Anchor / Vishal.
		navens / Anchor / Vishai.
d.	Switchgears	Stanley, KEW, Crompton Greagues CPL,
		GEC & English electric.
e.	MCB, ELCB, DB's, MCCB	Indo Kopp, MDS Loadkontakt, Havell's
		English Electric, Crompton / Siemens /
		LT / LK Spaceage Hundai.
f.	Air Circuit Breakers	Any ISI or CE (Elect) PWD approval.
	The Chount Browners	This for or of the (Elect) I was approved.
g.	Cables	Paragon, Gloster, Kaydour, CCI / HMT /
		Vishal / Polycab.
h.	XLPE Cables & Accessories	Torrent or any ISI or CE (Elect) PWD
		approval.
i.	Fluorescent, Weather Proof Fluo /	Philips, Bajaj, Compton / GEC.
1.	M.V./ H.P. S.V. fittings	Timpo, Bujuj, Compton / OLC.
j.	Meters	AEI or as per M.S.E.B's requirement &
		approval.

		T
k.	Current transformers	Asian, ITC
1.	Lamps	Philips, CEMA, Surya, Crompton, Wipro.
m.	Distribution Transformers only	Crompton, Bharat Bijlee, Volt Amps,
	copper wound as per P.W.D.	PACTIL or approved by CE (Elect) PWD
	Specifications.	Government of Maharashtra / Approved
		by M.S.E.D.C.LTD
0.	Water Pumps	Kirloskar / Crompton / Jyoti / Beacon.
q.	Star / Delta Starters / D.O.L.	LT-LK / Crompton / Siemens
	Starters	

All materials shall be got approved from competent authority before fixing. Material should be of above make or as approved by engineerin charge

Chapter –VI

Bank Guarantee and Other Forms

CHAPTER VI

(FORM NO. –I)

1)	List of works tendered for and in hand as on the date of submission of this tender.

Sr.	Name	Place /		Work	in hand		W	Works tendered for		
No.	of	Country	Tendered	Cost of	Anticipated	Estimate	Date	Stipulated	Remarks	
	Work		cost	remaining	date of	cost	when	date of		
				work	completion		decisions	period of		
							expected	completion		
1.	2.	3.	4.	5.	6.	7.	8.	9.	10	

FORM NO. II

2)	List of Plant and Machinery immediately available with the Bidder for this work

Sr. No.	Name of	No. of	Kind	Capacity	Age and	Present	Remarks.
	equipment	units	&		Conditions	Location	
			Make				
1.	2.	3.	4.	5.	6.	7.	8.
1							

FORM NO. III

3)	Details of works of similar type and magnitude carried out by the	Bidder
	Name of the Bidder:	

Sr.	Name	Cost	Date of	Stipulated	Actual Date of	Remark
No.	of	of	Starting	date of	completion	
	work	work		completion		
1.	2.	3.	4.	5.	6.	7.

FORM NO. IV

4)	List of works carried out in the interior Backward and Hilly
	Area during the presiding five years.

Sr.	Name of work	Cost of	Date of	Date of	Remarks
No.		work	starting	Completion	
				Remarks	
1.	2.	3.	4.	5.	6.

FORM NO. V

5	Details of Technical Personal Available with the Bidder.
	Name of the Bidder:

Sr. No.	Name of Person	Qualification	Whether working in field or in office	Experience of execution of similar works	Period for which the person is working with the tenderer	Remarks
1.	2.	3.	4.	5.	6.	7.

INDEMNITY BOND

(On Stamp Paper Rs.100/-)

I/ we indemnify the Corporation against all actions, suits, claims and demands brought or
made against him in respect of anything done or committed to be done by the me/us in execution of
work or in connection with the work of this contract and against any loss or damage to the Corporation in
consequence of any action or suit being brought against me/us for anything done or committed to be
done in the execution of the work of this contract.

Seal Signature of Bidder

FORM OF BANK GUARANTEE BOND

		of the Thane Municipa	al Corporation, Thane(hereinafter refe	erred to as
"TM	(C.")having	agreed	to		exemp
(here		s "the Bidder") from depos			sum of Rs
			only) being th	e amount of secu	urity deposit
paya	ble by the Bidder to	the Corporation under the	e terms and conditions	of the Agreemen	nt dated this
	da	y of	2007. and made betw	een the Corporat	ion as ONE
PAR	T and the Bidder a	s the OTHER PART (her	reinafter referred to a	s "the Said Agre	ement") for
			as so	ecurity for the due	e observance
and	performance by the	Bidder on the terms and	conditions of the said	Agreement, on	the contract
furni	shing to the Corpor	ation, a Guarantee in the p	prescribed form of a N	Nationalized Bank	/ Schedule
Bank	in India, being in	fact these presents in the	like sum of Rs		_ (Rupees
		onl	y).		
We			Bank / Limited	registered in I	ndia under
		Act ar	nd having one of	our local head	offices at
		do h	nereby		
1.	Guarantee to the	Corporation			
	a. I	Due performance and obser	rvance by the Bidder	of the terms co	venants and
	condition	ns on the part of the Bidder of	contained in the said A	greement.	
	b. I	Oue and punctual payment b	by the Bidder to TMC	of all sums of mo	oney, losses
	damages	, costs, charges, penalities ar	nd expenses payable to	TMC by the Bid	der under o
	in respec	t to the said Agreement.			
2.	a. U	Indertake to pay to the Co	orporation on demand	l and without de	lay and not
	withstanding any	dispute or disputes raised l	by the Bidder in any s	uit or proceeding	filed in any
	court of Tribunal	relating there to the said sur	m of Rs		
	(Rupees		only) or	such lesser sum	as may be
		d by the Corporation from scal and agree that:	n us as our liability h	ereunder being a	ibsolute and
	-	-			

dues of the C	f the said agreement and that the same	shall remain in full and effect during the shall continue to be enforceable till all the said Agreement have been duly paid and its ion certifies that the terms and conditions of dout by the Bidder
the said rigid	ements have been fully properly earned	Tout by the Blader.
c.	We shall not be discharged or release	sed from the liability under this Guarantee by
reasons of:		
a) Any	change in the constitution of the Bank	of the Bidder, or
	arrangement entered into between the consent;	Corporation and the Bidder with or without
c) Any	forbearance or indulgence shown to the	e Bidder;
d) Any	variation in the terms covenants or cor	ditions contained in the said agreement;
, ,	time given to the Bidder, or	
	other conditions or circumstances charged.	under which, in law, a surety would be
d.	Our liability herein under shall be j	oint and several with that of the Bidder as if said sum of Rs (Rupees
	only) and	
We si in writing of the Co		ts currency except with the previous consent
	S WHERE OF the common seal of day of	has been here into 2007.
The common	seal of	_ was pursuant to the resolution of the Board
of Directors of the C	ompany dated this	day of2007
		who in token thereof, have here to
set their respective ha	nds in the presence of:	
1.		
Signature of Contracto	or No.of Corrections	City Engineer, T.M.C., Thane

BANK GUARANTEE FOR MOBILISATION ADVANCE

THIS AGREE	MMENT made the	day of	200)/ between the
bank having its	Registered Office at	herein	after called "The Ba	ank" which
expression sha	ll unless repugnant to the context	of meaning thereo	f be deemed to inclu	ude its successors
and permitted a	assigns of the Part and the Thane	Municipal Corpora	ation having their pr	rinciple office at
Thane Municip	oal Corporation, Thane; Mahapali	ka Bhavan, Almei	da Road, Panchpakh	nadi, Thane –
400 602 (here	inafter called "TMC" which expre	ession shall unless	excluded by or rep	ugnant to the
context or mea	ning thereof be deemed to include	e their successors a	and assigns) of the (Other Part.
WHER	REAS, the TMC has awarded a co			
	having	its registered office	e at	_ (hereinafter call
"The Bidder" v	which expression shall unless repu	ignant to the conte	xt or meaning there	of include its
successors and	permitted assigns).			
AND '	WHEREAS the Bidder has reques	sted the Bank to gi	ve the said guarante	e which the bank
has agreed to d	o and the TMC has agreed to give	e advance to the B	idder of the said am	ount of Rs.
	upon the Bank giving such	guarantee.		
1. in cons	sideration of the TMC having agree as aforesaid the Bank happen demand without recourse to ment out of the contract price not	eed to advance to the ereby agrees to income the contractors ago	demnify the TMC was gainst repayment to	rithout protest or the TMC of
and pe	ecision of TMC as to whether the errormed by the contractor and regularized shall be final and binding or	arding the refund		
circum	ank hereby agrees that the guarant istances whatsoever before the day or adjusted and intimation thereo	y of	2004 until the sai	d advance has fully
	ability of the bank here under is re			
guaran	tee will remain in force until the	day of	_2004 unless renev	wed for a further
Signature of Co	ontractor No.of Co	orrections		ty Engineer, M.C., Thane

	period as herein after provided. If the Contractors obl	ligation under the contracts are not
	completed by the said date the bank shall upon dema	and by the TMC as the cost of the contractor
	and not with standing any instructions on the contrar	ry from the said contractor provided
	however, that such renewal/s shall not exceed period	l/s of one year on each occasion.
5.	The liability of the Bank shall expire on the	day of 2004 shall not be entertained
	unless instituted within 6 months from the said date.	
IN	WITNESS WHEREOF, MR.	being fully authorized to sign and to
inc	ur obligations for and on behalf of and in the name of	the bank has hereinto set and subscribed his
har	nd at the day and year first herein	above written.
SIC	GNED AND DELIVERED BY :	
Th	e above named	
For	r and on behalf of bank.	

FORM OF AGREEMENT

(Stamp paper cost will be as per Government Norms)

1.	THIS AGREEMENT is made on the	e day of 2002 betw	veen Thane Municipal		
Corpor	ration, Thane hereinafter called "the E	Employer" of the One Part and			
		(Name of Tenderer)		
(Mailir	ng address of Contractor) "the Contra	ector" of the other part.			
Contra	EAS the Employer is desirous the ctor) and has accepted a Tender by the corks NOW THIS AGREEMENT WITH	ne Contractor for the execution, comp	•		
In this	Agreement words and expression shat the Conditions of Contract hereinafte	hall have the same meaning as are r	respectively assigned to		
		deemed to form and be read and co	onstrued as part of this		
Agreer	ment, viz;		1		
•	l tender Document as issued by the En	nployer for this work.			
,	•	ments as issued by the Employer pri	for to submission of the		
b)	Acceptance letter issued by the Emp	oloyer vide No and all cor	respondence exchanged		
	between the Employer and the Cospecifically referred to in the said ac	contractor up to the date of issue contractor up to the date of issue of contractor.	of acceptance letter as		
1.	In consideration of the payment to be	e made by the Employer to the Contra	actor as hereinafter		
	mentioned, the Contractor hereby covenants with the Employer to execute and complete the				
	works in conformity in all respects v	with the provisions of the Contract.			
2.		pay the Contractor in consideration of ct price at the times and in the manner			
IN V	WITNESS WHEREOF the parties hereunto affixed (or have hereunto above written.	hereto have caused their respective set their respective hands and seals			
SIGNE	ED, SEALED AND DELIVERED				
By the		By the said			
Name_		Name	 		
on beh	alf of the Contractor	on behalf of the Contract	tor		
-	presence of :	in the presence of:			
Signatu	re of Contractor No.0	of Corrections	City Engineer, T.M.C., Thane		

Name	Name
Address	Address

No Claim Certificate for Labour On Contractor's Letterhead

To,
City Engineer,
Thane Municipal Corporation, Thane,
Dr. Almeida Road, Panchpakhadi,
Thane.
Subject : Name of Work
NO CLAIM CERTIFICATE FOR LABOUR
This is to certify as under
We hereby confirm that we have paid all the wages to all the laours employed under this contract as per minimum Wages declared by the Govt. of Maharashtra.
In case in future any claim arised inadvertently shall be dealt by us as we understood that this is our sole responsibility.
We indemnify Thane Municipal Corporation against any claim arised in future in respect of this contract from any labour deployed by us on the works under this contract.
Authorized Signatory (Name) For Name of the Agency

No Demand Certificate On Contractor's Letterhead

To,
City Engineer,
Thane Municipal Corporation, Thane,
Dr. Almeida Road, Panchpakhadi,
Thane.
Subject : Name of Work
NO DEMAND CERTIFICATE
This is to certify as under
We hereby confirm and assure in writing that we have no claim/demand of any amount from Thane Municipal Corporation in respect of the above said work which was awarded on us vide work order No dated dated
We indemnify Thane Municipal Corporation against any claim / demand. Any matter arises in
future in respect of this contract from either our supplier, sub contractors or labors who have contributed
their services directly/indirectly for this contract.
Authorized Signatory
(Name)
For Name of the Agency

JOINT VENTURE FORM OF AGREEMENT

This Joint Venture agreement is made on the day of 2007 between
and
JOINTLY agree to carry out the work
if the
Contract is awarded to us the (Brief description of division of works, required be carried
out) whoof this tender duly
we nominate
as authorized nominee/signatory to execute the work and accept
the joint responsibility with "
" which is being represented byof the
both of them are
authorized by their respective companies to act on behalf of the company and the company is fully
responsible for any act done for discharge of his duties for completion of the work during the contract
time period, if the job is awarded. We put our companies seals with signatures of authorized persons
below and accept the responsibility jointly and severally to carry out the contract, if awarded.
SIGNED, SEALED AND DELIVERED SIGNED, SEALED AND DELIVERED
by the with named by the with named
through its dulythrough its duly
constituted Attorney constituted Attorney
in the presence of in the presence of

VII. ADDITIONAL GENERAL CONDITIONS

CHAPTER-VII

Additional General Conditions

- 1. The Bidder shall provide adequate storing space for cement and he shall for the purpose provide a store for which shall have adequate storage capacity. This space should be in addition to the space required for storing empty cement bags. In case of failure to provide the requisite store as stated above, the same shall be provide at Bidder risk and cost as may be directed by the Engineer-in-charge. The cement shall be stored as per instruction issued in the books of the Associated cement company.
- 2. The offer of the Bidder shall be inclusive of all taxes, duties, Octroi etc. to be paid by the Bidder for the material required for the work and no extra payment shall be made to the Bidder on any account thereof.
- 3. In case of failure on the part of the Bidder to comply with any of the instructions given in the notes under the tender. The Engineer-Incharge shall be at liberty to get the work done at the risk and cost of the Bidder and deduct necessary amount from his bills or other dues.
- 4. The Bidder shall sign each page of the Agreement.
- 5. The Bidder shall make himself aware of the department procedure right from accepting the tender to payment of final bills, including interim payment.
- 6. The Bidder shall have to supply at his own cost, adequate numbers of printed R.A. Bill forms in the prescribed form, with complete description of all items of the work as per tender for preparation of running account bills and final bill.

