

Proposed Construction of “**Shantilal Shanghvi Paediatric Haematolymphoid Cancer Centre**” At ACTREC,
Kharghar, Navi Mumbai

TATA MEMORIAL CENTRE

ADVANCED CENTRE FOR TREATMENT RESEARCH AND EDUCATION IN CANCER (ACTREC).

**A GRANT-IN-AID INSTITUTE UNDER DEPARTMENT OF ATOMIC ENERGY,
GOVERNMENT OF INDIA**

**2nd floor, Engineering Services,
Khanolkar Shodhika,
ACTREC**

Website – www.actrec.gov.in



**Construction of “Shantilal Shanghvi Pediatric
Hematolymphoid Cancer Centre” at ACTREC Kharghar,
NAVI MUMBAI**

**NIT No. TMC/ACTREC/ENGG/SSPCC/PT-14/2020
dated 28/08/2020**

Pre-Qualification cum Tender

for

**Construction of “Shantilal Shanghvi Pediatric Hematolymphoid
Cancer Centre” at ACTREC Kharghar, NAVI MUMBAI**

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Pre-Qualification cum NOTICE INVITING E-TENDER

NIT No. TMC/ACTREC/ENGG/SSPCC/PT-14/2020 dated 28/08/2020

Officer-in-Charge, Engineering Services, on behalf of Director, TMC invites E-tender in Two Bids for the following work from the contractors having adequate experience in executing similar nature of works.

Name of work	Estimated cost in Cr.	Period of completion
Construction of “Shantilal Shanghvi Pediatric Hematolymphoid Cancer Centre” (Gr. +10 OR 14 Bldg.) & Utility Building at ACTREC, Kharghar, Navi Mumbai	Rs. 58.10 Cr	24 Months (Including monsoon)

PART A: Special Instructions & Information for submission of the Tender

The Tender is required to be submitted on line in three parts as follows:

1A)	Part I Technical Bid & Qualification Bid (Documents for Eligibility) (Refer Section - II)	1	Details of similar nature of work carried out in last 07 years ending previous day of last date of submission of tender.
		2	Annual Income Tax return filed with I.T Department. Annual turnover of latest three year ending in March 2019 duly certified by Chartered Accountant.
		3	Capability of tenderer will be assessed through credentials submitted in the technical bid and site visit by a committee constituted by the Competent authority of one completed and one ongoing work having same magnitude as mentioned in the Tender. Preference will be given to agencies who has experience in executed/executing PT Works.
		4	Registration certificate, GST certificates.
		5	Net Worth Certificate

		6	Performance Certificates
		7	List of Technical Staff they possess.
		8	List of Plant & Machinery
		9	List showing the cost of work completed / in progress in last Seven years.
		10	Name of the Proprietor, Director, Owner of the company, Address for correspondence, e-mail id, fax no, telephone no, mobile no, etc. refer FORM “F”
		11	Details of Legal Status of the Company, Statutory Registrations, etc. refer FORM “F”
		12	Affidavit as per clause 7.2 of Section II
		13	Letter of Transmittal & any other related documents
B)	Technical Bid	1	NIT, Technical Specification, General Conditions of contract, Special Conditions of contract
		2	Earnest Money Deposit
		3	Drawings, if any
		4	Date wise execution program
		5	Technical staff to be deployed for the execution of the work.
		6	Any other related documents as required.
		7	Name of the Proprietor, Director, Owner of the company, Address for correspondence, e-mail id, fax no, telephone no, mobile no, etc.
C)	Part II Financial Bid	1	Schedule of Rates. The rates shall be inclusive of all taxes Excluding GST , documentary evidences of paid taxes shall be submitted periodically.

PART B: DETAILS NOTICE INVITING TENDER

	NIT No. :
1	Name of work: Construction of “ Shantilal Shanghvi Paediatric Haematolymphoid Cancer Centre ” (Gr. + 10/14 Floors) & Utility Building at ACTREC, Kharghar, Navi Mumbai.
2	Estimated cost: Rs. 58.10 Cr.
3	EMD: Earnest Money Deposit (EMD) of Rs 68, 10,000/- should be deposited along with the Technical Bid. Out of the total EMD amount, Rs.20 Lakhs shall be in the form of Demand Draft, Pay Order, F.D. Receipts and Balance Rs.48,10,000/- shall be in the form of Bank Guarantee in favour of “ Accounts Officer, TMC “ from any nationalized or scheduled bank having validity for 6 months or more from the date of receipt of tender. Cheques, Cash for Earnest Money Deposit will not be accepted.
4	Completion Period : 24 months including monsoon
5	Tender Processing Fees: Rs. 5,900/- (to be paid on line to M/s. ITI Ltd.)
6	Security Deposit: 2.5% of the tendered value.
7	Performance Guarantee: 5% of tendered value.
8	Availability of Tender for view and download : From :28-08-2020 to 26-09-2020 on www.tenderwizard.com/DAE
9.	Last date of Submission of pre-bid queries : The queries for pre-bid to be submitted on line on or before 14-09-2020 to bchandra@actrec.gov.in , pghadi@actrec.gov.in , hkelkar@actrec.gov.in may contact on 022-27405000/ 022 68735000 Extn:5066/5011/5067 or 9930178311 or 7978738806
10	Date of Pre-Bid meeting: On 17-09-2020 from 11.00am to 1.00pm in the office of officer-in-Charge, Engineering Services, ACTREC, Kharghar, Navi Mumbai 410210.
11	Validity Of Tender: 180 days from the date of opening of Technical bid (Part I)
12	Closing of online submission of Tender: 01-10-2020 up to (15.00 hrs.)
13	On line opening of Part I: Technical Bid bid: On 01-10-2020 (15.30 hrs.)
14	On line opening of Part II: Financial Bid: Will be informed to the technically qualified bidders at later date.
15	Last date of receipt of Original DD/FDR/BG & Technical bid documents etc.

: 5:

Signature of the Contract & Seal

	towards EMD: 01-10-2020 up to (15.00 hrs.) in the office of Officer-in-Charge, Engineering. ACTREC, Kharghar, Navi Mumbai-410210
16	Time Period allowed for submission of originals of all the scanned and uploaded documents except EMD as specified in NIT : 7 Days from the date of opening of Technical Bid
17	The NIT can also be viewed on website www.actrec.gov.in

PART C: TENDER REQUIREMENT FOR ELIGIBILITY

- 1) Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures, subletting/back to back works is/are not accepted. Preference will be given to Contractors who has executed/executing PT Works.
- 2) Proof of registration with Government / Semi Government organizations like CPWD, MES,BSNL, Railways, State PWDs etc. in appropriate class **OR** having experience in execution of similar nature of works.
- 3) Should have satisfactorily completed similar nature of works of following magnitude in the last 07 years ending previous day of last date of submission of tender.
 - (i) **Three** similar nature of works each costing not less than **Rs.23.24 Crs**
Or
 - (ii) **Two** similar nature of work each costing not less than **Rs.34.86 Crs**
Or
 - (iii) **One** similar nature of work costing not less than **Rs.46.48 Crs**

Similar work shall mean:

- 1) Civil works for Hospital/ institutional buildings /residential buildings / Hospitality buildings/ hostels / office buildings/ industrial buildings etc. (Experience in carrying out Civil – RCC Structure Construction with Masonry works, internal & external plastering works, & Fabrication in High Rise buildings 28 M height and above is desirable).
- 2) Buildings of minimum 8 storeys

The value of executed works shall be brought to the current costing level by enhancing the actual value of work at a **simple rate of 7% per annum**; calculated from the date of completion to the previous day of last date of submission of tender. The bidder should attach separate annexure for the calculation of cost of present date, if applicable. Gross value of completed work including cost of material supplied by the department/Client but excluding those supplied free of cost.

- 1.2 Should have had average **annual financial turnover** of not less than **Rs.29.05 Crs** on construction works during the immediate last 03 consecutive financial years ending 31st March, 2019.

Should not have incurred any loss (**profit after tax should be positive**) in more than 02 years during the last 5 years ending 31st March, 2019.

- 1.3. Net Worth Certificate: Net worth certificate of minimum **Rs 8.72 Cr**, i.e., 15% of Estimated Cost Put to Tender (ECPT) issued by the certified Chartered Accountant

- 1.5 GST registration Certificate of the State in which the work is to be taken up, if already obtained by the bidder. If the bidder has not obtained GST registration in the State in which the work is to be taken up, or as required by GST authorities then in such a case the bidder shall scan and upload following undertaking along with other bid documents.

“If work is awarded to me, I/we shall obtain GST registration Certificate of the State, in which work is to be taken up within one month from the date of receipt of award letter or before release of any payment by TMC, whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by TMC or GST department in this regard”.

- 1.6 Short listing of the agencies shall be subject to thorough verification of their credentials and inspection of the quality of works by a Committee constituted by TMC. The centre reserves the right to verify the particulars furnished by the applicant independently.

- 1.7 List of works in hand & similar works carried out by them for last 7 years indicating i) Agency for whom executed, ii) Value of work, iii) Completion time as stipulated and actual, or present position of the work.