- 8. The Bidder should submit every month, account of consumption of steel and cement indicating components where it is used in given format. Bidder should submit Transport Challans immediately whenever cement or steel received at site. The Bidder with submission of his R.A. Bills should submit true copies of Money Receipt against the purchase of above material, steel and cement and royalty clearance certificate from the Collector of the District.
- 9. As per the provision of the Weight & Measures Act, 1965 stipulations have been made in metric system only and wherever the corresponding equivalent fittings in the British unit have been given the same should be taken as general guidance only. All the materials etc. required for the work wherever possible shall be provided in the metric unit only. However, no extra payment or reduction in rate shall be considered whatsoever where the materials or items is provided in British units for little variation than the exact equivalent of what has been stipulated in the metric system in the tender.
- 11. Electric supply and water supply for construction purpose shall have to be arranged by the Bidder at their own cost only. Necessary connection and consumption charge shall be borne by the Bidder. The TMC Officers shall however, render the necessary assistance by way of recommendation only.
- 12. All the Construction of 5 nos. of Gr.+8 Floors each, RCC Type buildings on plot at Siddharthnagar, Thane (E), including all infrastructures & allied buildings shall be completed in all respect within a period of Eighteen Months from the date of written work order to start the work.
- 13. As regards any incidental charges, fees, dues, Royalties on Minerals (for any material excavated or taken from departmental land, work site, Govt. quarry, Private quarry etc.) as applicable at the time of construction. Deposits, refundable or non refundable, payable to Government or any other related authorities, for getting water supply, Electrical supply for construction purpose, or for any other purpose, the same

shall be borne by the Bidder and nothing extra will be payable by Corporation nor be reimbursed by the Corporation.

The Offer of the Bidder shall be inclusive of all taxes, duties, octroi, transport, loading unloading, applying to MSEDC LTD. for Supply Connection, follow up with MSEDC LTD., preparing necessary documents for submission to MSEDC LTD. and everything necessary for getting proper electric supply to the site and successful handing over to TMC.

- 14. All electrical work, waterproofing of W.C.S. baths, sinks, terrace and O.H. water tank & Anti –Termite treatment shall be carried out as per specified agencies specification and approved by Corporation.
- 15. The Bidder will give a seven years guarantee on stamp paper for all items stated in 14 above to carry out repairs replaced the entire ineffective water proofing work during guarantee period of 7 (Seven) years without any extra cost. The Bidder before refund of security deposit should produce a Bank Guarantee amount, equivalent to 10% of cost of waterproofing and anti-termite. This guarantee should be for 7 years. This Bank Guarantee will expire or revoke only after the date of completion etc. Revoking of guarantee for partially completed period will not be permitted.
- 16. All water supplies, sanitary works shall be carried out as per rules and requirement. The Bidder will provide all fittings and specials as required without any extra cost. He should obtain necessary permission for water supply and sanitary arrangement form concerned department.
- 17. The Bidder shall make necessary arrangements for procurement of entire quantity of cement and steel required for the works at their own cost. No compensation will become payable due to delay in getting cement and steel by the Bidder.

All Electrical work shall be done through licensed Electrical Contractor who is Registered with PWD, including preparing documents for submission to MSEDC LTD. for obtaining necessary Electric Load, Inspection on Completion by MSEDC LTD. / PWD and obtaining completion Report from MSEDC LTD. and installing and commissioning the electric energy. The Bidder will pay necessary Deposits and connection charges in the name of the Thane Municipal Corporation, Thane.

The Bidder at no extra cost shall do necessary, inspection and testing from Electrical Inspector, I.E. & L. Department of Government of Maharashtra. And obtain necessary permission and approval from concerned department. Bidder shall hand over all permissions and approval in original to TMC.

18. **OFFICIAL SECRECY**:

The Bidder shall take whenever required necessary steps to ensure that all persons employed on any work in connection with this contract have noticed that the Indian Official Secrets Act 1923 (XIX of 1923) applies to them and shall continue so to apply even after execution of such work under the contract.

19. NOTICES TO LOCAL BODIES:

The Bidder shall comply with and give all notices required under any Government authority instrument, rule or order made under any Act of Parliament, State laws or any regulations or Bye-laws of any local authority or public utility concern relating to works. He shall before making any variation from the contract drawings necessitated by such compliance, give to the City Engineer, a notice giving reasons for the proposed variations and obtain City Engineer's instructions thereon.

20. The Bidder shall pay and indemnify the Corporation against any loss or liability in respect of any fees or charges payable under any act of Parliament, State laws of any Government instrument, rule or order, any regulations or Bye –laws of any local authority or public utility concern in respect of the work.

21. Discrepancies in Drawings or Specifications.

The drawings and specifications are to be considered as mutually explanatory of each other; detailed drawing being followed in preference to small –scale drawings and figured dimensions in preference to scale and special conditions in preference to general conditions.

Special conditions, dimensions, specifications, scope of work given in the tender book.

A tender drawings are likely to be modified at the time of actual execution within a given scope of work.

Execution drawings shall be issued to the Bidder if & when found necessary.

Should discrepancies, however, appear or should any misunderstanding arise as to the materials or the due and proper execution of the work, or as to the measurement or quality and valuations of the works executed under this contract, or as extra thereupon the same shall be explained by the City Engineer and his explanation shall, subject to the final decision of the City Engineer, be binding upon the Bidder and Bidder shall execute the work according to such explanation (subject as aforesaid) and without extra charge or deduction from the contract and shall also do all such works and things as may be necessary for the proper completion of works as implied by the drawings and specifically shown and described in the said drawings and specifications.

22. USE OF ISI SPECIFICATIONS

In case where no particular specifications are given for any articles to be used under contract, the relevant specification where one exists of the Indian Standards Institution or National Building Code shall apply.

23. MISSING ITEM / SPECIFICATION / MAKE OF WORKS

Bidder should highlight the missing item of construction activity or specification which is absolutely necessary for the completion of building work and or if any material of particular make / brand as mentioned in the approved list of material is not available, then he / she should bring to the notice of TMC, may include or change such missouts as addendum / corrigendum, otherwise it will be assumed that Bidder will carry out such missing item at no extra cost. i.e. to say work shall be completed in all respects without extra compensation for not mentioning particular item of work which may be essential for successful and satisfactory completion of the said work.

VIII. ADDITIONAL GENERAL SPECIFICATIONS

CHAPATER- VIII ADDITIONAL GENERAL SPECIFICATIONS

1. Storage of Cement

- 1.1 Cement required for use shall be as fresh as possible and stored on planks raised 15 to 20 cm (about 6" to 8") above the floor and stacked 30 cm (about 12"), away from the walls in suitable closed weather-proof buildings at the work site, in such a manner as to prevent deterioration by dampness or moist atmosphere or intrusion of foreign matter. Cement of different grades shall be stored in separate godowns. Further, cement from different brands and different batches shall be stored in separate stacks. Cement of different grades of different brands or different batches shall not be mixed.
- 1.2 Cement stored for over two months from date of issue from the factory shall be subjected to testing and used only if found satisfactory.
- 1.3 Cement shall be kept in a store under double locking arrangement so that it can be taken out as fresh stock and daily transactions of cement shall be kept in each room of the cement store. Daily account of receipt and use of cement bags shall be maintained by the Bidder in a register in approved proforma and the copies of the records shall be supplied regularly to the Engineer in Charge.

The Bidder shall be responsible for such damage, which render the cement useless in the opinion of the Engineer-in-charge of the construction of the work. No compensation shall be payable to the Bidder for such damages. The Bidder shall be responsible for preserving the same in good order as required by specification mentioned above. The damaged and rejected cement shall be immediately removed.

1.5 The work included in the contract shall be carried out according to the specification detailed therein and in accordance with the specifications, rules and regulations as laid down in the following standard specification should be followed;

IS-269-1976 Specification for Ordinary Portland cement.

IS-383-1970 Specification from natural source for concrete.

IS-432-1966 Specification for mild steel and H.Y.S.D.

IS-1786-1979 bars and hard drawn steel wire for

IS-1566-1967 concrete reinforcement with amendments.

IS-456-1972 Code of practice for plain and reinforced concrete for general construction (Revised).

I.R.C. Code of practice for road, bridges for plain and reinforced concrete.

Controlled Concrete IS-456-1978 and I.R.C.-44-1976 tentative guideline for cement concrete mix shall be applicable.

If the standard specification quoted above fall short for the item quoted in the schedule of this contract, reference shall be made to latest Indian Standard Specification. If any of the items of this contract do not fall in reference quoted above, the decision and specification directed by Engineer-in-charge shall be final.

1.6 The Bidder shall establish fully equipped field laboratory to carry out all preliminary tests to work out grading and proportioning of aggregates in order to obtain and maintain uniform quality of work. The Bidder shall supply all materials, labour and testing machine as per list below for preparing and testing samples are required unless otherwise specified in the detailed item wise

specifications number of cubes to be taken and tested shall be as per relevant code / standard of practice for roads, bridges.

EQUIPMENT FOR FILLED LABORATORY

1	Slump Cones	3 Nos.
2	Cube Moulds	24 Nos.
3	Cement Testing Equipments	1 Set.
	(Initial / Final setting, accelerated	
	Compressive test)	
4	Oven	1 No.
5	Cube Testing Machine	1 No.
6	Weigh Balance	1 Nos.
7	Spring Balance	1 Nos.
8	I.S. Sieves	1 Sets.
9	Twister Meter	1 No.
10	Micro Meter	1 No.
11	Silt Measuring Jar	2 No.

All cement concrete work is specified by strength and shall be as per the approved mix design. Mix design of concrete shall have to be obtained from Government laboratory / Government Institute as approved by Engineer-incharge.

The testing of test cubes as per required frequency specified in standard specifications shall be done at Bidder's cost.

1.7 NON-DESTRUCTIVE TESTS

Minimum 5% of structural Elements shall be tested by non-destructive test such as ultrasonic test. The minimum strength at 9.5% confidence shall be 1.1 x characteristic strength. This test will not be accepted for accepting concrete where cubes have shown below required strength.

1.8 LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS

- a) The joint shall be of the kind and dimension as required by specifications and shall be located where and as indicated in the plants or as directed by the Engineer-in-charge.
- b) The longitudinal joints shall be constructed as shown on the plan or as directed by the Engineer-in-charge. These shall extend for the full depth of the concrete.

1.9 CONSTRUCTION JOINTS

Construction joints formed at the close or each day work or when the process of depositing concrete is stopped for Thirty (30) minutes or longer. It shall be constructed by the use of metal bulkheads or using a clean wooden bulkhead having thickness of not less than two and half (2 $\frac{1}{2}$ ") inches and out to the section of the finished base.

Longitudinal bars shall be continuous through the construction joints. The bulkhead will be held secured in a plain perpendicular to the surface of the base.

All honeycombed surface on the vertical faces of constructional joints shall be cleared with wire brush and thoroughly wetted and patched with cement mortar.

2. CEMENT CONCRETE (PLAIN & REINFORCED)

2.1 All work shall be carried out as per specifications and also confirm to relevant B. I. S. Specifications, and specifications contained herein and shall be to the entire satisfactory of the Architects / R.C.C. Consultants / PTA /Engineer-in-Charge.

The maximum size of the course aggregate may be as large as possible within the limits specified but in no case greater than one quarter of the minimum thickness of the member provided so as to surround all reinforcement thoroughly and to fill the corners of the formwork.

2.2 CEMENT

Signature of Contractor

- i. Ordinary Portland Cement Grade 43/53 shall be used.
- ii. Cement shall be stored and used given in Clause I above.
- 2.3 i. All Reinforced Cement Concrete designed by strength shall be treated as a design mix concrete of grade as specified.
 - ii. Before start of work, mix design for grade M 20, M 25 and above, shall be obtained from an approved laboratory.

No.of Corrections

- iii. In any case the minimum cement content has been provided. If additional cement content is required to achieve the desired strength, it shall be provided without extra charges.
- iv. However, if a mix design using similar materials has been earlier established than the Bidder shall prepare sufficient number of cubes of trial mixes to attain the required results and the best mix as approved by RCC consultant through Architect, shall be used.
- v. For Plain Cement Concrete, nominal mixes as given in schedule of Quantities may be used Concreting may be done by volume batching for which appropriate size steel / wooden boxes shall be made.
- vi. All concrete shall be mixed in a mechanical mixes and mechanically vibrated Concrete will be mixed for at least two minutes in mixer.
- vii. Water, cement ratio will be carefully controlled throughout. Moisture content of sand and aggregate and bulkage shall be taken into account. Graduated litre cans shall be used for this purpose.
- viii. Slump shall be minimum 50 mm.
- ix. Curing shall be carried out as per IS specifications.

2.4 ACCEPTANCE CRITERIA FOR CONCRETE

In order to ensure proper control on the quality of concrete, acceptance criteria as laid down in I. S. Specification No. I. S. 456 - 2000 has to be followed. Random samples from fresh concrete should be taken as specified in IS - 1199 and cubes should be made cured and tested as specified in IS - 516.

a. The test strength of the sample shall be the average of the strength of three specimens. The individual variation should not more than 15%.

2.5 FREQUENCY OF SAMPLING

The minimum frequency of sampling concrete of each shall be in accordance with the following.

Quantity of concrete work	No. Of Samples	
in cubic mtr		

1 – 5	1
6 – 15	2
16 - 30	4
31 - 50	4
51- above	4 plus one additional for each additional
	50 m3 or part thereof

2.6 STEEL REINFORCEMENT

- I This shall confirm to the following.
 - a) Mild Steel Shall be Grade I tested quality Conforming to IS 432 Part 1.
 - b) High Strength deformed steel bars-shall be tested quality conforming to IS 1786. It shall be T or 40, TMT 40 or, Tiscon 40.
 - c) Binding wire black annealed steel wire conforming

to IS 280 – min. in 16 gauge.

II Test certificates shall be furnished for all steel reinforcement brought to site.

III Samples from each batch shall be taken as instructed and tested for tensile strength and malleability from an approved Laboratory.

IV Measurement for steel shall be recorded before concreting is commenced and signed by Bidder and PMC.

3. 3.1 CEMENT CONTENT IN CONCRETE

The cement content as referred to, in additional specifications against respective items is minimum cement content that is required for the job. The cement content, if required as per actual mix design, is less than that specified in additional specifications, the Bidder shall have to put the minimum cement quantity at the rate specified in additional specifications. If the cement content required as per actual mix design is more than that specified in additional specifications, the Bidder shall put the additional quantity of cement without any extra cost to TMC.

3.2 WATER / CEMENT RATIO

For high quality concrete of low permeability, the water / cement ration shall not be more than.. 0.45 and preferably 0.40 or less subject to the attainment of adequate workability.

3.3 CURING OF CONCRETE:

Special attention shall be paid to curing of concrete in order to ensure maximum durability and to minimize cracking. Concrete shall be cured with fresh water whenever it is possible to ensure that the concrete surface can be kept wet despite wind, etc. Care shall be taken to avoid rapid lowering of concrete temperatures caused by applying cold water to hot concrete surface (thermal shock). Seawater shall not be used for curing reinforced concrete or any concrete work. Where there is doubt about the ability to keep concrete surface permanently wet for the whole of the curing period heavy-duty membrane-curing compound shall be used.

3.4 CONCRETE COVER TO REINFORCEMENT

- The cover concrete must be of the same quantity, impermeability and strength as the rest of the concrete. Particular care must be taken to ensure this especially in piles and other structural components.
- 2 The concrete cover must develop sufficient alkalinity, and protect the steel. The alkalinity developed shall not be less than 0.04 N and shall not be more than 0.08 N.
- The cover must be uniform throughout and its thickness shall be exclusive of plaster other than decorative finishes.
- The concrete cover shall be as per the relevant clauses of IS codes. In the case of piles the Engineer-in-Charge shall separately decide the cover thickness.

3.5 DETAILING OF MISCELLANEOUS ITMES

Binding wires: - All ends of binding wires shall be carefully turned inwards so that they do not project out of concrete to start rusting action. Stainless Steel or galvanized wires are preferable. Wherever possible Polythene binding, strings and Polythene bar grips shall be used, after making sure that these do not result in loss of bond of chemical reaction with concrete and this is subject to approval of Engineer-in-charge.

3.6 HOLLOWS IN CONCRETE

After completion of concreting work, the concrete surface particularly where there is congestion of reinforcement, shall be tested by light hammering or if possible by Schmidt hammer. Any portion showing signs of hollowness should be grouted immediately.

ADDITIONAL TECHNICAL CONDITIONS

The work shall be carried out in the best workmanship like manner and in strict accordance with latest P.W.D. handbook edition and as per Standard Specifications Book of Govt. of Maharashtra and as per specific order of the Engineer In-charge / his representative from time to time.

2

The order issued by Government in P.W. Department from time to time regarding construction procedure shall be binding on the Bidder in addition to the specification contained in P.W.D. hand book and book of standard specification of P.W. Department and the specifications enumerated above.

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The Bidder shall submit day-to-day account of the materials issued to his and its use and also monthly progress and programme of work.

- i The concrete mix design shall be got approved by Engineer-in-charge and the mix design shall give preliminary strength of 1.33 times work test.
 - ii The Maximum size of aggregate permissible would be as per standard Specifications.

4

Unit rate for relevant building items under schedule 'B' shall be deemed to include the cost of any cutting / leaving framing holes forming changes etc. in walls, floor, ceiling etc. as required and making good.

5

The items provided with watering for curing include continuous watering operations through out the day including lunch hours and also during holidays. For this purpose ,Bidder shall have to construct tank of appro. 3000 litres capacity near each building and provides necessary Booster Pumps etc. to ensure adequate curing and wetting. Hold fasts coming in contact with R.C.C. columns shall be of sizes 30cm x 4cm to be fitted with two rows, nails fixed properly in concrete.

6

Criteria of strength for test cubes required to be specified in case of cement concrete for R.C.C. work.

7 The Bidder will have to use sand washing machine for washing of sand.

CONCRETE WORK METHODOLOGY

1.

For all items of concrete works in any structural portion or its components only Design Mix Concrete shall be used. For grade of concrete less than M-15, Nominal mix concrete may be used.

Aggregates for concrete:

Aggregates, coarse and fine shall conform to I. S. 383 of 1970 and relevant portion of I. S. 51.5 of 1959. Coarse Aggregates shall be obtained from sources known to produce aggregates satisfactory for concrete and shall be strong, hard, durable and chemically inert and free from any impurities like clay limps, organic matter etc. Maximum size of aggregates permissible shall be as per Standard Specifications.

3. Water for Concrete:

Water used both for mixing and curing concrete shall be free from deleterious materials and shall be as per standard specifications.

4.

4.1 CEMENT CONTENT

Minimum cement content for various grades of Design mix concrete shall be as per IS - 456.

4.2 Water Cement Ratio:

Water cement ratio in all elements shall be as low as practicable in conformity with requirement of workability as per IS -456.

4.3 Admixtures: Use of superplasticizers in

concrete shall be permitted. The

admixture should be got approved from Engineer - in -

charge. The cost of admixture shall be borne by he Bidder.

4.4 Water quantity Water quantity and slumps for all

and slump: reinforced (Ordinary and

controlled concrete) and plain

concrete work shall conform to IS: 456 specification unless

otherwise directed by the Engineer-in-charge.

4.5 In any case ,the slump of concrete shall be as per the requirements of mix design

and shall be maintained throughout the concrete, for a particular member.

4.6 The Bidder shall provide free of cost, slump test apparatus and labour etc.

Design of cement concrete mixes:

i All the cement concrete of grade M - 15 and higher strength shall be done with

proper mix design. The mix design shall be got approved from the Executive

Engineer from time to time whenever there is change in the source and type of

cement and aggregates and change in gradation of aggregates.

ii Preliminary mix design must be carried out from an approved laboratory. For

subsequent changes field mix design shall be acceptable. However in case the

Executive Engineer has got difficulty in acceptance of the field mix design, the

Bidder shall do laboratory mix design from approved laboratory at his own cost.

Cement, fine aggregate and coarse aggregate must be used by weight only

according to the requirement of the approved mix design.

iv The concrete mix design shall give target strength of 1.33 times the working

strength.

- v The minimum size of aggregate permissible shall be as per standard specifications.
- vi The provision of the specifications for controlled concrete shall be applicable for all the structural concrete items and that the minimum quantity of cement per cubic meter of concrete shall be as specified in the specification. The maximum water cement ratio shall be 0.45. The mix design shall be done accordingly (of I.S. 456 2000 for severe exposure condition.)
- vii No extra payment over and above the accepted tender rate shall be made or no reduction in accepted tender rate shall be effected in case of variation in the constituents of cement concrete because of the mix designs or change in the mix design as per requirements and direction of the Engineer in Charge.
- viii All the expenses of preliminary mix design, subsequent field / laboratory mix design, work tests, shall be borne by the Bidder.

6. Form work for Concrete work:

The forms of concrete shall be of the materials as directed by the Engineer – in – Charge and shall be of steel or as approved by Engineer-in-charge. Forms shall be of the required shape, Profile and lines. Suitable devices shall be used to hold corners, adjacent ends, edges of panel or other forms together in accurate alignment. The forms and joints shall be tight enough. Forms used, for circular, curved or structures of unusual shape, petal dome etc. shall be of such a character that will result in smooth concrete surface and exact shape.

They shall be prepared such that they will not wrap or distort during erection or while placing concrete. Their design and layouts shall be got approved from the Engineer – in – charge in advance.

7. ERECTION AND REMOVAL OF FORM WORK

The centering, strutting shall be of steel exclusively and it should be got approved by Engineer in charge. Centering and shuttering shall be close and tight to prevent leakage of cement slurry. The centering shall have the necessary props, bracing and edges sufficiently strong and stable, which shall not yield or displace while or after lying of concrete. They shall be made in such way that they can be slackened and removed gradually and slowly without disturbing the concrete. Centering and shuttering shall not be removed before the design strength is achieved.(As per I.S.Code)

8. Mixing of Concrete:

Design mix concrete as well as nominal mix concrete shall be mixed following the provisions in standard specifications unless otherwise directed by the Engineer in charge.

Unless otherwise agreed by the Engineer in charge concrete shall be mixed in a batch type mixer or such other type of mixer as the Engineer in charge may approve.

During hot weather the Bidder shall ensure that the constituent materials are sufficiently cool to prevent the concrete from stiffening in the intervals between its discharge from the mixer and its final position.

9. Transportation, placing and compaction of Concrete:

The method of transportation, placing and compaction of concrete shall be followed as per Standard Specification unless otherwise directed by the Engineer in charge. The compaction shall be done with surface float vibrators for slabs and with pin vibrators for columns and beams. Vibrators of adequate vibrating capacity shall be employed for all types of works.

10. Curing:

Curing shall be done with following provision of standard Specifications and as directed by the Engineer in charge.

Approved curing compounds may be used in lieu of moist curing with the permission of the Engineer in charge. Such approved compounds shall be applied to all exposed surfaces of the concrete as soon as possible after the concrete has set.

11. Working in extreme weather:

During windy weather efficient protection shall be provided to prevent the cement from being blown away during the process of proportionate and mixing. During wet weather, the concrete shall be adequately protected as soon as it is in position.

No concreting shall be carried out during period of continuous heavy rain unless; it is completely covered during mixing, transporting and placing. In extreme hot weather, concreting shall be restricted to morning and evenings. Time between mixing and placing of concrete shall be kept to the minimum and sprinkling with water shall cool formwork.

12. Finishing:

Finishing work shall comply with requirements of standard specification unless otherwise specified herein below.

Immediately on removal of forms, the Engineer shall examine the R.C.C. work before any defects are made good. Surface defects of a minor nature shall be rectified generally as indicated below by the Bidder.