- 1.8 Bidding capacity shall be worked out based on works in hand. Bidding capacity shall be equal to or more than cost of work:

Bidding Capacity = A x N x 2 – B

Where A = Maximum **turnover in construction works** executed in any one year during the last five years taking into account the completed as well as works in progress. The value of completed work shall be brought

out to current costing level by enhancing at a **simple rate of 7% per annum**; calculated from the date of completion to last date of submission of tender.

N = Number of years prescribed for completion of this work.

B = Value of existing commitment and ongoing works to be completed during the period of completion of this work.

- 1.9 List of construction plant, machinery, equipments, accessories & infrastructure facilities possessed by the agency to complete the work in time.
 - 1.10 **List of Technical staff** they possess.
 - 1.11 **CERTIFICATES:** (Scanned copy of original certificates to be uploaded)
 - i) Performance Certificates
 - ii) GST registration certificate
 - iii) PAN (Permanent Account Number) Registration
 - iv) EPFO Registration Certificate
 - v) ESIC Registration Certificate
2. The intending bidder must read the terms and conditions as per “SECTION – 1: NOTICE INVITING TENDERS” OF “CONDITIONS AND CLAUSES OF CONTRACT – 2008” carefully. He should only submit his bid if he consider himself eligible and he is in possession of all the documents required. TMC/Department reserves the right of Non-consideration of Tender documents of the agencies who are not fulfilling the NIT stipulations and / or having adverse report on the works carried out by them in the past.
 3. Information and Instructions for tenderers posted on website shall form of tender document. The tender document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.tenderwizard.com/DAE or www.actrec.gov.in free of cost.
 4. The bid can only be submitted after uploading the mandatory scanned documents Such as Demand Draft or Pay order or Deposit at call Receipt or Fixed Deposit Receipts and Bank Guarantee of any Scheduled Bank towards cost of tender

Document and EMD as specified in NIT in favour of “**ACCOUNTS OFFICER, ACTREC, NAVI MUMBAI**” and Processing Fee in favour of “ITI LIMITED, NEW DELHI, THROUGH E-PAYMENT” and other documents as specified.

5. Those contractors not registered on the website mentioned above, are Required to get registered. If needed, they can be imparted training for online Bidding process as per details available on the website.
6. The intending bidder must have valid class-III digital signature to submit the bid.
7. On opening date, the contractor can login and see the bid opening process.
8. **Certificate of Financial Turn Over:** At the time of submission of bid, contractor may upload Undertaking / Certificate from CA mentioning Financial Turnover of Last 5 years or for the period as specified in the bid document and further details if Required may be asked from the contractor after opening of technical bids. There is No need to upload entire voluminous balance sheet.
9. Contractor must ensure to quote rate of each item. The column meant for quoting Rate in figures appears in YELLOW color and the moment rate is entered, it turns SKY BLUE. In addition to this, while selecting any of the cells a warning appears That if any cell is left blank the same shall be treated as “0”. Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as “0” (ZERO).
10. If any information furnished by the applicant is found incorrect at a later stage, he shall be liable to be debarred from tendering / taking up of work in TMC. Short listing of the agencies shall be subject to thorough verification of their credentials and inspection of works carried out by them, through a Technical Evaluation Committee of experts, constituted by Director, TMC
11. Director TMC, reserves the right to accept or reject the tender(s) in full or in part without assigning any reason thereof. Tenders with any condition including conditional rebate shall be rejected forthwith.

-sd

TENDER

I / We have read and examined the Notice Inviting Tender, Salient Governing Features of the Tender / Work including Schedules A, B, C, D, E & F, **Specifications Books**, Drawings and Designs, General Rules & Directions, General Clauses of Contract, Special Clauses of Contract & other documents and rules referred to in the **Conditions and Clauses of Contract** and all other contents in the tender documents for the work.

I / We, hereby tender for the execution of the work specified for the Director, TMC within the time specified in Schedule “F”, viz., Schedule of Quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule 1 of General Rules & Directions and in Clause - 11 of the General Clauses of Contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for **one hundred eighty (180) days** from the date of opening of qualification bid (part - I) and not to make any modifications in its terms and conditions.

A sum of Rs. 20,00,000/- has been deposited in cash / fixed deposit receipt of scheduled bank / demand draft of a scheduled bank and **Rs. 48,10,000/-** in the form of bank guarantee towards earnest money. If I / we, fail to furnish the prescribed performance guarantee within prescribed period, I / we agree that the said Director, T M C or his successors in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I / we fail to commence work as specified, I / we agree that Director. T M C or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Schedule "F" those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form. Further, I/ We agree that in case of forfeiture of earnest money or both Earnest Money & Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I / We undertake and confirm that eligible similar work(s) has/ have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of TMC/Department, then I/we shall be debarred for tendering in TMC in future forever. Also, if such a violation comes to the notice of TMC/Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

I / We hereby declare that I / We shall treat the tender documents, drawings and other records connected with the work as secret / confidential documents and shall not communicate information derived there-from to any person other than a person to whom I / We am / are 10authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Signature of Contractor

Postal Address

: 10:

Signature of the Contract & Seal

Dated

SECTION-I

BRIEF PARTICULARS OF THE WORK

1. Salient details of Construction work for which qualification applications are invited are as under:

Name of work	Estimated cost in Cr.	Period of completion
Construction of “ Shantilal Shanghvi Paediatric Hematolymphoid Cancer Centre ” (Gr. +10 OR 14 Bldg.) & Utility Building at ACTREC, Kharghar, Navi Mumbai	Rs. 58.10Cr	24 Months (Including monsoon)

2. The proposed works is to be carried out at Advanced Centre for Treatment, Research & Education in Cancer” (ACTREC) campus on Plot No. 1 & 2, Sector 22, Kharghar, Navi Mumbai.
3. Brief descriptions of the Project works.

Tata Memorial Centre-ACTREC is Grant-in Aid Institute of Department of Atomic Energy, Govt of India, registered under Society is a premium institute for Cancer Care has signed a MOU (Minutes of Understanding) under CSR (Company Social Responsibility) to build dedicated Cancer Treatment Hospital named as ‘**Shantilal Shanghvi Paediatric Hematolymphoid Cancer Centre**’ in ACTREC, Kharghar, Navi Mumbai. The building is designed for G+14 floor. However the Local sanctioning authority has initially approved for G+10 building and TMC-ACTREC will approach higher sanctioning authority to get approval for additional floors. There will not be any change in Completion period of project from 24 months irrespective of any additional floors to be constructed or not. Cooperation is required to for executing works such as Civil, Electrical, Air Conditioning, Fire Fighting, Medical Gas Pipe line system and Etc. for which Tenders will be invited in phased manner.

- a) It is original RCC Structure Construction with **Post Tensioning works**, Masonry works, internal & external plastering works, & Fabrication works, Road works.
 - b) It includes construction of 02 independent buildings viz. “**Shantilal Shanghvi Pediatric Hematolymphoid Cancer Centre**” and “**Utility Block**” at desired location within ACTREC campus.
 - c) Construction of “**Shantilal Shanghvi Pediatric Hematolymphoid Cancer Centre**” - It is Ground +10/ 14 Storied building which houses OPD, Day Care, Labs, BMT, ICU & other hospital related facilities.
 - d) **Utility Building** – It is Ground +1 Story building with RCC slab which houses Transformer / Electrical panels / HVAC chillers / Cooling tower, DG Sets and other hospital related utility facilities.
4. Presently existing Hospital are running. Precautions have to be taken by the successful bidder during execution of works so that it does not affect the daily function/s of the Hospital and without causing inconvenience to the patients / relatives residing there.
5. During outbreak of any Pandemic medical and natural exigencies, it is contractor's responsibility to take care of material, manpower working and staying in site along with their family including women and kid if any, additional expenditure incurred to abide by the guidelines drawn by Local or Central authorities shall be strictly followed at no extra cost to TMC. Also guidelines set by TMC/ACTREC related to quarantine, face mask, social distancing etc., to be strictly followed at no extra cost to TMC.
6. Work shall be executed according to the Tender Conditions of Contract for this Project.

SECTION-II

INFORMATION & INSTRUCTIONS FOR the BIDDERS

1.0 General:

- 1.1 Letter of transmittal and forms for deciding eligibility are given in Section III.
- 1.2 All information should be furnished against the relevant columns in the forms. If for any reasons, information is furnished on a separate sheet, this fact should be mentioned against the relevant column. Even if no information is to be provided in a column a “nil” or “no such case” entry should be mentioned against the relevant column. If any particulars / query is not applicable in case of applicant, it should be stated as “not applicable”. The applicants are cautioned that not giving completed called for in the application forms or not giving it clear terms or making any change in the prescribed forms or deliberately suppressing the information may result in the applicant being summarily disqualified. Applications made by telegram or fax and those received late will not be entertained. The tender must be submitted through e-Tender model.
- 1.3 Wherever applicable, the application should be type-written & signed on each page along with enclosures with rubber stamp before submitting the tender.
- 1.4 Overwriting should be avoided. Correction, if any, should be made by neatly crossing out, initiating, dating and numbered. Additional sheets, if any, added by the Contractor, should also be numbered by him. They should be submitted as a package with signed letter of transmittal.
- 1.5 References, information and certificates from the respective Clients certifying suitability, technical knowhow or capability of the applicant should be signed by an officer not below the rank of Executive Engineer / Project Manager or equivalent.