- (i) Surface defects, which are seen are to be corrected when forms are removed, usually consist of bulges due to movement of forms, ridges at forms joints, honey-combed areas, damage resulting from the stopping of forms and bolt hole. Careful chipping or tooling shall remove bulges and ridges and the surface is then rubbed with a grinding stone. Honey combed and other areas shall be chipped out, the edges being cut as straight as possible and perpendicularly to the surface or preferably slightly under cut to provide a key at the edge of the patch. Boltholes shall be closed by cement mortar to ensure thorough filling.
- (ii) Shallow patches shall first be treated with a coat of thin grout composed of one part of cement and one part of sand and then filled with mortar similar to that uses in concrete. The mortar is placed in layers not more than 10 mm thick and each layer shall be given a scratch finish to secure bond with the succeeding layer. The last layer shall be finished to match the surrounding concrete by floating, rubbing or tooling on formed surfaces by pressing the form material against the patch while the mortar is still plastic.

- (iii) Large and deep patches require filling up with concrete held in place by forms. Such patches shall be reinforced and carefully dowelled to the hardened concrete.
- (iv) The same amount of care to cure the material in the patches shall be taken as with the whole structure. Curing shall be started, as soon as soon as possible after the patch is finished to prevent early drying. Damp Hessian may be used.
 But in some locations it may be difficult to hold it in place, a membrane-curing compound in these case will be most convenient.

General Guidelines for waterproofing work

13.1 Roof slab and Terrace

Providing average 112 mm, thick cement based waterproofing treatment with brickbat coba bedding finished with hand fitted broken china mosaic tiles at all surface area including vatta, by keeping the treatment minimum 75mm thick at the rain water pipe point and keeping the gradient not flatter than 1 in 100.

- a) Cleaning the surface to the requirements.
- b) Applying a coat of cement wash mixed with water proof compound.
- c) Providing 12mm thick cement mortar bed with admixture of waterproofing compound to form a bed for brickbats. Special care shall be taken at the junction of parapet & terrace slab to ensure gaps, if any, are properly sealed.
- d) Placing brickbats of varying sizes (average 80mm thick) to a proper slope & grouting their joints with chemical process in cement mortar with 2% waterproofing compound.

- e) Providing all around the terrace large waterproof wattas
 (rounding) up to a height of 30 cm. in P.C.C. or as directed above the finished
 level of waterproof treatment.
- f) Finishing: Finishing the top surface with average 20mm thick layers of cement mortar 1:3 added with jute fiber at one kilogram per bag, including finishing the surface smooth with cement slurry mixed with approved waterproofing compound, marking finished surface with false squares of 300mm x 300mm.
- g) Curing: Curing shall be done for 14days. Making base (wattas) with lean cement mortar to keep water standing on the surface shall do curing of top surface.
- h) Carrying out the test.

Payment for the item shall be released only after results of pond test are satisfactory.

13.2 Toilets:

- a) Cleaning the surface to the requirements.
- b) Applying a coat of cement wash mixed with waterproof compound.
- c) Providing 25mm, thick waterproof treatment to the bottom of toilet floors.
- d) Providing 20mm to 25mm thick cement mortar waterproof treatment to the walls of toilets up to the heights of 0.60 meter above the finished floor level.

- e) Grouting the mouths of inlets and outlets.
- f) Filling sunk portion with brickbats including waterproof mortar and the top surface left rough to form a key for tiles.

13.3 **Overhead Tanks:**

The work of construction of underground/overhead water tank, water tank as a whole shall be tested for water tightness and leakages if any shall be rectified.

14 Waterproofing:

- 14.1 The work of waterproofing shall be carried out by the bidder only through a renowned specialist- waterproofing agency using cement-waterproofing compound, as approved in writing by the Engineer-in-charge.
- 14.2 The Bidder shall give before actual execution, detailed specifications for each item of work of waterproofing to be executed according to the specifications of the agency, The work shall not be started unless approval in writing given by the Engineer-in-charge to the said specification.
- 14.3 The Bidder shall give a guarantee bond on requisite stamp paper for a minimum period of 7 years for all the items of waterproofing done. During the guarantee period the Bidder shall entirely be responsible to rectify any defect at his own cost to maintain the work in waterproof condition. The agency for waterproofing shall also have to make good all the surrounding disturbed by him during the rectification work at his own cost. The form of written guarantee shall be on a

legal stamped agreement acceptable to the Corporation. The guarantee shall be given within one month from the date of completion of waterproofing treatment but any delay in furnishing the guarantee shall not relieve the Bidder from the implications of this clause. 25% (twenty five percent) of the cost of the waterproofing work executed shall be retained as "Retention Money" for a period of seven years covering the guarantee period of 7 yeas.

15 EARTH WORK FOR LEVELLING THE AREA:

- 15.1 Setting out and making profiles Masonry pillars will be erected at suitable points in the area to serve as bench marks for the execution of work. These benchmarks shall be connected with G.T.S. or any other benchmark approved by the Engineer-in-charge by using Total Station survey instrument.
- 15.2 The ground levels shall be taken at 5 metres interval, in level or uniformly sloping ground and at closer intervals where local mounds, pits or undulations are met with, as directed by the Engineer-in-charge. The ground levels shall be recorded in field books and plotted on a plan, which shall be signed by the Bidder and the Engineer-in-charge before the earthwork is started and labour required for taking levels shall be supplied by the Bidder at his own cost.

15.4 CUTTING AND FILLING:

a) Cutting shall be done from top to bottom. Under mining or under cutting shall not be allowed. The earth from cutting shall be directly used for filling and no claim

of double handling of earth shall be entertained. Filling shall be done in regular layers, each layer not exceeding 20 cms. in depth. The earth used for filling shall be free from all roots, grass and rubbish and all lumps and clods exceeding 8 cms. in any direction, shall be broken down. Breaking clods and ramming shall consolidate each layer. Watering shall be done, if so stipulated. The top surface of the finally finished area shall be neatly dressed.

- b) Where consolidation of filling or banking is specified each layer of earth shall be adequately watered to aid compaction. It shall then be rolled with roller of minimum half tonne weight not less then five times till it gets evenly and densely consolidated. Where roller cannot work, the earth shall be consolidated with wooden or steel rammers of seven to ten kilograms weight having a base of 20 cms. Square or 20 cms. diameter. The labour for ramming shall be at least one rammer to six diggers. Every third layer of earth and the topmost layer shall be well consolidated with power roller of minimum eight tonne weight, not less than five times, till the soil behaves as an elastic material and gets compressed under the load of roller. Before placing the next layer, the surface of the under-layer, shall be moistened and scarified with pickaxes spades, so as to provide a satisfactory bond with the next layer. The top surface of the finally finished area shall be neatly dressed.
- c) All cutting shall be done to the required levels. Should cutting be taken deeper, such extra excavation shall not be measured for payments. Further the bottom of excavation shall be brought to required levels by filling in with suitable earth duly consolidated at the Bidder's cost. However, in case of hard rock, where blasting operations have been resorted to, cutting shall be measured to the actual levels, provided the Engineer-in-charge is satisfied that the Bidder has not gone deeper than what was unavoidable.

- d) The finished formation "levels", in case of filling shall be kept higher than the required levels by making an allowance of 10% depth of filling for future settlement in case of ordinary consolidated fills, and 5% in case where the consolidation is done by heavy mechanical means.
- e) During the execution of work, the Bidder shall maintain the natural drainage of the area.

Chapter – IX

Declaration of Contractor

CHAPTER IX

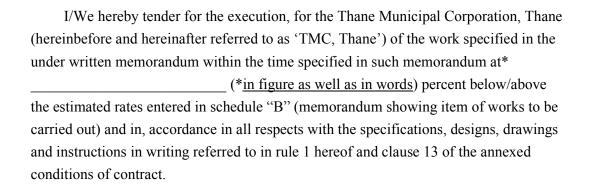
DECLARATION OF THE CONTRACTOR

I/We, hereby declare that I/We have made myself/ourself thoroughly conversant with the sub-soil conditions local conditions regarding all materials (such as stone, murum, sand. source of water, etc.) and Labour of which I/We have based my/our rates of this work. The specifications, conditions, bore results and lead of materials on this work have been carefully studied and understood by me/us before submitting this tender. I/We undertake to use only the best materials approved by the City Engineer Thane Municipal Corporation, Thane of his duly authorised assistant before starting the work and to abide by his decision.

Signature	of	Contractor((s)	١
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Chapter – X Agreement B-1 Tender Form

CHAPTER - X TENDER FOR WORKS CONSTRUCTION OF DWELLING UNITS & INFRASTRUCTURE AT SIDDHARTHNAGAR UNDER BSUP



MEMORANDUM

(a)General Description :CONSTRUCTION OF DWELLING UNITS & INFRASTRUCTURE AT SIDDHARTHNAGAR UNDER BSUP

(b) Estimated Cost : **Rs. 29,90,00,000/-**(c) Earnest Money : **Rs. 29,90,000/-**

(d) Security Deposit

A) Initial : Rs. 67,27,500/-

B) From Running account

bill @ 5%. : **Rs. 67,27,500**/-

(e) Total : Rs. 1,49,50,000/-

- (f) Time allowed for the work from the date of written order to commence 18 (Eighteen) calender months excluding monsoon.
- 2. I/We agree that this offer shall remain open for acceptance for a minimum period of 180 days from the date of opening the same and thereafter until it is withdrawn by me/us by notice in writing duly addressed to the authority opening the tenders and

	oost A.D. or otherwise delive	ered, at the office	of such authority.
The Earnest Money	in form of D.D. or Bank G	uarantee No	date
is herewith forward	led. The amount of Earnest	Money shall not	bear interest and
shall be liable to be	forfeited to the TMC, Thane	e should I/We fail	to (i) abide by the
stipulation to keep	the offer open for the perio	d mentioned above	ve or (ii) sign and
complete the contra	act documents as required by	y the City Engine	er and furnish the
security deposit as	specified in item (d) of the	memorandum cor	ntained in para - 1
above within the time	ne limit, laid down in clause	(1) of the condition	ons of the contract.
The amount of ear	rnest money may be adjuste	ed towards the se	ecurity deposit or
refunded to me/us	if so desired by me/us in w	vriting unless the	same or any part
thereof has been for	feited as aforesaid.	_	
Should this tender	be accepted. I/We hereby a	gree to abide by	and fulfill all the
	ons of the conditions of c	•	
•	default thereof to forfeit and		
* *	n the said condition.	,	
-			
Contractor			
Name & Address			
_			
Dated	day of	2011	
(Witness)			
Name & Address			
-			
Occupation			
The above tender	is hereby accepted by me	for and on beh	alf of the Thane
Municipal Corporat	ion.		
O.C.			
Officer	1	2007	
Dated	day of	2007	
		City Engin	ieer

CONDITIONS OF CONTRACT

CLAUSE 1

The person/persons whose tenders may accepted (hereinafter called the Contractor, which expression shall unless excluded by or repugnant to the context include his heirs, executor, administrators and assigns) shall (A) within 10 days (which may be extended by the City Engineer concerned upto 15 days' if the City Engineer thinks fit to do so) of the receipt by him of the notification of acceptance of his tender deposit with the City Engineer in cash or approved securities endorsed to the Commissioner of sum sufficient which will make up the full security deposit specified in the tender and (i) above and (B) Permit TMC, Thane at the time of making any payment to him for work done under the contract to deduct such as will amount to two percent. Of all money so payable such deductions to be held by TMC, Thane by way of security deposit until the full amount of the security deposit is made up. All compensation or other money payable, by the Contractor to TMC, Thane under the terms of his contract may be deducted from or paid by the sale of sufficient part of his security deposit or from the interest arising therefrom or from any sums which may be due or may become due by TMC, Thane to the contractor under any other contract or transaction of any nature on any account whatsoever and in the event of his security deposit being reduced by reason of any such deduction or sale as aforesaid the contractor shall, within ten days thereafter, make good in cash or approved securities endorsed any sum or sums which may have been deducted from or raised by sale of his security deposit or any part thereof. The security deposit referred to when paid in cash may, at the cost of the depositor, be converted into interest bearing securities.

If the amount of securities deposit to be paid in lump-sum within the period specified at (A) above is not paid the tender/contract already accepted shall be considered as cancelled and legal steps taken against the contractor for recovery of the amounts. The amount of security deposit retained by the TMC, Thane shall be released after the expiry of period upto which the contractor has agreed to maintain the work in good order is over. In the event of the contractor failing or neglecting to complete

rectification work within the period upto which the contractor has agreed to maintain the work in good order, then subject to provisions of clauses 17 and 20 hereof the amount of security deposit returned, by TMC, Thane shall be adjusted towards excess cost incurred by the TMC, Thane on rectification work.

CLAUSE 2

The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which the order to commence work is given to the contractor. The work shall throughout the stipulated period of the contract, be proceeded with, all due deligence (time being deemed to be of the essence of the contract on the part of the contractor) and the contractor shall pay compensation as an amount equal to one percent or such smaller amount as City Engineer (whose decision in writing, shall be final) may decide, of the amount of the estimated cost of the whole work as shown by the tenderer for every day that the work remains uncommenced, or unfinished after the proper dates. And further to ensure good progress during the execution of the work the contractor shall be bound, in all cases in which the time allowed for any work exceeds one month to complete.

NOTE:

The quantity of the work to be done within a particular time to be specified above shall be fixed by the City Engineer after taking into consideration the circumstances of each case. And abide by the program of detailed progress laid down by the City Engineer.

The following proportions will usually be found suitable: In 1/4, 1/2, 3/4 of the time.

Reasonable progress of work: 1/6, 1/2, 3/4 of the total value of the work to be done.

In the event of the contractor failing to comply with these conditions he shall be liable to pay as compensation an amount equal to half percent of the said estimated cost of the whole work for every week that the due quantity of the work remains uncommenced or incomplete, provided always that the total amount of the compensation to be paid under provisions of this clause shall not exceed 5% of the estimated cost of the work shown in the tender.

CLAUSE 3

In the case in which under any laws of this contract the contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit (whether paid in one sum or deducted by installments) or in the case of abandonment of the work owing to serious illness or death of the contractor or any other cause, the City Engineer on behalf of the TMC, Thane shall have power to adopt any of the following courses as he may deem best suited to the interest of TMC, Thane.

- a) To rescind the contract for which rescission notice in writing to the contractor under the signature of the City Engineer) shall be conclusive evidence and in that case the security deposit of the contractor shall stand forfeited and be absolutely at the disposal of the TMC, Thane.
- b) To carry out the work or any part of the work departmentally, debiting the contractor with the cost of the work expenditure incurred on tools and plants and charges on additional supervisory staff including the cost of work charged establishment employed for getting the unexecuted part of the work completed and crediting him with the value of the work done departmentally in all respect in the same manner and at the rates as if it has been carried out by the contractor under the terms of his contract. The certificate of the City Engineer as to the cost and other allied expense as incurred and as to the value of the work so done departmentally shall be final and conclusive against the contractor.
- c) Order that the work of the contractor be measured up and to take such part as thereof as shall be unexecuted out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work charged establishment and cost of the work executed by the new contract agency will be debited to the contractor and the value of the work

done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the City Engineer as to all cost of the work and other expenses incurred as aforesaid for, or in getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor.

In case the contract shall be rescinded under clause (a) above the contractor shall not be entitled to recover or be paid any sum for any work therefore actually performed by him under this contract unless and until the City Engineer shall have certified in writing performance of such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the course referred to in clause (b) or (c) being adopted and the cost of work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited to the contractors, the amount of excess values shall be deducted from any money due to the contractor by the TMC, Thane under the contract or otherwise howsoever or from his security deposit or the sale proceeds thereof, provided however that the contractor shall have no claim against TMC, Thane even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses provided always that whichever of the three Courses mentioned in clauses (a), (b) or (c) is adopted by the City Engineer, the contractor shall have ii,) claim to compensation for any loss Sustained by him by reason of his having purchased, or procured any material or entered into engagements or made any advances on account or with a view of the execution of the work or the performance of the contract. The certificates of the City Engineer as to all cost of the work and other expenses incurred as aforesaid for or in getting the unexecuted work done by the new contractor and as to the value of the work so done and shall be final and conclusive against the contractor.

CLAUSE 4 If the progress of any particular portion of the work is unsatisfactory the City Engineer shall not withstanding that the general progress of the work is satisfactory in accordance with clause (2) be entitled to take action under

clause 3 (b) after giving the contractor 10 days notice in writing and the contractor will have no claim for compensation, for any loss sustained by him owing to such action.

CLAUSE 5

In any case in which any of the power conferred upon the City Engineer by clauses 3 and 4 hereof 'shall have become exercisable and the same shall not have been exercised, non-exercise thereof shall not constitute a waiver of any of conditions thereof and such powers shall not withstanding be exercised in the event of any future case of default by the contractor, for which, by any clause or clauses hereof he is declared liable to pay compensation amounting to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected.

In the event of the City Engineer taking the action under sub clauses (a) or (c) of clause 3 he may if he so desires, take possession of all or any tools, plants materials and stores in or upon the works or the site thereof or belonging to the contractor or procured by him and intended to be used for the execution of the work or any part thereof, paying or allowing for the same in account at the contract rates, or in the case of contract rates not being applicable at current market rates to be certified by the City Engineer whose certificate thereof shall be final. In the alternative the City Engineer may after giving notice in writing to the contractor alternative the City Engineer may after giving notice in writing to the contractor or his clerk of the work, foreman or other authorised agent, require him to remove such tools, plants, materials, or stores from the premises within a time to be specified in such notice, and in the event of the contractor failing to comply with any such requirement the City Engineer may remove them at the contractor's expense or sell them by auction or private sale at risk and account of the contractor in all respects and the certificate of the City Engineer, as to the expense of any such removal, and the amount of the proceeds, and expense of any such sale shall be final and conclusive against the contractor.

CLAUSE 6

If the contractor shall desire an extension of time for completion of the work on the ground of his having been unavoidably hindered in its execution or on any other ground he shall apply in writing to the City

Engineer before the expiration of the period stipulated in the tender or before the expiration of 30 days from the date on which he was hindered as aforesaid, or on which the cause for asking for the extension occurred, whichever is earlier and the City Engineer if in his opinion there was reasonable grounds for granting an extension grant such extension if he thinks necessary or proper. The decision of the City Engineer in this matter shall be final.

CLAUSE 7 CERTIFICATION OF SUBSTANTIAL COMPLETION OF WORKS:

On completion and taking over of works or a part of work exclusively stipulated in the contract documents, all in accordance with the requirements of the contract agreement and further Subject to the condition that the completed works or items of work, as the case may be (in case of phase completion), the City Engineer will issue a substantial completion certificate for whole or part of the works as the case may be on receiving written request from the contractor. The substantial completion is defined as stage of the work when it has been completed and made ready for functional use, although some minor points or insignificant items of work still remain to be completed, however, these minor points and insignificant items should not have any bearing on the functionality of the item. Provided always that the said substantial completion certificate being issued, prior to completion of whole of the works shall not be deemed to preempt requirement of reinstatement of any ground or surface, as may be necessary under contract provisions.

COMPLETION CERTIFICATE:

The completion certificate shall be issued by the City Engineer after completion of all minor works mentioned in substantial completion of work.

CLAUSE 8 No payment shall be made for any work estimated to cost less than Rs. 10000\-, till after the whole of the said work shall have been completed and certificate of completion given. But in the case of the works estimated to

cost more than Rs. 10000/- the contractor shall on submitting the monthly bill therefore, be entitled to receive payment proportionate to the part of the work then approved and passed by the City Engineer, whose certificate of such approval and passing, of the sum of payable shall be final and conclusive against the contractor. All such intermediate payments shall be regarded as payments by way of advance against the final payments only and not as payments for work actually done and completed, and shall not preclude the City Engineer from requiring any bad, unsound, imperfect or unskillful work to be removed and taken away and reconstructed or reerected, nor shall any such payment be considered as an admission of the due performance of the contractor or any part thereof in any respect or the occurring of any claim, nor shall it conclude, determine, or affect in any other way the powers of the City Engineer as to the final settlement and adjustment of the account or otherwise, or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for the completion of the work, otherwise City Engineer's certificate of the measurements and of the total amounts payable for the work shall be final and binding on all parties.

CLAUSE 9

The rates for several items on work estimated to cost more than Rs. 10000\- agreed to within, shall be valid only when the item concerned is accepted as having been completed fully in accordance with the sanctioned specifications. In case where the items of work are not accepted as so completed the City Engineer may make payment on account of items at such reduced rates as he may consider reasonable in the preparation of final or on accounts bill.

CLAUSE 10

A bill shall be submitted by the contractor in each month on or before the date fixed by the City Engineer for all work executed in the previous month and the City Engineer shall take or cause to be taken requisite measurement for the purpose of having the same verified, and the claim so far as it is admissible, shall be adjusted, within 10 days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the City Engineer may depute a subordinate to measure the said work in the presence of the contractor or his duly

authorised agent whose counter signature to the measurement list shall be sufficient warrant, and the City Engineer may prepare a bill from such list which shall be binding on the contractor in all respects.

CLAUSE 11

The contractor shall submit all bills on the printed forms to be had on application at the office of the City Engineer. The charges to be made in tile bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the tender, at the rates hereinafter provided for such work.

CLAUSE 12

If the specifications or estimate of the work provided for the use of any special description of materials to be supplied from the TMC, Thane stores or if it is required that the contractor shall use certain stores to be provided by the City Engineer (such materials and stores, and the prices to be charged therefore as hereinafter to mention being so far as practicable for the convenience of the contractor but not so as in anyway to control the meaning and effect of this contract-specified in the schedule or memorandum hereto annexed) the contractor shall be supplied with such materials and stores as he may be required from time to time to be used by him for the purpose of the contract only and the value of the full quantity of materials and stores supplied shall be set off or deducted from any "Sums then due or thereafter to become due to the contractor under the contract, or otherwise, or from the security deposits or the proceeds of the sale thereof. If the deposit is held in approved securities, the ;same or a sufficient portion thereof shall in that case be sold for the purpose. All material supplied to the contractor shall remain the absolute property of TMC. Thane and shall on no account be removed from the site of work. and shall at all times be open to inspection by the City Engineer. Any such materials unused and in perfectly good condition at the time of completion or termination of the contract shall be returned to the TMC Thane store, if the City Engineer so requires by notice in writing given under his hand but the contractor shall not be entitled to return any such material except with such consent of the City Engineer and he shall have no claim for compensation on account of any such material supplied to him as aforesaid

but remaining unused by him or for any wastage in or damage to any such

CLAUSE 12(A) All stores of controlled materials such as cement, steel, etc. supplied to the contractor by TMC or procured by the contractor, should be kept by the contractor under lock and key and they will be accessible for inspection by the City Engineer or his authorised agent at all the times.

materials.

CLAUSE 13 The contractor shall execute the whole and every part of the work in the most substantial and workman like manner, and both as regards material and in every other respect in strict accordance with specifications. The contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the City Engineer and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspections at such office, or in the site of the work during office hours. The contractor will be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of the accepted tender along with the work order free of cost.

CLAUSE 14

The City Engineer shall have power to make any alterations in or additions to the original specification drawings, designs and instructions that may appear to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with any instructions in this connection which may be given to him in writing signed by the City Engineer and such alteration shall not invalidate the contract, and any additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respect on which he agreed to do the main work, and at the same rates as per specified in the tender for the main work. And if the additional and altered work includes any class of work for which no rate is specified in this contract, then such rates or at the rates mutually agreed upon between the City Engineer and the contractor, whichever is lower.

If the additional or altered work, for which no rate is entered in the Schedule of Rates of schedule as adopted by TMC, ordered to be carried out before the rate is agreed upon, then the contractor shall, within seven days of the date of receipt by him of the order to carry out the work, inform the City Engineer of the rate which it is his intention to charge for such class of work and if the City Engineer does not agree to this rate he shall be notice in writing be at liberty to cancel his order to carry out such class of work and arrange to carry it out in such manner as he may consider advisable, provided always that the contractor shall commence work or incur any expenditure in regard thereto before the rates shall have been determined as lastly herein before mentioned, then in such case he shall only be entitled to be paid in respect of the work carried out or expenditure by him prior to the date of the determination of the rates as aforesaid according to such rate or rates as shall be fixed by the City Engineer. In the event of a dispute, the decision of the City Engineer of the TMC, Thane will be final.

The time limit for the completion of the work shall be extended in the proportion that the increase in its cost occasioned by alterations or additions bears to the cost of the original contract work, and a certificate of the City Engineer as to such proportion shall be conclusive.

CLAUSE 15

Engineer shall for reasons whatsoever (other than default on the part of the contractor for which the TMC, Thane is entitled to rescind the contract) desires that the work or any part of the work specified in the tender should be suspended for any period of that the whole or part of the work should not be carried out at all, he shall give to the contractor a notice in writing of such desire and upon receipt of such notice the contractor shall forthwith suspend or stop the work wholly or in part as required, after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury to the work already done or endanger the safety thereof provided that the decision of the City Engineer as to the stage at which the work any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the

- contractor. The contractor shall have no claim to any payment of compensation whatsoever by reason of or in pursuance of any notice as aforesaid on account of any suspension stoppage or curtailment except to the extent specified hereinafter.
- 2) Where the total suspension of work ordered as aforesaid continued for a continuous period exceeding 90 days, the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving 10 days prior notice in writing to the City Engineer within 30 days of the expiry of the said period of 90 days of such intention requiring the City Engineer to record the final measurement of the work already done and to pay the final bill. Upon giving such a notice the contractor shall be deemed to have been discharged from his obligations to complete the remaining unexecuted work under this contract. On receipt of such notice the City Engineer shall proceed to complete the measurement and make such payments as finally due to the contractor within the period of 90 days from receipt of such notice in respect of the work already done by the contractor, such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provision of this clause.
- 3) Where the City Engineer requires the contractor to suspend the workfor the period in excess of 30 days at any time or 60 days in aggregate, the contractor shall be entitled to apply to the City Engineer within 30 days of the resumption of the work after such suspension of payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery remaining idle on site or on account of his having had to pay the salary or wages of labour engaged by him during the said period of suspension provided always that contractor shall not be entitled to any claim in respect of any such working machinery, salary or wages whatsoever occasioned by unsatisfactory work or any other default on his part. The decision of the City Engineer in this regard shall be final and conclusive against the contractor.