1.6 The applicant may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work.

1.7 Any information furnished by the applicant found to be incorrect either immediately or at later date, would render him liable to be debarred from the tendering / taking up of work in Tata Memorial Centre.

2.0 **Definitions:**

2.1 In this document the following words and expressions have meaning hereby assigned to them.

2.2 **Employer:** Means the Director, Tata Memorial Centre, acting through the Officer-in-Charge, Engineering Services, ACTREC

2.3 **Applicant:** Means the individual, proprietary firm, firm in partnership, limited company, private or public or corporation.

2.4 **Architect / Consultant :**Means Architect / Consultant appointed by TMC

2.5 **“Year”** means “Financial Year” unless stated otherwise.

3.0 **Method of Application:**

3.1 If the applicant is an individual, wherever applicable the application shall be signed by him above his full typewritten name and current address.

3.2 If the applicant is a proprietary firm, wherever applicable the application shall be signed by the proprietor above his full typewritten name and the full name of his firm with its current address.

3.3 If the applicant is a firm in partnership, wherever applicable the application shall be signed by all the partners of the firm above their full typewritten names and current addresses or alternatively by a partner holding power of attorney for the

firm. In the later case a certified copy of the power of attorney should accompany the application. In both cases a certified copy of the partnership deed and current address of all the partners of the firm should accompany the application.

- 3.4 If the applicant is a limited company or a corporation, wherever applicable the application shall be signed by a duly authorized person holding power of attorney for signing the application accompanied by a copy of the Power of Attorney. The application should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

3.5 All Necessary documents mentioned above shall be uploaded online.

4.0 Guidelines for e-Tendering :-

- 4.1 The intending bidders must read the terms and conditions of the tender documents. He should only submit bids if he considers himself eligible and he is in possession of all documents required.
- 4.2 The information and instruction for bidders along with Technical bid, financial bids and drawings etc. posted on website shall form part of the bid document.
- 4.3 The documents as uploaded can be viewed and downloaded free of cost by any one including the intending bidder. However for participating tendering process the intending bidder must download the documents after confirmation of tender processing fees from e-tendering portal only, within time and date of downloading, otherwise it will not be possible for them to upload the documents on the e-tendering portal.

Notes:

- i) Downloading the tender documents without confirmation of payment details towards tender processing fees on web site: **www.tenderwizard.com/DAE** shall not be valid.
- ii) The excel sheets accompanied with technical bid and financial bid shall be filled up uploaded within due date of submission.
- iii) The PDF document available in website are part of tender document and can't be uploaded on the e-tendering portal in its present form. However the bidders may download the specific forms / data sheets etc. filled up, scanned and upload the same as required.

iv) The Financial bid submitted manually can't be accepted and shall be rejected summarily. Physical submission of financial bid should be avoided and will lead to disqualification.

v) The agency must ensure downloading of excel sheets in which the columns meant for filling up data / rates appears in yellow color and the movement the data / rates are entered , it turns sky blue.

- 4.4 It is mandatory for all the applicants to have class-III digital signature certificate from any of the licensed Certifying Agency to participate in e-tendering.
- 4.5 In order to participate in online e-tendering process, it is mandatory for the applicants to have user ID & password to get access of the website www.tenderwizard.com/DAE. The applicants have to get registered their firm / company with the service provider, M/s ITI Limited for user ID & password.
- 4.6 Also obtain the Class 3 Digital Signature Certificate from certifying authorities for participate in the e-tender)
- 4.7 For Registration and getting the Digital Signature Certificate and e-tender participation manuals kindly visit the link [“www.tenderwizard.com/DAE>Help/Downloads>Generals](http://www.tenderwizard.com/DAE>Help/Downloads>Generals) “In this link all detailed help manuals are uploaded in the website.
- 4.8 **The registration shall be done by paying an annual registration fees to M/s ITI Limited and completing other formalities as mentioned in website. Validity of online registration is for one year from date of its issuance and be subsequently renewed. For assistance/clarifications, please contact mobile 09969395522, e-mail : twhelpdesk231@gmail.com / daehelpdesk@tenderwizard.co.in**
- 4.9 The applicants, who have already obtained such valid user ID and password from M/s ITI Limited, for any other project of TMC / DAE, need not to obtain fresh user ID and password for the purpose of participation in the present tender.
- 4.10 **The services for e-tendering in TMC / DAE is provided by M/s ITI Ltd., Tender wizard Help Desk Centre, B-1/5A, 2ndFloor, Main Nazafgarh Road Near Janakpuri Metro Station (East) Janakpuri, New Delhi-110058, Fax No: 91-11-25618721 Ph. No : 011-49424365, or Mumbai helpdesk Rudresh.KS Room No 7, 3rd floor, V.S.Bhavan, Anushakti Nagar, Mumbai 400094, 022-25487363, 09969395522, 09969313460,09969313423,e-mail: daehelpdesk@etenderwizard.co.in**
- 4.11 The excel sheets comprising of technical bid and financial bid and other documents shall be uploaded online in the prescribed format (JPG or PDF) before the date and time as mentioned in e-tender portal. No other mode of submission is acceptable.

- 4.12 The agency shall download the pre bid clarification if any for the work and upload the same (scanned copy) duly signed and sealed. The revised documents (if any) shall be uploaded in e tender portal.
- 4.13 After submission of the bid / document the bidder can re-submit revised bid / document any number of times but before last time and date of submission of bid/document as notified.
- 4.14 If the agency found ineligible, after opening of Qualification bid/technical bid his tender shall become invalid and processing fees shall not be refunded.
- 4.15 Tenderers are advised to upload their documents well in advance, to avoid last minutes rush on the server or complications in uploading. TMC, in any case, shall not be held responsible for any type of difficulties during uploading the documents including server and technical problems whatsoever.
- 4.16 Submission of the tender documents after the due date and time (including extended period) shall not be permitted. Time being displayed on e-tendering portal of TMC shall be final and binding on bidders.
- 4.17 In case of any problem with the submission of the tender, the tenderers may take the assistance of help desk or use the help manual given on the said website or mobile and e-mail mentioned above.

The tenderers are advised to submit the hard copies towards processing fees (if not paid online), EMD and other documents etc. well in advance to the Tender Inviting Authority (Officer-in-Charge, Engineering Services, KS 210, ACTREC, Kharghar, Navi Mumbai 410 210), so that it should reach on or before the due date and time. Delay in receipt of hard copies due to security restriction, postal delay or delay due to any other reasons etc. shall not be accepted and tender shall be rejected forthwith.

INSTRUCTIONS TO BIDDER:

- 1- Bidder has to register in the website www.tenderwizard.com/DAE and
- 2- For online queries kindly contact M/S ITI Representatives. Their contact details are given under the website link is www.tenderwizard.com/DAE Contacts Us button.

5.0 General rules and directions to be followed in conjunction with e-tendering

5.1 THE PROPOSAL

- a. Item rate E–Tenders (two packet system) invited by Officer-in-Charge, ES on behalf of Director, TMC through the e-tendering portal by The Tata Memorial Centre-ACTREC, a Grant-in-Aid Institution under Department of Atomic Energy, Government of India, Kharghar, Navi Mumbai 410210 from eligible Contractors having registered office in India, meeting qualifying requirements, and having requisite experience and financial capacity for “Shantilal Shanghvi Paediatric Haematolymphoid Cancer Centre” (Gr. +10 OR 14 Bldg.) & Utility Building at ACTREC, Kharghar, Navi Mumbai
- b. The successful bidder shall be expected to complete the works by the intended completion date specified in the contract.
- c. Throughout these bidding documents, the terms 'bid' and 'tender' and their derivatives (bidder, bidders, bid/ tender, bidding/ tendering, etc.) are synonymous. Contractor means the selected bidder for the work.
- d. Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices.
- e. All bidders shall provide Forms of Bid, a preliminary description of the proposed work methodology should include programme of construction backed with equipment planning and deployment of staff duly supported with broad calculations and quality assurance procedures proposed to be adopted justifying their capability of execution and completion of work as per technical specifications, within stipulated period of completion.
- f. The tender paper consists of all the documents specified in Clause 1.1.2 of section-I along with Annexure, appendices, addenda and errata if any.

5.2. COST OF BIDDING

- i Tender document is available on www.tenderwizard.com/DAE and the same can be downloaded and used as tender document for submitting the offer. Tender Processing fee to be paid to M/s. ITI Ltd., Rs.5, 900/-, in the form of e-payment (NonRefundable)
- ii. The Demand Draft/ Bank Guarantee of EMD in original shall be placed in an envelope along with the Cost of Bid Document and marked as “EMD & Cost of Bid Document” along with tender no., name of work and name & address of

tenderer. The physical form (originals) of EMD & Technical Bid Document shall be sealed in one envelope and should be submitted to The Officer-in-charge, Engineering Services, Tata Memorial Centre, ACTREC 2nd floor, Engineering Services, Khanolkar Shodhika, ACTREC latest by the specified online ‘Bid Submission End Date’ (date & time is specified in the NIT). Please note that the cost of the tender document & Earnest Money Deposit should be paid separately and not to be clubbed together.

- iii. Tenderer to note that, if the cost of bid document (in the manner specified above) is not received in original, latest by the specified online ‘Bid Submission End Date’ i.e. (date & time is specified in the NIT) at The Officer-in-charge, Engineering Services, Tata Memorial Centre, ACTREC 2nd floor, Engineering Services, Khanolkar Shodhika, ACTREC, then, the tender would be summarily rejected.
- iv. Also, scanned copy of the above DD/Banker’s Cheque should be uploaded on E - Tender Portal as the proof of submission of Cost of Bid Document.

5.3. SITE VISIT

The Bidder, at the Bidder’s own responsibility and risk is advised to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The cost of visiting the Site shall be at the Bidder's own expense.

5.4. ADDRESS OF COMMUNICATION

The Officer-in-charge,
Engineering Services,
Tata Memorial Centre, ACTREC 2nd floor, Engineering Services,
Khanolkar Shodhika, ACTREC

5.5 TENDER REQUIREMENTS

All tenders submitted shall include the following information:

- 5.6 The authorized signatory of the Bidder shall sign each page of tender. Power of Attorney in favour of the signatory will be required to be furnished along with the tender.

- 5.7 Cancellation or creation of a document such as Power of Attorney, Partnership deed, Constitution of firm etc., which may have bearing on the Bid/Contract shall be communicated forthwith in writing by the Bidder to TMC, through Engineer in Charge.
- 5.8 Each Bidder, or any associate will be required to confirm and declare in the tender submittal that no agent, middleman or any intermediary has been, or will be, engaged provide any services, or any other items of work related to the award and performance of this contract. They will have to further confirm and declare in the submittal that no agency commission or any payment, which may be construed as an agency commission, has been, or will be paid and that tender price will not include any such amount.

6. BIDDING MODE & DOCUMENT

E-Tendering

6.1 Digital Signatures:

- (i) All the designated officers in field units obtain digital signature (Class III) from authorized certifying authority's viz. NIC, MTNL, e-Mudhra, TCS, Safe script, GNFC etc. and get the same registered with ITI or any other service provider as intimated from time to time.
- (ii) In case of transfer, the officer sends intimation to ITI or any other service provider as intimated from time to time immediately through e-mail.
- (iii) The new incumbent, if not in possession of digital signature, obtains the same from authorized agency or if in possession, intimates the serial number of his/her digital signatures to ITI or any other service provider as approved by Officer-in-Charge, ES at site from time to time for updating so as to enable him/her to upload and open e-Tenders.

6.2 Preparation of Bid Document

- (i) The list of documents to be scanned and uploaded by the intending bidder are clearly mentioned in Information and Instructions for contractors.
- (ii) The Information and Instructions for contractors are attached in NIT and are modified suitably as per requirement, if found necessary by the TMC.

: 20:

- (iii) If the time of opening of bid is changed, issue of corrigendum is not required and only information is given to the bidders after opening of bids.

6.3 Bids invited in Two Bid System

- (i) Stage-I: The technical bid documents uploaded by the contractors related with Eligibility Criteria are opened first and after evaluation of bids the financial bid of technical qualified contractors are to be opened.
- (ii) Stage-II: Stage II deals with financial bid. The financial bid of only technically qualified contractors may be opened.
- (iii) System generated e-mail is sent to all the qualified contractors intimating them the date and time of opening of financial bid.

6.4 Bidding Document

The set of bidding documents comprises of the documents as mentioned in Clause 1.1.2 of Section-I of TENDER Volume-I.

- (i) The Bidder shall purchase/download the above listed documents as listed under volume I and II.
- (ii) The bidders shall be expected to examine carefully all instructions, conditions of contract, contract data, forms, terms, technical specifications, forms, annexes and drawings in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the bidder's own risk. Pursuant to Clause 1.1.2 of section-I hereof, bids, which are not substantially responsive to the requirements of the Bid Documents, will be rejected. Further details if required are asked from contractor later on after opening of technical bid

6.5. CLARIFICATION OF BIDDING DOCUMENTS

- 6.5.1 Prospective bidder requiring any clarification of the bidding documents may notify the TMC in writing at the address indicated in the invitation to bid. The TMC/Project Architect will respond to any request for clarification, which he received earlier than 15 days prior to the deadline for submission of bids. Copies of the TMC/Project Architect response will be forwarded to

all bidders, including a description of the enquiry but without identifying its source.

- 6.5.2 While all efforts have been made to avoid errors in the drafting of the tender documents, the Bidder is advised to check the same carefully. No claim on account of any errors detected in the tender documents shall be entertained.

6.6 PRE-BID MEETING

- 6.6.1 Online queries and Minutes of the meeting, raised pre-bid queries and the responses given will be transmitted to all bidder uploaded at e-portal.
- 6.6.2 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.
- 6.6.3 Mode of prebid meeting will be decided (physical/virtual or both) based on situation.

6.7. AMENDMENT OF BIDDING DOCUMENTS:

- 6.7.1 Before the deadline for submission of bids, the Employer/ Project Architect may, for any reason, whether at its own initiative or in response to clarification or query raised by the prospective bidder, modify the bidding documents by issuing addenda/ amendment.
- 6.7.2 Any Corrigendum/Addendum thus issued shall form part of TENDER document and shall be posted only on e-procurement portal and the Bidders are thus advised to update their information by using said website www.tenderwizard.com/DAE. To give the Bidders reasonable time to take an amendment into account in their bids and on account of any other reasonable circumstances, MEA may at its discretion, extend the deadline for the submission/opening of the tender.

6.8. PREPARATION OF BIDS

6.8.1 BIDDERS RESPONSIBILITY

- a) The Bidder is solely responsible for the details of his bid and the preparation of bids. In no case shall TMC be responsible for any part of the tender documents submitted by him. Any Site information given in this tender document is for guidance only. The Bidder is advised to visit and examine the Site of Works and its surroundings at his/their cost and obtain for himself on his own responsibility, all information that may be necessary for preparing the tender and entering into a Contract.
- b) Irrespective of whether the Bidders have visited the site of work or attended the pre bid conference or not, they shall be deemed to have inspected the Site and its surroundings beforehand and taken into account all relevant factors pertaining to the Site and clarifications/ modifications/ additions given in Pre-bid meeting or addendum issued as per Clause 8 of ITB, Section-II of TENDER Volume-I, in the preparation and submission of the Bid.
- c) The Employer shall not be responsible for any error, inaccuracy or omission of any kind in the Employer's Requirements as originally included in the Contract and shall not be deemed to have given any representation of accuracy or completeness of any data or information. Any data or information received by the Contractor, from the employer otherwise, shall not relieve the Contractor from his responsibility for the design and execution of the Works.
- d) The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

6.9 LANGUAGE OF THE BID All documents relating to the bid shall be in the English language.

6.10. DOCUMENTS COMPRISING THE BID

6.10.1 TECHNICAL BID

The technical bid (clearly labeled) as “TECHNICAL BID”, has to be submitted in two parts, Part-I shall consist of information of applicants and Part-II is the Technical proposal.

Part-I Information of applicant shall comprise of the followings (to be submitted uploaded and submitted in hard copy):

- a. Covering letter for the Bid
- b. Checklist for the enclosed documents in the format as attached.
- c. E.M.D. in original in a separate sealed and duly marked “E.M.D.” envelope in the format attached as Form B,
- d. Cost of tender document in a separate sealed envelope and duly marked “Cost of tender fee”, if not submitted at the time of purchase.
- e. Attested Copy of Power of Attorney (in favour of the Authorized Signatory of the Bidder) to submit tender,

In addition to above, following information shall also be furnished in Part-I of technical bid (only to be uploaded not to be submitted in hard copy):

- An organization chart with assignment of each key staff member (identified by name), duration & timing together with clear description of the responsibilities of each key staff member within the overall work program. The minimum level of supervision and qualification/experience of Site staff is given in Form F-1.
- The name, background and professional experience of each key staff member to be assigned to the project, with particular reference to his experience of a nature similar to that of the proposed assignment. The majority of the key staff shall be regular employees of the firm for at least six months (CV format in Form F-2).
- The bidder shall furnish details of agency/sub-Contractor proposed to be hired for the specialized work. Bio data of employee on the role of the developer shall be submitted who will be at site for execution, " will be qualified by TMC/Project Architect after evaluation."

6.10.2 Part II: Technical bid

- a) Bid documents as listed in Clause 1.1.2 of section-I of TENDER
- b) Technical Proposal

The proposal should cover in detail the following:

- a. Understanding and comprehension of the work involved. At the time of submission of tender, the applicant shall have to furnish an Undertaking on the letter head. as under:

“I/We undertake and confirm that eligible similar work(s) has /have not been Sublette or executed under Joint Ventures or got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of TMC, then I/we shall be debarred for tendering in TMC Contracts in future forever. Also, if such a violation comes to the notice of TMC before date start of the work, the Engineer- in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit / Performance Guarantee.”