- 4) In the event of:
 - i) Any total stoppage of work on notice from the City Engineer under sub clause (1) in that behalf.
 - ii) Withdrawal by the contractor from the contractual obligations to complete the remaining unexecuted work under sub clause (2) on account of continued suspension of work for a period exceeding (90) days.
 - iii) Curtailment in the quantity of item or items originally tendered on account of any alterations omissions or substitution as in the specifications, drawings, designs or instructions under clause 14 (i) where such curtailment exceeds 25% in quantity and the value of the quantity curtailed beyond 25% at the rates for items specified if the tender is more than Rs.5,000\-.

It shall be open to the contractor within (90) days from the service of (i) the notice of stoppage of work or (ii) the notice of withdrawal from the contractual obligations under the contract on account of the continued suspension of the work or (iii) notice under clause 14 (i) resulting in such curtailment to produce to the City Engineer satisfactory documentary evidence that he had purchased or agreed to purchase material to use in the contracted work, before receipt by him of the notice of the stoppage, suspension or curtailment and require the TMC, Thane to take over on payment of such material at the rates determined by the City Engineer, provided however such rates shall in no case exceeds the rates at which the same where acquired by the contractor. The TMC, Thane shall thereafter take over the material so offered provided the quantities offered are not in excess of the requirements of the unexecuted work as specified in the accepted tender and are of quality and specifications approved by the City Engineer.

- **CLAUSE 15(A)** The contractor shall not be entitled to claim any compensation from the TMC, Thane for the loss suffered by him on account of delay by TMC Thane in the supply of materials entered in schedule "A" where such delay is caused by
 - i) Difficulties relating to the supply of railway wagons.

- ii) Force majeure.
- iii) Act of God.
- iv) Act of enemies of the state or any other reasonable cause beyond control of Thane Municipal Corporation.

In case of such delay in the supply of material, the TMC, Thane shall grant such extension of time for the completion of the work as shall appear to the City Engineer to be reasonable in accordance with the circumstances of the case. The decision of the City Engineer as to the extension of time shall be accepted as final by the contractor.

CLAUSE16

Under no circumstances what so ever shall be contractor be entitled to any compensation from TMC, Thane on any account unless the contractor shall have submitted a claim in writing to the City Engineer within one month of the case of such claim occurring.

CLAUSE 17

If any time before the security deposit or any part thereof is refunded to the contractor it shall appear, to the City Engineer or his subordinate in charge of the work, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of inferior quality, or that any materials or articles, provided by him for the execution of the work are unsound or the quality inferior to that contracted for, or are otherwise not in accordance with the contract. It shall be lawful for the City Engineer to intimate this fact in writing, to the contractor and then notwithstanding the fact that the works, materials or articles, complained of may have been inadvertently passed, certified and paid for, the contractor shall be bound forthwith to rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or if so required shall remove the material or articles so specified and provide other proper and suitable materials or articles at his own charge and cost and in the event of his failing to do so within a period to be specified by the City Engineer in written intimation aforesaid the contractor shall be liable to pay compensation at the rate of 1% on the amount of the estimate for, everyday not exceeding 10 days during which the failure so continues and in the case of any such failure City Engineer may rectify or remove and re-execute the

work or remove and replace the materials or articles complained of as the case may be at the risk and expenses in all respects, of the contractor. Should the City Engineer, consider that any such inferior work or materials, as described above maybe accepted or made use of it shall be within his discretion to accept the same at such reduced rates as he may fix therefor

CLAUSE 18

All works under or course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the City Engineer and his subordinates, and contractor shall at all times during the usual hours and at all other times at which reasonable notice of the intention of the City Engineer or and his subordinate to visit the work shall have been given to the contractor, either himself be present to receive orders and instructions, or have a responsible agent duly accredited in writing present for that purpose. Orders given to the contractor's duly authorised agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

CLAUSE 19

The contractor shall give not less that five days notice in writing to the City Engineer or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof taken before the same is covered up or placed beyond the reach of measurement, any work without the consent in writing of City Engineer or his subordinate in charge of the work and if any work shall be covered up or placed beyond the reach of measurement without such notice having been given or consent obtained, the same shall be uncovered at the contractor's expenses and in default thereof no payment or allowance shall be made for such work or for the materials with which the same was executed.

CLAUSE 20

If during the period of 24 months from the date of completion as certified by the Engineer in pursuant of clause 7 of the contract or 24 month after commissioning the work whichever is earlier in the opinion of the Executive Engineer, the said work is defective in any manner whatsoever the contractor shall forthwith on receipt of notice in that behalf from the Executive Engineer duly commence execution and completely carry out at his cost every respect all the work that may be necessary for rectifying and setting right the defects specified therein including dismantling and reconstruction of unsafe portions strictly in accordance with, and in the manner prescribed and under the supervision of the Executive Engineer. In the event of the contractor failing or neglecting to commence execution of the said rectification work within the period prescribed therefor in the said notice and/or to complete the same as aforesaid as required by the said notice, the Executive Engineer get the same executed and carried out departmentally or by any other agency at the risk on account and at the cost of the contractor. The contractor shall forthwith on demand pay to T.M.T., the amount of such cost,-charges and expenses sustained or incurred by the T.M.T., Thane of which the certificates of the Executive Engineer shall be final and binding on the contractor. Such costs, charges and expenses shall be deemed to be arrears of land and revenue and in the event of contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other right and remedies of the T.M.T., Thane the same maybe recovered from the Contractor as the arrears of land revenue. The T.M.T., Thane shall also be entitled to deduct the same from any account which may then be payable or which may thereafter become payable by the T.M.T., Thane to the contractor either in respect of the said work or any other whatsoever or from the amount of security deposit retained by T.M.T., Thane.

CLAUSE 21

The contractor shall supply at his own cost all material (except such special materials if any as may be required in accordance with the contract, by supplied from the TMC Stores) plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and any temporary work required for the proper execution of the work, whether in the original, altered or substituted form, and whether included in the specification, or other documents forming part of the contract or referred to in these conditions or not and which may be necessary for the purpose of satisfying or complying with the requirements of the City Engineer as to any matter on which under these conditions he is entitled to be satisfied or which he is entitled to require together with carriage therefor, to and from the work. The

contractor shall also supply without charge, the requisite number of persons with the means and materials necessary for the purpose of setting out work and counting, weighing and assisting in the measurement or examination at any time and from time to time of the works or the materials failing this the same may be provided by City Engineer at the expense of the contractor under the contract or from his deducted from any money due to the contractor under the contract or from his security deposits or the proceeds of sale thereof, or a sufficient portion thereof. The contractor shall provide all necessary fencing and lights required to protect the public from the accident, and shall also be bound to bear the expense or defense of every suit action or other legal proceedings, that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay and damages and costs which may be awarded in any such suit action or proceedings to any such person, or which may with the consent of the contractor be paid in compromising any claim by any such person.

List of machinery in contractor's possession and which they propose to use on the works should be Submitted alone, with the tender.

- **CLAUSE 21(A)** The contractor shall provide suitable scaffolds and working platforms, gangway and stairways and shall comply with the following regulations in connection herewith.
 - a) Suitable scaffolds shall be provided for workmen for all work that cannot be safely done from a ladder or by other means.
 - b) A scaffold cannot be constructed, taken down or substantially altered except
 - i) under the supervision of competent and responsible person and
 - ii) as far as possible by competent workers possessing adequate experience in this kind of work.
 - c) All scaffolds and appliances connected therewith and all ladders shall:
 - i) be of sound material
 - ii) be of the adequate strength having regard to the loads and strains to which they will be subjected, and

- iii) be maintained in proper condition.
- d) Scaffolds shall be so-constructed that no part thereof can be displaced in consequence of normal use.
- e) Scaffolds shall not be overloaded and so far as practicable the load shall be evenly distributed.
- f) Before installing lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffolds.
- g) Scaffolds shall be periodically inspected by a competent person.
- h) Before allowing a scaffold to be used by his workmen, the contractor shall, whether the scaffolds has been erected by his workmen or not, take steps to ensure that it complies fully with the regulations herein specified.
- i) Working platforms, gangways and stairways shall
 - be so constructed that no part thereof can sag unduly or unequally.
 - ii) to be constructed and maintained having regard to the prevailing conditions as to reduce as far as practicable risks of persons tripping or slipping, and
 - iii) be kept free from any unnecessary obstruction.
- j) In the case of working platform and gangways working places and stairways at height exceeding 3 meters (to be specified)
 - every working platform and every working gangway shall be closely boarded unless other adequate measures are taken to ensure safety.
 - ii) every working platform and gangway shall have adequate width and iii) every working platform, gangway, working place and stairway shall suitably fenced.
- k) Every opening in the floor of building or in working platform shall except for the time and to the extent required to allow the access of persons or the transport or shifting or materials, be provided with suitable means to prevent the fall of persons or materials.
- When persons are employed on roof where there is danger of falling from the height exceeding two meters (to be prescribed) suitable precaution shall be taken to prevent the fall of persons or materials.

- m) Suitable precautions shall be taken to prevent persons being struck by articles which might fall from scaffolds or other working places.
- n) Safe means of access shall be provided to all working platforms and other working places.
- o) The contractors) will have to make payments to the labours as per minimum Wages Act.

CLAUSE 21(B) The contractor shall comply the following, regulations as regards the Hoisting Appliances to be used by him:

- a) Hoisting machine and tackle, including their attachments, anchorages and support shall:
 - i) be of good mechanical construction, sound material and adequate strength and free from patent defect, and
 - ii) be kept in good repair and in good working order.
- b) Every rope used in hoisting, and lowering materials or as means of suspension shall be of suitable quality; and adequate strength and free from patent defect.
- c) Hoisting machines and tackle shall be examined and adequately tested after erection on the site and before use and re-examined in position at intervals to be prescribed by the TMC, Thane.
- d) Every chain, ring, hook shackle, swivel and pulley block used in hoisting and lowering materials or as a means of suspension shall be periodically examined.
- e) Every crane driver or hoisting appliance operator shall be properly qualified.
- f) No person who is below the age of 21 years shall be in control of any hoisting machine including any scaffold which, or give signals to any operator.
- g) In the case of every hoisting machine and of every chain, ring, hook shackle, swivel and pulley block used in hoisting or lowering or as a means of suspension the safe working load shall be ascertained by adequate means.
- h) Every hoisting machine and all gears referred to, in the preceding regulation shall be plainly marked with the safe working load.

- In case of hoisting machine having available safe working loads, each safe working load and the conditions under which it is applicable shall be clearly indicated.
- No part of any hoisting machine or of any gear referred to in relation
 (g) above shall be loaded beyond the safe working load except for the purpose of testing.
- k) Motors, gearing transmission, electric wiring and other dangerous parts of hoisting appliances shall be provided with efficient safeguards.
- Hoisting appliances shall be provided with such means as will reduce to minimum the risk of the accidental decent of the load.
- m) Adequate precautions shall be taken to reduce to minimum the risk of any part of suspended load becoming accidentally displaced.
- CLAUSE 22 The contractor shall not set fire to any standing, jungle, trees, brush wood or grass without a written permit from the City Engineer. When such permit is given, and also in all cases when destroying cut or dug up trees, brush wood, grass, etc. by fire the contractor shall take necessity measures to prevent such fire spreading to or otherwise damaging, surrounding property. The contractor shall make his own arrangement for drinking water for the labour employed for him.
- CLAUSE 23 Compensation for all damages done intentionally or unintentionally by contractor's labours whether in or beyond the limits of TMC, Thane property including any damage caused by the spreading or fire mentioned in clause 22 shall be estimated by City Engineer or such other officer as he may appoint and the estimates of the City Engineer shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand, failing which, the same will be recovered from the contractor as damages in the manner prescribed in clause I or deducted by the City Engineer from any sums that may be due or become due from TMC, Thane to contractor under this contract or otherwise.

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The contractor shall bear the expenses of defending any action or other legal proceedings that may be brought by any persons for injury sustained by him owing to neglect of precautions to prevent the spread of fire and he shall also pay any damages and costs that may be awarded by the court in consequence.

CLAUSE 24 The employment of female labours on works in the neighborhood of soldier's barracks should be avoided as far as possible.

CLAUSE 25 No work shall be done on a Sunday without the sanction in writing of the City Engineer.