- b. The general approach and methodology proposed for carrying out the services covered in the Scope of Work, including such detailed information as deemed relevant. Apart from above, Contractor shall give details and numbers of equipment including their source, to be mobilized for the project with an assurance that equipment mobilized would be able to conduct work as per specifications in stipulated time schedule.
- c. A program implementation schedule with broad list of activities, timelines and milestones (Hard and soft copy). A detailed overall work program and a bar chart indicating the duration and timing of all major activities, manpower deployment. Bar chart shall be made showing the activity to be performed for the project along with duration of each activity on a weekly basis.
- d. A detailed cash flow bar chart indicating the project expenses along with duration on a fortnightly basis.
- e. Proposed quality plan as per requirements of ISO: 9001:2008.
- f. No information relating to financial terms of services should be included in the Technical Proposal.

6.11 FINANCIAL BID

The financial bid will be uploaded in excel filed in volume-II only.

The final prices shall be entered in the Form of Bid. These prices should include all cost associated with the contract. The financial proposal shall include the cost of total complete project which shall be ready to occupy for all the building, Equipment, plants, and machinery in ready to occupy situation.

Documents to be submitted by the Bidder under technical and financial packages have been described under the respective Clauses. This list of documents has been prepared mainly for the convenience of the Bidder and any omission on the part of TMC shall not absolve the Bidder of his responsibility of going through the various Clauses in the Bid Documents including the specifications and to submit all the details specifically called for (or implied) in those Clauses.

All documents issued for the purposes of tendering as described in RFP and any amendments issued shall be deemed as incorporated in the Bid.

6.12 TENDER PRICES

- a) The bid should include the complete scope of the tender.
- b) The Bidder shall quote his price in Excel file format only (Financial Bid). The total price quotes should be final and should be for undertaking the entire project in all respects as per the TENDER document. .
- c) Prices quoted by the Bidder will include all Materials, Tools & Plant, labor, supervision, profit; other levies together with all general risks, liabilities and obligations set out or implied in the contract, statutory payments like PF, ESI, and applicable Labor Cess, cost of insurance to this contract, all applicable taxes including GST, Income Tax & Surcharges etc. **There will be no variation in the Contract Price quoted by the Bidder on any account throughout the contract period & completion of work.**
- d) The Bidder shall keep the contents of his tender and rates quoted by him confidential.
- e) The Bidder shall utilize Indian labor, staff and materials to the maximum extent possible in execution of Works.

6.13 COST OF TENDERING

The Bidder shall bear all costs associated with the preparation and submission of his tender and TMC will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the tendering process.

6.14. LANGUAGE OF TENDER

All tender documents shall be in English language.

6.15. CURRENCY OF THE TENDER

Bid prices shall be quoted in Indian Rupees only.

6.16. TENDER VALIDITY

- a. The tender should be valid for a period of 180 days from the date of opening of the bids.
- b. In exceptional circumstances, prior to expiry of the original tender validity period, TMC may request the Bidders for a specified extension in the period of validity. The request and the response thereto shall be made in writing or by e-mail/Tele-fax. The Bidder shall not be required or permitted to modify his tender but shall be required to extend the and validity of his bid and validity of E.M.D. correspondingly.

6.17. EARNEST MONEY DEPOSIT (E.M.D.)

- a. The Bidder shall furnish, as E.M.D., an amount as mentioned in Clause 1.1.1 of section-I of TENDER Volume-I.
- b. The E.M.D. will be in the form of a Bank Guarantee from a Scheduled Commercial bank in India acceptable to the Employer. The format of the Bank Guarantee shall be generally in accordance with the sample form of E.M.D. (Form B) included in this volume of tender documents. Other formats may be permitted subject to the prior approval of TMC. Bank guarantees shall be irrevocable and operative for a period not less than 30 days beyond the validity of the tender. The E.M.D. shall be endorsed/pledged in favor of Tata Memorial Centre and shall be submitted

in a separate envelope super scribed “E.M.D. for Construction of SSPCC Block at ACTREC.

- c. Any tender not accompanied by an acceptable E.M.D. will be summarily rejected and shall be treated as non-responsive.
- d. The tender securities of unsuccessful Bidders shall be discharged/returned by TMC as promptly as possible as but not later than 30 days after the expiration of the period of tender validity as defined in Clause 16 of Section-II of TENDER Volume-I.
- e. The E.M.D. of the successful Bidder shall be returned upon the Bidder executing the Contract Agreement and the required performance guarantee for performance.
- f. The E.M.D. shall be forfeited:
 - If a Bidder withdraws his tender during the period of tender validity, or
 - If the Bidder does not accept the correction of his tendered price in terms of Clause 28 of Section-II of TENDER Volume-I., or
 - In the case of a successful Bidder, if he fails to:
 - i. Furnish the necessary performance guarantee for performance as per Clause 32 of Section-II of RFP Volume-I and/or
 - ii. Enter into the Contract within the time limit specified in Contract data.
- g. No interest will be payable by TMC on the E.M.D. amount cited above.

6.18. POWER OF ATTORNEY

Power of Attorney duly notarized and on a stamp paper of an appropriate value, issued and signed by the member authorizing the person signing the tender documents to sign documents, make corrections/ modifications and interacting with TMC and acting as the contact person shall be submitted along with technical bid.

6.19. FORMAT AND SIGNING OF TENDERS

- a. The bidder shall submit one set of the bid comprising the documents as described in Clause 11 of ITB.
- b. The Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. All pages of the Bid shall be signed by the person or persons signing the Bid.
- c. The Bid shall contain no overwriting alternations or additions. All witnesses and sureties shall be persons of status and probity and their full names, occupations and addresses shall be written below their signatures.

6.20. SUBMISSION OF TENDERS

6.20.1 SEALING AND MARKING OF TENDERS

The Bidder shall follow the procedure as indicated below:

- a. The completed Technical Proposal and Financial Proposal must be submitted on E portal on or before the time and date stated in the NIT. No proposal can be submitted after closing time for submission & will not be considered. The bidders are requested to upload their bids well before the time & date specified for submission to avoid last minute rush & congestion on website. The TMC or the website www.tenderwizard.com/DAE shall not be held responsible if the bids are not uploaded in time on thee-portal.
- b. The Proposal must be valid for the number of days stated in the Tender. The Client will make its best effort to conclude the Proposal evaluation process within this period. If the Client wishes to extend the validity period of the Proposals, Consultant has a right to extend or not to extend the validity of their Proposals The TECHNICAL BID shall be sealed in envelopes couriered/postal/hand delivery to 'Officer-in-Charge, Engineering Services, Room No KS 210, ACTREC, Kharghar, Navi Mumbai 410210) duly super scribing on top, tender number, name of work and time and last date for submission. The envelope should also bear the name and address of the Bidder.
- c. The contents of Technical bid and financial bid shall be as detailed under Clause 11 of ITB herein.

- d. No responsibility will be accepted by the TMC for the misplacement or premature opening of a tender, not sealed or marked as per aforesaid instructions.

6.21. ADDRESS FOR SUBMISSION OF BID

Bid should be submitted to: The Officer-in-charge, Engineering Services, Tata Memorial Centre, ACTREC 2nd floor, Engineering Services, Khanolkar Shodhika, and ACTREC.

- a. The last date for submission of completed tenders is given in Clause 1.1.1 of Section-I of TENDER Volume-I. The TMC may, at their discretion, extend this date for the submission of tender by amending the Bid Documents, in which case all rights and obligations of the TMC and the Bidder previously subject to the original date shall thereafter be subject to the new deadline as extended. If such nominated date for submission of tender is subsequently declared as a Public Holiday, the next official working day shall be deemed as the date for submission of tender.
- b. Tenders shall be submitted by hand or through registered post or courier service at the address mentioned in Clause 21 of ITB. TMC shall not take any cognizance and shall not be responsible for delay/loss in transit or –no submission of the tender in time.
- c. Tenders sent telegraphically or through other means of transmission (Tele-fax etc.), which cannot be delivered in a sealed envelope, shall be treated as defective, invalid and shall stand rejected.

6.22. LATE TENDERS

Any tender received after the deadline prescribed for submission of tenders in Clause 1.1.1 of Section-I of TENDER Volume-I herein will be returned unopened to the Bidder.

6.23. BID OPENING AND EVALUATION

All the bids received shall be opened in the **Office of Officer-in-Charge, Engineering Services, TMC-ACTREC, Kharghar, Navi Mumbai 410210, on Date_____ at _____** in the presence of the Bidders or their representatives who choose to attend. In the event of the specified date of

Bid opening being declared a holiday, the Bids will be opened at the appointed time and location on the next working day.

6.24. PROCESS TO BE CONFIDENTIAL

Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award is successful and Bidder has been announced. Any effort by a Bidder to influence the processing of Bids or award decisions may result in the rejection of his Bid.