CLAUSE 26

The contract shall not be assigned or sublet without the written approval of the City Engineer. And if the contractor shall assign or sublet his contract, or attempt to do so or become insolvent or commence any proceedings to get himself adjudicated and insolvent or make any composition with his creditors or attempt to do so, the City Engineer may, by notice in writing rescind the contract. Also if any bribe, gratuity, gift, loan prerequisite, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given, promised or offered by the Contractor, or any of his servants or agents to any public officer or person in the employment of the TMC, Thane in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in contract the City Engineer maybe notice in writing rescind the contract. In the event of contract being rescinded, the security deposit of the contractor shall thereupon stand forfeited and be absolutely at the disposal of TMC. Thane, and same consequences shall ensure as if the contract had been rescinded under clause 3 hereof and in addition the contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

CLAUSE 27 All sums payable by a contractor by way of compensation under any of these conditions shall be considered as reasonable compensation to be

applied to use of TMC, Thane without reference to the actual loss or damage sustained, and whether any damage has or has not been sustained.

CLAUSE 28 In the case of tender by partners, any changes in the constitution of firm. shall be notified by the contractor to the City Engineer for his information.

CLAUSE 29 All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the City Engineer of the TMC, Thane for the time being, who shall be entitled to direct at what points and in what manner they are to be commenced and from time to time carried on.

CLAUSE 30

- 1. City Engineer for the time being shall be final conclusive and binding on all parties to the contract upon all questions relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or material used on the work, or as to any other question, claim, right matter, or thing, whatsoever, if any way arising out of, relating to the contract, designs, drawings, specifications estimates, orders or these conditions or otherwise concerning the works, or the execution, or failure to execute the same, whether arising, during the progress of the work, or after the completion or abandonment thereof. This Clause is not an Arbitration Agreement.
- 2. The contractor may, with-in thirty days of receipt of him by any order passed by the City Engineer of the TMC, Thane as aforesaid, appeal against it to tile Municipal Commissioner concerned with the contract, work or project provided that
 - a) The accepted value of the contract exceeds Rs. 10 Lakhs (Rupees Ten Lakhs Only)
 - b) Amount of claim is not less than Rs. 1 Lakh (Rupees One Lakh)

CLAUSE 31

The contractor shall obtain from the TMC, Thane all stores and articles of European and American manufacturer which may be required for work, or any part thereof or in making up any articles required thereof in connection therewith unless he has obtained permission in writing from the City Engineer to obtain such store articles elsewhere. The value of such stores and articles as may be supplied to contractor by. the City Engineer will be debited to the contractor in his account at the rates shown in the schedule in form A attached to the contract and if they are not entered in the said schedule, they shall be debited to him at the cost price which for the purpose of this contract shall include the cost of carriage and all other expenses whatsoever, which shall have to be incurred in obtaining delivery of the same at the stores aforesaid.

CLAUSE 32

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

CLAUSE 33

In the case of any class of work for which there is no such specifications as is mentioned in rule 1. Such work shall be carried out in accordance with the TMC prescribed specifications, and in the event of there being, no TMC prescribed specification then in Such case then work shall be carried out in all respects in accordance with the instructions and requirements of the City Engineer.

CLAUSE 34

The expression 'work" or "works" where used in these conditions shall unless there be something in the subject or context repugnant to Such construction be constructed to mean the work or the works contracted, to be executed under or in virtue of the contract, Whether temporary or permanent and whether original, altered, substituted or additional.

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- CLAUSE 35 The percentage referred to in the tender shall be deducted from/ added to the gross amount of the bill before deducting the value of any stock issued.
- CLAUSE 36 All quarry fees, royalties, octroi dues and ground rent for stacking materials, if any should be paid by the contractor.
- CLAUSE 37 The contractor shall be responsible for and shall pay any compensation to his workmen payable under the Workmen's Compensation Act, 1923 (VIII of 1923) (hereinafter called the said act) for injuries caused to the workmen. If such compensation is payable and paid by TMC, Thane as principal under sub-section (i) of section- 1 2 of the said act, on behalf of the contractor, this shall be recoverable by the TMC, Thane from the contractor under sub-section (2) of the said section. Such compensation shall be recovered in the manner laid down in clause (1) above.
- CLAUSE 37(A) The contractor shall be responsible for and shall pay the expenses of providing medical aid to any workmen who may suffer a bodily injury as a result of an accident. If such expenses are incurred by TMC, Thane the same shall be recoverable from the Contractor forthwith and deducted without prejudice to any other remedy of TMC, Thane from any amount due or that ma become due to the contractor.
- CLAUSE 37(B) The contractor shall provide all necessary personal safety equipment and first-aid apparatus available for the use of the persons employed on site, and shall maintain the same in condition suitable for immediate use at any time and shall comply with the following regulations in connection therewith.
 - a) The worker shall be required to use the equipment so provided by the contractor and the contractor shall take adequate steps to insure proper use of the equipment by those concerned.
 - b) When work is carried on in proximity to any place where there is a risk of drowning, all necessary equipment shall be provided and kept ready for use and all necessary steps shall be taken for the prompt rescue of any person in danger.

c) Adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during, the course of the work.

CLAUSE 37(C) The contractor shall duly comply with the provisions of "THE APPRENTICES ACT, 1961" (III of 1961), the rules made thereunder and the thereunders that may be issued from time to time under the said act and the said rules and on the failure or neglect to do so lie shall be subjected to all the liabilities and penalties provided by the said act and the said rules.

CLAUSE 38

- 1) Quantities in respect of the several items shown in the tender are approximate, and no revision in the tendered rate shall be permitted in respect of any of the items so long as, subject to any special provision contained in the specifications, prescribing different percentage of permissible variations or the quantity of the item does not exceed 40% of the tender quantity.
- 2) The contractor shall, if ordered in writing by the City Engineer so to do, also carry out any quantities in excess of the limit mentioned in sub-clause (1) hereof on the same conditions as and in accordance with the specifications in the tender and on at the rates (i) derived from the rates entered in the current schedule of rates and in the absence of such rates, (ii) at the rate prevailing in the market, the said rates being decreased in case percentage quoted by the contractor is below to which the total tendered amount upon the schedule of rates applicable to the year in which the tender were invited. For purpose of operation of this clause, this cost shall be taken to be **Rs.** 29,90,00,000/- (In words Rs. Twenty Nine Crore, Ninty Lakhs Only).
- 3) The quantities shown in the tender are tentative and may be reduced. No compensation or increase in rate will be applicable if quantities are reduced.
- 4) There is no change in the rate for the excess upto 40% of the tendered quantity.

5) In case of item for which quantities shown as zero there is no limit

- 5) In case of item for which quantities shown as zero there is no limit on quantity and contractor has to execute the work as directed by the city engineer at the tender rate.
- 6) In case of extra item for which rates are not given in tender current D.S.R. rate or percentage below on current D.S.R. rate quoted by contractor which ever is less will be applicable and no excalation will be paid on extra items.
- CLAUSE 39 The contractor shall employ any famine, convict or other labour of particular kind or class if ordered in writing to do so by the City Engineer.
- CLAUSE 40 No compensation shall be allowed for any delay caused in the starting of the work, on account of any acquisition of land or in the case of the clearance works, on account of any delay in according sanction to estimates.
- CLAUSE 41 No compensation shall be allowed for any delay in execution of work on account of water standing in borrow pits or compartments. The rates are inclusive of hard or cracked soil excavation in mud, sub-soil water or water standing in borrow pits and no claim for extra rates shall be entertained, unless otherwise expressly specified.
- CLAUSE 42 The contractor shall not enter upon or commence any portion of work except with the written authority and instruction of the City Engineer or of his subordinate in-charge of the work. Failing such authority the Contractor shall have no claim to ask for measurement of or payment of work.
- CLAUSE 43 i) No contractor shall employ any person who is under the age of 18 years.
 - ii) No contractor shall employ donkeys or other animals with bracing of string or thin rope. The bracing must be at least 3 inches wide and should be of tape (Nawar.)

- iii) No animal suffering from sores, lameness or emaciation or which is immature shall be employed on the work.
- iv) The City Engineer or his agent is authorised to remove from the work any person or animal found which does not satisfy these conditions and no responsibility shall be accepted by the TMC, Thane for any delay caused in the completion of work by such removal.
- v) The contractor shall pay fair and reasonable wages to the workmen employed by him in the contract undertaken by him in the event of any dispute arising between the contractor and his workmen on the ground, that the wages paid are not fair and reasonable the dispute shall be referred without delay to the City Engineer who shall decide the same. The decision of the city Engineer shall be conclusive and binding on

the contractor, but such decision shall not the contractor, but such decision shall not in any way affect the condition in the contract regarding the payment to be made by TMC, Thane at the sanctioned tender rates.

- vi) The contractor shall provide drinking water facility to the workers. Similar amenities shall be provided to the workers engaged on large works in urban areas.
- vii) Contractor is to take precaution against accidents which takes place on account of labour using loose garments while working near machinery.
- CLAUSE 44 Payment to contractors shall be made by cheques drawn on any Bank within the TMC limits convenient to them, provided the amount exceeds Rs. 100/- Amounts not exceeding Rs. 100\- will be paid in cash.
- CLAUSE 45 Any, contractor who does not accept these conditions shall not be allowed to tender for works.
- CLAUSE 46 If Government declares a state of scarcity or famine to exist in any village situated within 16 km. of the work in contractor shall employ upon such parts of the work, as are suitable for unskilled labour any person certified

to him by the City Engineer or by any person to whom the City Engineer may have delegated this duty in writing to be in need of relief and shall be bound to pay to such persons wages not below minimum which Government have fixed in this behalf. Any disputes which may arise in connection with the implementation of this clause shall be decided by the City Engineer whose decision shall be final and binding on the contractor.

CLAUSE 47

The price quoted by the contractor shall not in any case exceed the control price if any fixed by Government or reasonable price which is permissible for him to charge a private purchaser for the same class and description of goods the controlled price permissible under the provisions of Hoarding and Preventions Ordinance, 1943, as amended from time to time. If the price quoted exceeds the controlled price of the price permissible under Hoarding and Preventions Ordinance the contractor shall specifically mention this fact in his tender along with reasons for quoting such higher price. The purchaser at his discretion will in such case exercise the right of revising the price at any stage so as to confirm with the controlled price permissible under the hoarding and Profiteering Prevention Ordinance. This discretion will be exercised without prejudice to any other action that may betaken against the contractor.

- CLAUSE 47 (A) "The tendered rates shall be inclusive of all taxes, and shall also be inclusive of the tax leviable in respect of works contract under the provision of the Maharashtra Sales Tax on transfer of property or goods involved in the execution of works Contract Act, 1985 (Maharashtra Act NO.XIX of 1985)".
- CLAUSE 48 The rates to be quoted by the contractor must be inclusive of Sales Tax., Work Contract Tax etc. No extra payment on account of this will be made to the contractor.
- CLAUSE 49 In case of materials that may remain surplus with the contractor from those issued for the work contracted for the date of ascertainment of the

materials being surplus will be taken as date, of sale for the purpose of sales tax and the sales tax will be recovered on such sale.

CLAUSE 50

The contractor shall employ unskilled labour to be employed by him on the said work only locally available lebour and shall give preference to those persons enrolled under Maharashtra Government Employment and Self Employment Departments Scheme.

Provided, however that if required unskilled labour not available, locally the contractor shall in the first instance employ such number of persons as is available and thereafter may with previous permission in writing of the City Engineer in charge of the said work, obtain the rest of the requirement of unskilled labour from outside the above scheme.

CLAUSE 51

The contractor shall pay the labourer skilled and unskilled according to the wages prescribed by the Minimum Wages Act, 1948 applicable to the area in which the work of the contractor is in progress.

A contractor shall comply with the provisions of the Apprentice Act, 1961 and the rules and the orders issued thereunder from time to time. If he fails to do so his failure will be breach of the contract and the City Engineer may, in this discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provision of the act.

The contractor shall pay the labourers skilled and unskilled according to the wages prescribed by the Minimum Wages Act of 1948 applicable to the area in which the work of the contractor is in progress.

CLAUSE 52

All amount whatsoever the contractor is liable to pay to the TMC, Thane in connection with the execution of the work including the amount payable in respect of (i) materials and/or stores supplied/issued hereunder by the TMC Thane to the contractor, (ii) hicher charges in respect of heavy plant, machinery and equipment on hire by TMC, Thane to the contractor for execution by him of the work and/or on which advances have been given by the TMC, Thane to the contractor shall be deemed to be arrears of land revenue and the TMC, Thane to the contractor shall be deemed to be

arrears of land revenue and the TMC, Thane, may without prejudice to any other right and remedies of the, TMC, Thane, recover the same from the contractor as arrears of land revenue.

CLAUSE 53

The contractor shall duly comply with all the provisions of the contract labour (Regulation and Abolition) Act, 1970 (37 of 1970) and the Maharashtra contract labour (Regulation & Abolition) Rules 11 971 as amended from time to time and all other relevant statutes and statutory provisions thereof concerning payments of wages particularly to workman employed by the contractor and workman on the site of the work. In particular the contractor shall pay wages to each worker employed by him on the site of the work at the rates prescribed under the Maharashtra contract labour (Regulation & Abolition) Rules 197 1. If the contractor fails or neglects to pay wages at the said rates or makes short payment ad TMC, Thane makes such payment of wages in full or part thereof less paid by the contractor as the case may be, the amount so paid by the TMC, Thane to such workers shall be deemed to be arrears of land revenue and the TMC, Thane shall be entitled to recover the same as such from the contractor or deduct the same from tho amount payable by the TMC, Thane to the contractor hereunder or from any other amount's payable to him by the TMC, Thane. (Inserted vide Govt. Public Works Department's Circular NO. CAT 1284\(120) Building-dt 14.8.1985. Accompaniments to the G.R.P.W.D. No. BGD.1979\64188(358) Desk - 2 dt.4\2\1981.

CLAUSE 54

The contractor shall engage apprentices such as brick layer, carpenter, wiremen, plumber as well as black smith recommends d by the State Apprenticeship Advisor, Director of Technical Education, Dhobi Talaw, Mumbai - 400 001, in the construction work (As per Government of Maharashtra, Education Departments circular No.TSA/5170/T/56689, dated 7/7/1972).

CLAUSE 55 (Govt. of Maharashtra P.W.D. Resolution NO.CAT- 1086/CR-243/ K/Bldg.2 dt. 1 1/8/1987.)

CONDITIONS FOR MALARIA ERADICATION, ANTI-MALARIA AND OTHER HEALTH MEASURES

- a) Anti malaria and other health measures shall be as directed by the Joint Director (Malaria and Fileria of health services, Pune).
- b) Contractor shall see that mosquotogenic conditions are not created so as to keep vector population to minimum level.
- C) Contractor shall carry out anti-malaria measures in the area as per guidelines prescribed under National Malaria Eradication pro-ram and as directed by the Joint Director (M&F) of Health Services, Pune.
- d) In case of default in carrying out prescribed anti-malaria measuring resulting in increase in malaria incidence Contractor shall be liable to pay to TMC, Thane the amount spent by TMC, Thane on anti-malaria measures to control the situation in addition to fine.
- e) Relations with Public Authorities: The contractor shall make sufficient arrangements for draining away the sewerage water as well as water coming from the bathing and washing places and shall dispose of this water in such a way as not to cause any nuisance. He shall also keep the premises clean by employing sufficient number of sweepers. The contractor shall comply with all rules regulations by laws and directions given from time to by any local or public authority in connection with this work shall pay fees or charges which are leviable on him without any extra cost to TMC, Thane.

Chapter –XI

Price Variation Clause

CHAPTER XI

PRICE VARIATION CLAUSE

Name of work : CONSTRUCTION OF DWELLING UNITS & INFRASTRUCTURE AT SIDDHARTHNAGAR

UNDER BSUP

If during the operative period of the contract as defined in condition(i) below, there shall be any variation in the consumer price index(New Series) for industrial workers for Mumbai center as per the labour gazette published by the commissioner of labour, Govt. of Maharashatra and or in the whole sale price Index for all commodities prepared by the office of Economic Advisor, Ministry of Industry, Govt. of India, or in the price of petrol/oil and lubricants and major construction materials like bitumen, cement, steel, various types of metal pipes etc., then subject to the other conditions mentioned below, price adjustment on account of

- (i) Labour component.
- (ii) Material component.
- (iii) Petrol, Oil and Lubricant component.
- (iv) Bitumen Component.
- (v) HYSD and Mild steel Component.
- (vi) Cement Component.
- (vii) CI and DI pipe component.

Calculated as per the formula herein after appearing, shall be made. Apart from these, no other adjustment shall be made to the contract price for any reasons whatsoever. Component percentages as given below are as of the total cost of work put to tender. Total of Labour, Material and POL Components shall be 100 and other components shall be as per actual.

Description	Percentage adopted for escalation			
	Labour	Material	P0L.	
	K1	K2	К3	
ESR's /WTP/MBR	40	55	5	
Raw & pure water				
Pumping main.				
Leading main,				
Distribution System.	25	70	5	

Bitumen Component Actual

HYSD and Mild steel Component. Actual
Cement Component Actual

CI and DI Pipes Components Actual

Note: - If cement, steel, Bitumen, CI and DI Pipes are supplied on Schedule-A, then respective component shall not be considered. Also if a particular component is not relevant same shall be deleted.

(1) FORMULA FOR LABOUR COMPONENT

V1 = 0.85PX[(K1/100)X(L1-L0)/L0]

Where,

V1 = Amount of price variation in Rupees to be allowed for Labour Component.

P = Total value of work done minus (Cbitu. + Csteel+ Cr +Ccem. +Cpig) during the period under reference as recorded in the Measurement Book excluding water and sewerage charges where,

Cbitu = Cost of Bitumen component i.e. quantity of bitumen (payable quantity recorded in the measurement book)X Bo(As per star rate.)

Csteel = Cost of Cu bearing mild steel plates (for manufacturing pipes) i.e. quantity of steel (payable quantity recorded in the measurement book) X So (As per star rate.)

Cr = Cost of HYSD, mild steel reinforcement, structural steel i.e. quantity of HYSD/MS reinforcement (Payable quantity recorded in the measurement book)X Sor(As per star rate.)

Ccem = Cost of cement component i.e. quantity of cement (as per mix design and payable quantity recorded in the measurement book)X Co(As per star rate.)

Cpig = Cost of pig iron component in valves and CI /DI pipes i.e. quantity of pig iron (payable quantity recorded in the measurement book)X Do(As per star rate.)

K1 = Percentage of labour component as indicated above.

L0 = Consumer price Index No. for working class for Mumbai(Declared by the Commissioner of Labour and Director of Employment, Mumbai.) prevailing, on the day of 28 days prior to the date of submission of tender.

L1= Consumer Price Index No of working class for Mumbai (Declared by the Commissioner of Labour and Director of Employment, Mumbai.) applicable to the period under reference.

The star rates shall be for cement, reinforcement (HYSD, Mild Steel), Mild steel plates, structural steel, Bitumen, CI and DI pipes etc. basic construction materials.

The star rates shall be as follows:

- i) Cement (Co) Rs.5200/- per MT. (inclusive of all taxes)
- ii) Mild Steel Plates Rs. 29505/- per MT. (inclusive of all taxes)
- iii) HYSD reinforcement, Rs. 38050/- per MT. (inclusive of all taxes)
- iv) Structural steel Rs. 37000/- per MT. (inclusive of all taxes)
- v) Bitumen (Bo) =Rs. 33700/- per MT (inclusive of all taxes).

(2) FORMULA FOR MATERIAL COMPONENT

V2 = 0.85PX [(K2/100) X (M1-Mo)/Mo]

Where,

V2 = Amount of price variation in Rupees to be allowed for Materials Component.

P = Same as worked out for labour component.

K2 = Percentage of Material Component as indicated above

Mo = Wholesale Price Index as stated above prevailing on the day of 28 days prior to the date of submission of tender.

M1 = Average Wholesale price Index as published by RBI Bulletin (Table 39) applicable to the period under reference.

(3) FORMULA FOR Petrol, Oil and Lubricant COMPONENT

V3 = 0.85PX[(K3/100)X(P1-Po)/Po]

Where,

V3 = Amount of price variation in Rupees to be allowed for Petrol, Oil and Lubricant Component.

P = Same as worked out for labour component.

K3 = Percentage of Petrol, Oil and Lubricant component.

Po = Basic Price of HSD in Mumbai Region i.e. Rs. ----- per lit.

P1 = Average Price of HSD at Mumbai Region for the period under reference.

(4) FORMULA FOR BITUMEN COMPONENT

V4 = QB X (B1-Bo)

Where,

- V4 = Amount of price variation in Rupees to be allowed for Bitumen Component.
- QB = Quantity of Bitumen(Grade 60/70) in MT used in the permanents works and enabling works for the period under reference. (Payable Quantity recorded in the Measurement Book)
- B1 = Current, average EX refinery price per MT of Bitumen (Grade 60/70) under consideration including taxes(Octroi, Excise, sale tax) applicable to the period under reference.
- Bo = Basic rate of Bitumen including taxes (Octroi, Excise, sale tax) of bitumen for the grade of bitumen under consideration i.e. Rs. 33700/-per MT.

(5) FORMULA FOR Mild Steel COMPONENT

V5 = So X [(S11-Slo)/Slo] X T

Where,

- s= Amount of price variation in Rupees to be allowed for HYSD/ Mild Steel Component.
- So = Basic rate of Cu bearing Mild steel in Rs. per MT as considered for working out value of P i.e. Rs. 29505/- per MT (Ex. -Kalamboli)
- Sl1 = Average Steel index(Iron and steel as per RBI bulletin applicable to the period under reference.
- Slo = Average of steel index as per RBI Bulletin privelling on the day of 28 days prior to the date of submission of the tender.
- T = Tonnage of steel used in the permanent works for the period under reference.(Payable quantity recorded in the measurement book).

(6) FORMULA FOR HYSD COMPONENT.

V5 = Sor X [(S11-Slo)/Slo] X T

Where,

- V5 = Amount of price variation in Rupees to be allowed for HYSD Component.
- Sor = Basic rate of HYSD Steel reinforcement, in Rs. per MT as considered for working out value of P. i.e. Rs 38050/- per MT(Ex. Kalamboli)

Sl1 = Average Steel index (Iron and steel as per RBI bulletin applicable to the period under reference.)

Slo = Average of steel index as per RBI Bulletin prevailing on the day of 28 days prior to the date of submission of the tender.

T = Tonnage of steel used in the permanent works for the period under reference.(Payable quantity recorded in the measurement book).

(7) FORMULA FOR CEMENT COMPONENT

V6 = Co X [(Cl1-Clo)/Clo] X T

Where,

V6 = Amount of price variation in Rupees to be allowed for Cement Component.

Co = Basic rate of Cement in Rs. per MT as considered for working out value of P i.e. Rs. 5200/- per MT(Including taxes)

Cl1 = Average Cement index published in the RBI bulletin applicable to the period under reference.

Clo = Average of Cement index published in the RBI Bulletin prevailing on the day of 28 days prior to the date of submission of the tender.

T = Tonnage of Cement used in the permanent works for the period under reference (as per Mix design and Payable quantity recorded in the measurement book).

The following condition shall prevail-

(i) The operative period of the contract shall mean the period commencing from the date of work order issued to the contractor and ending on the date on which the time allowed for the completion of the works specified in the contract for works expires, taking in to consideration the extension of time, if any for completion of the work granted by Engineer in charge under relevant clause of the condition of contract in cases other than those where such extension is necessitated on account of default of the contractor. The decision of Engineer in charge as regard the operative period of the contract shall be final and binding on the contractor. Where any compensation for liquidated damages is levied on the contractor on account of delay in completion or inadequate progress under the relevant contract provision, the escalation amount for the balance of work from the date of levy such

compensation shall be worked out by pegging the indices, L1, M1, C1, P1, B1, S11 and C11 to levels corresponding to the date from which such compensation is levied.

- ii) The price variation clause shall be determined during the period under reference as per formula given above in this clause.
- (iii) This clauses operative both ways e.g. if the price variation as calculated above is on the plus side, payment on the account of the price variation shall be allowed to the contractor and if it is on negative side, the TMC shall be entitled to recover the same from the contractor and the amount shall be deductible from any amounts due and payable under the contract.
- (iv) To the extent that the full compensation for any rise or fall in the costs to the contractor is not entirely covered by the provision of this or other clauses in the contract, the unit rate and prices included in the contract shall be deemed to include amounts to cover the contingencies of such other actual rise or fall in costs.

In case the materials are procured directly from supplier or it's distributors the purchase price for the purpose of price variation will include the basic controlled price plus sales taxes plus octroi plus clearing charges plus cost of one transport (i.e. from railway yard/ or port to the site or from their authorized agents godown to the site if the supply is made through the authorized agents).

Chapter – XII
Schedule 'B'

CHAPTER-XII **Schedule 'B'**

THANE MUNICIPAL CORPORATION, THANE						
SUMMARY SHEET						
Sr.no.	Item Description	Qty		Cost in Rs.		
1)	HOUSING					
i)	Building 90 T/s	5	44728335.00	223641673.00		
	(G+8,10 Flat /Floor)					
ii)	E1 BUILDING	1	990746.00	990746.00		
	E2 BUILDING	1	3122457.00	3122457.00		
	E3 BUILDING	1	740182.00	740182.00		
	E4 BUILDING	1	8273572.00	8273572.00		
	BudhaVihar BUILDING	1	990746.00	990746.00		
2)	INFRASTRUCTURE					
	Compound cum Retaining Wall /UCR Wall	1	4587412.00	4587412.00		
	External Pavement Work	1	8160164.00	8160164.00		
	RG-Garden	1	3803416.00	3803416.00		
	External Sewerage work	1	135808.00	135808.00		
	Rainwater Harvesting	1	844480.00	844480.00		
	Solar Water Heating System	1	11704160.00	11704160.00		
	External water supply	1	478916.00	478916.00		
	Storm Water Drain	1	2679780.00	2679780.00		
	Fire Fighting Work	1	8176095.00	8176095.00		
	External Electrical Work	1	19546163.00	19546163.00		
	Substation	1	1037613.00	1037613.00		
			Total cost of Project	298913383.00		
			Say	29,90,00,000		