6.25. CLARIFICATION OF TENDERS

- a. To assist in the examination, evaluation, and comparison of Bids, the **Client** may, at his discretion, ask the lowest evaluated responsive bidder for clarification of his-Bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing or e-mail, but no change in the price or substance of the Bid shall be sought, offered, or permitted.
- b. No Bidder shall contact the Employer / Project architect on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so writing.
- c. Any effort by the Bidder to influence the Employer / Project architect in the bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

6.26. DETERMINATION OF RESPONSIVENESS

During the detailed evaluation of Bids, the Project architect / Employer will determine whether each Bid.

- Meets the criteria defined of ITB
- Is accompanied by the required securities and;
- Is substantially responsive to the requirements of the Bidding documents.

6.27. EVALUATION OF TENDER

- a) **The Officer-in-charge, ES** will evaluate and compare only the Bids determined to be substantially responsive.
- b) The evaluation of Financial proposals by TMC will take into account, in addition to the tender amounts, the following factors:
 - Arithmetical errors corrected by TMC in accordance with Clause 28 of ITB.
 - Such other factors of administrative nature as TMC may consider having a potentially significant impact on contract execution, price and payments, including the effect of items or rates that are unbalanced or unrealistically priced.
- c) The Employer reserves the right to accept or reject any variation arising out of change in scope of work. Such variations, which are in excess of the requirements of the Bidding documents, shall not be taken into account in Bid evaluation.
- d) Evaluation of financial offer will be based on price quoted by the Contractor.

6.28. CORRECTION OF ERRORS

- a. For any arithmetical errors in computation and summation TMC will check tenders determined to be technically acceptable during financial evaluation. Errors will be corrected by the TMC.
- b. If a Bidder does not accept the correction of errors if any arise, his tender will be rejected and the E.M.D. forfeited.

7.0 AWARD OF CONTRACT 29.1 AWARD CRITERIA

- TMC will award, the Contract to the Bidder, whose tender has been determined to be substantially responsive, complete and in accordance with the tender documents, and whose total evaluated price for undertaking the entire project detailed in Scope of work (Clause 2 of section-I of TENDER Volume-I and Employer's requirement in Volume-II) is the lowest.

- If the financial bids of lowest two bidders are equal, then the bidders shall be asked to resubmit the financial bid. No upward revision will be allowed

7.1. EMPLOYER'S RIGHT TO ACCEPT ANY TENDER AND TO REJECT ANY OR ALL TENDERS

- TMC reserves the right to accept or reject any tender, and to annul the tender process and reject all tenders, at any time prior to award of Contract, or to divide the Contract between/amongst Bidders without thereby incurring any liability to the affected Bidder or Bidders or any obligations to inform the affected Bidder or Bidders of the grounds for TMC's action.

7.2. NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT

- a. The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by telex, facsimile or e-mail confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Bidder in consideration of the execution the Works on a Percentage basis by the Bidder as prescribed by the Contract (hereinafter and by the Contract called the "Contract Price").
- b. The notification of award will constitute the formation of the Contract, subject to condition that after furnishing of a performance security in accordance with the provisions Clause 7.3 of the award will be complete.
- c. The Contract agreement will incorporate all correspondence between the Employer and the successful Bidder. The detail work programme shall be finalized with the successful bidder after notification of award. The agreed work programme shall form part of the contract agreement. The agreement in Performa (Form E) included in this document will be signed by the successful bidder.

7.3. PERFORMANCE SECURITY

- 7.3.1 Within 15 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance Security [valid up to the stipulated date of completion plus 60 days beyond that. In case

completion date gets extended, validity shall be extended accordingly] in any of the forms given below for an amount **equivalent to 5% of the Contract price:**

- A bank guarantee in the Form-D given in Section-III of TENDER Volume-I; or
- A deposit receipt of Schedule Bank in favour of Accounts Officer, Tata Memorial Centre.

7.3.2 The period for submission of the performance guarantee can be extended by competent authority up to maximum period of 15 days up on written request received from the Bidder stating the reason for delays in procuring the performance guarantee to the satisfaction of the competent authority.

7.3.4 Failure of the successful Bidder to comply with the requirements of performance security shall constitute sufficient grounds for cancellation of the award and forfeiture of the E.M.D.

7.4. CORRUPT OR FRAUDULENT PRACTICES:

It is required that the bidders / Contractor observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, it is:

- a. Defined, for the purposes of this provision, the terms set forth below as follows:
- b. “Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution
- c. “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer and includes collusive practice among Bidders (prior to or after bid Bidder Employer Volume-I submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Government of the benefits of free and open competition.

- d. The Employer will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question and will declare the firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract, if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

8.0 EVALUATION CRITERIA

8.1 For the purpose of qualification, bidder will be evaluated in following manner :

8.1.1 The initial criteria prescribed in Para 7.1 to 7.5 above in respect of experience of similar class of works completed, financial turnover etc. will first be scrutinized and the bidder's eligibility for qualification for the work be determined.

8.1.2 The bidders qualifying the initial criteria as set out in Para 7.1 to 7.5 above will be evaluated for following criteria by scoring method on the basis of details furnished by them :

- (a) Financial strength [Form “A & B, B- 1”] : Maximum 20 marks
- (b) Experience in similar nature of work : Maximum 20 marks during last seven years [Form “C”]
- (c) Performance on works (Form “E”) – : Maximum 20 marks
Time over run
- (d) Performance on works (Form “E” / : Maximum 40 marks
Site Inspection by the committee) –
Quality

Total	:	<hr/>
		100 Marks
		<hr/>

To qualify, the bidder must secure at least 50% marks in each criteria and 60% marks in aggregate.

Note: The break-up of above scoring method is indicated in the table below:

Sl. No.	Attributes		Evaluation	
(a)	Financial strength	(20 marks)	(i) 60% marks for minimum eligibility criteria	
	(i) Average annual turnover	16 marks	(ii) 100% marks for twice the minimum eligibility criteria or more	
	(ii) Net Worth Certificate	4 marks	In between (i) & (ii) – on prorate basis	
(b)	(i) Experience in similar class of works	15 marks	(i) 60% marks for minimum eligibility criteria	
	(ii) Experience in PT works	5 marks	(ii) 100% marks for twice the minimum eligibility criteria or more	
			In between (i) & (ii) – on prorate basis	
(c)	Performance on works (time over run)	20 marks		
	Parameter	Calculation for point	Score	Max Marks
		If TOR	1.00 2.00 3.00 >3.50	20
	(i) Without levy of compensation		20 15 10 10	
	(ii) With levy of Compensation		20 05 0 -5	
	(iii) Levy of compensation not decided		20 10 0 0	
TOR = AT/ST, where AT=Actual Time; ST=Stipulated Time				
Note: Marks for value in between the stage indicated above is to be determined by straight line variation basis.				

(d)	Performance on works (Quality)	(40 marks maximum)
	(i) Outstanding	40
	(ii) Very Good	30
	(iii) Good	20
	(iv) Poor	00

8.2 Even though an applicant may satisfy the above requirements, he would be liable to disqualification if he has :

- a) Made misleading or false representation or deliberately suppressed the information in the form statements and enclosures required in the eligibility document.
- b) Record of poor performance such as abandoning work, not properly completing the contract, or financial failures / weaknesses etc.

9.0 FINANCIAL INFORMATION:

Bidder should furnish the following financial information:

Annual financial statement on construction works for the last 5 years [in Form “A”]
& Net Worth Certificate [Form “B-1”].

10.0 EXPERIENCE IN COMPOSITE WORKS HIGHLIGHTING EXPERIENCE IN SIMILAR WORKS:

10.1 Bidder should furnish the following:

- a) List of all works of similar class successfully completed during the last seven years [in Form “C”].
- b) List of the projects under execution of or awarded [in Form “D”].

10.2 Particulars of completed works and performance of the applicant duly authenticated / certified by an officer not below the rank of Executive Engineer or equivalent should be furnished separately for each work completed or in progress [in Form “E”].

10.3 Information in [Form “D”] should be completed and no work should be left out.

11.0 **ORGANIZATION INFORMATION:**

Bidder is required to submit the following information in respect of his organization [in Forms “F” & “G”].

- a) Name and Postal Address, i/c Telephone & Fax Numbers, E-mail ID etc.
- b) Copies of original documents defining the legal status, place of registration and principal places of business.
- c) Names & title of Directors and Officers to be concerned with the work, with designation of individuals authorized to act for the organization.
- d) Information on any litigation in which the applicant was involved during the last five years, including any current litigation.
- e) Authorization for employer to seek detailed references.
- f) Number of Technical & Administrative Employees in parent company, subsidiary company and how these would be involved in this work [in Form “G”].

12.0 **EQUIPMENT:**

Applicant should furnish the list of equipment including scaffolding likely to be used in carrying out the work [in Form “H”]. Details of any other equipment required for the work [not included in Form “H”] and available with the applicant may also be indicated.

13.0 **LETTER OF TRANSMITTAL:**

The applicant should submit the letter of transmittal attached with pre-qualification document.

14.0 OPENING OF PRICE BID:

After evaluation of applications, a list of short listed agencies will be prepared. Thereafter the financial bids of only the qualified and technically acceptable bidders shall be opened at the notified time, date and place in the presence of the qualified bidders or their representatives.

The bid shall remain valid for a period mentioned below:

For work involving two envelope system	-	180 days from the date of opening of Technical bids
--	---	---

15.0 AWARD CRITERIA:

15.1 The employer reserves the right, without being liable for any damages or obligation to inform the bidder to:

- a) Amend the scope and value of contract to the bidder.
- b) Reject any or all the applications without assigning any reasons.

15.2 Any effort on the part of the bidder or his agent to exercise influence or to pressurize the employer would result in rejection of his application. Canvassing of any kind is prohibited.

SECTION-III

LETTER OF TRANSMITTAL

(to be taken on the letter head of the bidder)

Ref: TMC/ACTREC/SSPCC/01

Date:

To
The Officer-in-Charge,
Tata Memorial Centre,
ACTREC, Kharghar
Navi Mumbai – 410 210

Subject: Construction of “**Shantilal Shanghvi Paediatric Haematolymphoid Cancer Centre**”& Utility Block at ACTREC, Kharghar, Navi Mumbai

Sir,
Having examined the details given in Press-Notice and bid document for the above work, I / we hereby submit the relevant information.

- 1) I / We hereby certify that all the statements made and information supplied in the enclosed forms A to H and accompanying statement are true and correct.
- 2) I / We have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
- 3) I / We submit the requisite certified Net Worth certificate and authorize Officer-in-Charge, ES, Tata Memorial Centre, to approach the Bank issuing the Net Worth certificate to confirm the correctness thereof, I/we also authorize Chief Engineer, Tata Memorial Centre, to approach individuals, employers, firms and corporation to verify our competence and general reputation.
- 4) I / We submit the following certificates in support of our suitability technical know-how and capability for having successfully completed the following works for pre-qualification.

Sr No	Name of Work	Name of Owner	Value of the work	Date of Start	Date of Completion
1					
2					
3					

Signature of bidder [s]

Enclosures:
Seal of bidder
Date of submission

: 40:

Signature of the Contract & Seal

FORM “A”

Financial Information

- 1) Financial Analysis – Details to be furnished duly supported by figures in balance sheet / profit & loss Account for the last five years duly certified by the Chartered Accountant, as submitted by the bidder to the Income Tax Department [Copies to be attached].

Particulars	Financial Year				
	2014-15	2015-16	2016-17	2017-18	2018-19
i) Gross Annual turnover on Construction work					
ii) Profit / Loss (please specify)					

- 2) Financial arrangements for carrying out the proposed work.

--

- 3) Net Worth Certificate from Certified Chartered Accountant of bidder in the prescribed “Form B-1”.

Signature of Chartered Accountant with seal

Signature of Bidder [s]

Postal Address of Chartered Accountant

FORM “B”

FORM OF BANKERS’ CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s. / Shri.
_____ having marginally noted address,
a customer of our bank are / is respectable and can be treated as good for any
engagement up to a limit of Rs..... [Rupees
_____]

This certificate is issued without any guarantee or responsibility on the bank or any of
the officers.

[Signature]

For the Bank

NOTE

- 1) Bankers certificates should be on letter head of the Bank, sealed in cover addressed to tendering authority.
- 2) In case of partnership firm, certificate should include name of all partners as recorded with the Bank.

FORM “B-1”

FORM FOR CERTIFICATE OF NET WORTH FROM CHARTED ACCOUNTANT

It is to certify that as per the audited balance sheet and profit & loss account during the
Financial Year_____, Net Worth of Ms_____ (Name and
registered address of individual/ firm/company), as on _____(the
relevant date) is Rs_____ after considering all liabilities. It is further
certified that the Net Worth of the company has not eroded by more than 30% in the last
three years on 2019.

Signature of Chartered Accountant _____

Name of Chartered Accountant _____

Membership Ni of ICAI _____

Date and Seal

FORM “C”

**DETAILS OF ALL WORKS OF SIMILAR CLASS COMPLETED DURING THE LAST
SEVEN YEARS ENDING LAST DAY OF SUBMISSION OF TENDER**

S. No.	Name of work/project and location	Owner or sponsoring organization	Cost of work in crores of rupees	Date of commence ment as per contract	Stipulated date of completion	Actual date of completion	Litigation/ arbitration cases pending/ in progress with details*	Name and address/ telephone number of officer to whom reference may be	Remark
1	2	3	4	5	6	7	8	9	10

* Indicate gross amount claimed and amount awarded by the Arbitrator

Signature of Bidder(s)

FORM “D”

**DETAILS OF WORKS UNDER EXECUTION OR AWARDED ON LAST DAY OF
SUBMISSION OF TENDER**

S. No.	Name of work/project and location	Owner or sponsoring organization	Cost work crores rupees	Date of commence of work per contract	Stipulated date of completion	Up to date percentage progress of work	Slow Progress if any and reasons thereof	Name and address/ telephone number of officer to whom reference may be made	Remarks
1	2	3	4	5	6	7	8	9	10

Certified that the above list of works is complete and no work has been left out and that the information given is correct to my knowledge and belief.

Signature of Bidder(s)

FORM “E”

PERFORMANCE REPORT OF WORKS REFERRED TO IN FORM “C’ & “D”

- 1) Name of work / Scope (Civil works, Road works, etc. heads):
- 2) Agreement No. :
- 3) Estimated cost :
- 4) Tendered cost :
- 5) Date of start :
- 6) Date of completion
 - a) Stipulated date of completion :
 - b) Actual date of completion :
- 7) Amount of compensation levied,
For delayed completion if any.
- 8) Amount of reduced rate items, if any :
- 9) Performance Report
 - a) Quality of work : Outstanding/Very good/Good/Poor
 - b) Financial Soundness : Outstanding/Very good/Good/Poor

- | | | |
|----|-----------------------|-----------------------------------|
| c) | Technical Proficiency | : Outstanding/Very good/Good/Poor |
| d) | Resourcefulness | : Outstanding/Very good/Good/Poor |
| e) | General behavior | : Outstanding/Very good/Good/Poor |

Executive Engineer or Equivalent or Client

Dated:

Note: Performance Certificate from Consultant will not be considered. The Performance Certificate should be directly from Client/Owner.

FORM “F”

STRUCTURE & ORGANIZATION

1)	Name & Address of the applicant	:	
2)	Telephone No. / Fax No./E-mail ID	:	
3)	Legal Status of the applicant [attach copies of the original document defining the legal status]	:	
a)	An individual		
b)	An proprietary firm		
c)	A firm in partnership		
d)	A limited company or corporation		
4)	Particulars of Registration with various Govt. Bodies [attach attested Photocopy].	:	
	Organization / Place of Registration _____ Registration No. _____		
a)			
b)			
c)			
5)	Names and Titles of Directors & Officers with designation to be concerned with this work.		
6)	Designation of individuals authorized to act for the organization. :	:	
7)	Was the applicant ever required to suspend construction for a period of more than six months continuously after you commenced the construction? If so, give the name of the project and reasons of suspension of work.	:	
8)	Has the applicant, or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons of abandonment.	:	
9)	Has the applicant, or any constituent partner in case of partnership firm, ever been debarred/black listed for tendering in any organization at any time? If so, give details.	:	
10)	Has the applicant, or any constituent partner in case of partnership firm, ever been convicted by a	:	

: 48:

Signature of the Contract & Seal

	court of law? If so, give details.		
11)	In which field of Civil Engineering construction the applicant has specialization and interest?	:	
12	Registration certificates like GST, PAN, ESIC, etc.	:	
13)	Any other information considered necessary not included above	:	

Signature of Applicant (s)

FORM “G”

DETAILS OF TECHNICAL & ADMINISTRATIVE PERSONNEL TO BE EMPLOYED FOR THE WORK

S. No.	Designation	Total number	Number available for this work	Name	Qualifications	Professional experience and details of work carried out	How these would be involved in this work	Remarks
1	2	3	4	5	6	7	8	9

Signature of Bidder(s)

FORM “H”

**DETAILS OF CONSTRUCTION PLANT AND EQUIPMENT LIKELY TO BE USED IN
CARRYING OUT THE WORK**

S.No.	Name of equipment	Nos.	Capacity or type	Age	Condition	Ownership status			Current location	Remark1.
						Presently owned	Leased	To be purchased		
1	2	3	4	5	6	7	8	9	10	11
Earth moving equipment 1. Excavators (various sizes) Equipment for hoisting & lifting 1 Tower 2 Builder's hoist Equipment for concrete work 1 Concrete batching plant 2 Concrete pump 3 Concrete transit mixer 4 Concrete mixer (diesel) 5 Concrete mixer (electrical) 6 Needle vibrator (electrical) 7 Needle vibrator (petrol) 8 Table vibrator (elect./ petrol) 9 Ply Shuttering materials. 10 Double headed Steel scaffolding system. 11 Workers Safety Lift. 12 Etc...										

SECTION - IV

GENERAL CONDITIONS OF CONTRACT (GCC)

1. The 'Contract' means the documents forming the tender and acceptance thereof and the formal agreement executed between the Competent authority on behalf of the Director, T M C and the Contractor together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in-charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.
2. In the contract the following expression shall, unless the context otherwise requires, have the meanings hereby respectively assigned to them.
 - i) The expression 'Works' or 'Work' shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent and whether original, altered, substituted or additional.
 - ii) The 'Site' shall mean the land or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
 - iii) The 'Contractor' shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personnel representative of such individual or the persons composing such firm or company or the successors of such firm or company and the permitted assignees of such individual, firm or company.
 - iv) The 'President' means the **Director, TMC** and his successors.
 - v) The 'Engineer-In-Charge' means the Engineer / Officer, who shall supervise and be in charge of the work
 - vi) 'Government' or 'Government of India' shall mean the **Director, TMC**.
 - vii) 'Temporary Work' means all temporary works of every kind required in or about the execution, completion and maintenance of the works.
 - viii) 'Accepting authority' shall mean the authority mentioned in Schedule "F".
 - (ix) Excepted Risk are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies,

hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of Government, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by Government of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to Government's faulty design of works.

- (x) Market Rate shall be the rate as decided by the Engineer-in-Charge on the basis of the cost of materials and labor at the site where the work is to be executed plus the percentage mentioned in Schedule 'F' to cover, all overheads and profits.
 - (xi) Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers.
 - (xii) Department means any of its Unit (s) of TMC which invites tenders on behalf Director, TMC in schedule "F".
 - (xiii) District Specifications means the specifications followed by the State Government in the area where the work is to be executed.
 - (xiv) Tendered value means the value of the entire work as stipulated in the letter of award.
 - (xv) **Date of commencement of work** –The date of commencement of work shall be the date of start as specified in Schedule F or the 1st date of handing over of the site, whichever is later, in accordance with the phasing if any, as indicated in the tender document.
- 3. **Scope and Performance:** Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.
 - 4. Headings to these General / Special Clauses of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
 - 5. The contractor shall be furnished one certified copy of the contract documents standard specifications, Schedule of quantities and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.
 - 6. **Works to be carried out:** The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labor, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions. given in the Schedule of Quantities (Schedule-A) shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties,

hoisting, setting, fitting and fixing in position and all other labors necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.

7. **Sufficiency of Tender:** The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.
8. **Discrepancies and Adjustment of Errors:** The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and Special Clauses in preference to General Clauses.

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

- (i) Description of Schedule of Quantities.
- (ii) Particular Specifications and Special Clauses, if any.
- (iii) Drawings.
- (iv) Departmental Specifications/TMC/DAE
- (v) C.P.W.D. Specifications.
- (vi) Indian Standard Specifications of B.I.S.

8.2 If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.

8.3 Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.

9. **Signing of Contract:** The successful tenderer / contractor, on acceptance of his tender by the Accepting Authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of :
 - (i) The notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
 - (ii) Standard TMC Form as mentioned in Schedule 'F' consisting of :
 - a) Various standard clauses with corrections up to the date stipulated in Schedule 'F' along with annexures thereto.
 - b) Safety Code.

- c) Model Rules for the protection of health, sanitary arrangements for workers employed by TMC or its contractors.
 - d) Contractor's Labor Regulations.
 - e) List of Acts and omissions for which fines can be imposed
-
- (iii) No payment for the work done will be made unless contract is signed by the contractor.

CLAUSES OF CONTRACT

CLAUSE1: PERFORMANCE GUARANTEE

- (i) The contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and / or Without prejudice to any other provisions in the contract) within period specified in Schedule "F" from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-charge up to a maximum period as specified in Schedule "F" on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in-charge. This period can be further extended at the written request of the contractor by the Engineer-in-charge for a maximum period ranging from 1 to 15 days with late fee @ 0.1% per day, of performance guarantee amount.

This guarantee shall be in the form of Department's cash receipt (in case guarantee amount is less than Rs. 10,000/- or Demand Draft /Pay Order / Banker s cheque /Deposit at call receipt issued by a Scheduled Bank (in case guarantee amount is less than Rs 1,00 ,000/) or Government Securities / Fixed Deposit Receipt (FDR) or Guarantee Bonds (BG) of any Scheduled Bank or The State Bank of India in accordance with the form annexed as Section 10 (i) hereto In case a fixed deposit receipt of any Bank is furnished by the contractor to the TMC as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipt the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the TMC to make good the deficit.

- (ii) The Performance Guarantee shall be initially valid up to the stipulated date of completion plus **60 days beyond that**. In case the time for completion of work gets enlarged, the contractor shall get the validity of performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.
- (iii) The Engineer-in-charge shall not make a claim under the Performance guarantee except for amounts to which the Director, TMC is entitled under the contract (notwithstanding and / or without prejudice to any other provisions in the contract agreement) in the event of :
- (a) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-charge may claim the full amount of the Performance guarantee.
 - (b) Failure by the contractor to pay **Director, TMC** any amount due, either as agreed by the contractor or determined under any of the Clauses / Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-charge.

- (iv) In the event of the contract being determined or rescinded under provisions of any of the clause /condition of the agreement ,the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Director, TMC

CLAUSE 1-A: RECOVERY OF SECURITY DEPOSIT:

The person(s) whose tender may be accepted (hereinafter called the contractor) shall permit TMC at the time of making any payment to him for work done under the contract to deduct a sum at the rate of **5%** of the gross amount of each running bill **as well as final bill** till the sum amount to security deposit of **2.5%** of the tendered value of the work. Such deductions will be made and held by TMC by way of Security Deposit unless he has /they have deposited the amount of Security at the rate mentioned above in cash or in the form of Government Securities or Fixed Deposit Receipts. **The security deposit can also be deposited in cash or in the form of Government Securities, Fixed Deposit Receipts etc.** In case a fixed deposit receipt of any bank is furnished by the contractor to the TMC as part of the security deposit and the bank is unable to make payment against the said fixed deposit receipt the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the TMC to make good the deficit.

All compensation or the other sums of money payable by the contractor under the terms of this contract may be deducted from or paid by the sale of a sufficient part of his security deposit or from the interest arising therefrom or from any sums which may be due to or may become due to the contractor by TMC or any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid the contractor shall within 10 days make good in cash or fixed deposit receipt tendered by the State Bank of India or by scheduled banks or (if deposited for more than 12 months) endorsed in favour of the Accounts Office TMC his representative in the office any sum or sums which may have been deducted from or raised by sale of his security deposit or any part thereof The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the Earnest Money deposited at the time of tenders will be treated as part of the ‘Security Deposit.

Security Deposit as deducted above can be released against Bank Guarantee issued by a Scheduled Bank on its accumulation to a minimum of Rs.5 Lakhs subject to the condition that amount of such Bank Guarantee, except last one, shall not be less than Rs.5 Lakhs. Provided further that the validity of bank guarantee shall be in conformity with provisions contained in clause 17 which shall be extended from time to time depending upon extension of contract granted under provisions of clause 2 and clause 5.

The Bank Guarantee submitted against Security Deposit shall initially be valid up to the stipulated date of completion of the work plus maintenance period as defined under clause 17 which shall be extended further time to time depending upon extension of contract granted under provisions of clause 2 & clause 5.

NOTE 1: Government papers tendered as security will be taken at 2.5% (Two point five per cent) below its market price or at its face value, whichever is less. The

market price of Government papers would be ascertained by the Engineer-in-charge at the time of collection of interest and the amount of interest to the extent of deficiency in value of the Government paper will be withheld if necessary.

NOTE 2: Government Securities will include all forms of securities mentioned in Rule No. 274 of the G.F. Rules except fidelity bond. This will be subject to the observance of the condition mentioned under the rule against each form of security.

NOTE 3: Note 1 & 2 above shall be applicable for both Clauses 1 & 1A.

CLAUSE 2: COMPENSATION FOR DELAY:

If the contractor fails to maintain the required progress in terms of clause-5 or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the Law to the Govt. on account of such breach, pay as agreed compensation the amount calculated at the rate stipulated below as the authority specified in Schedule "F" (whose decision in writing shall final and binding) may decide on the amount of tendered value of the work for every completed day / month (as applicable) that the progress remains below that specified in Clause-5 or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completion has been specified. :

i) **Compensation for delay of work: @ 1% per month of delay to be computed on per day basis.**

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the tendered value of work or of the tendered value of the item or group of items of work for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the TMC In case the contractor does not achieve a particular milestone mentioned in Schedule "F" or the re-scheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of Extension of Time. With-holding of this amount on failure to achieve a milestone, shall automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone (s), the withheld amount shall be released. In case the contractor fails make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

CLAUSE 3: WHEN CONTRACT CAN BE DETERMINED: POWERS OF ENGINEERS-IN-CHARGE:

Subject to other provisions contained in this clause, the Engineer-in-Charge may,

without prejudice to his any other right or remedy against the contractor in respect of any delay, inferior workmanship. any claim for damages and / or any other provisions of this contract or otherwise, and whether the date for completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- (i) If the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un workman-like manner shall omit to comply with the requirements of such notice for a period of 7 days thereafter.
- (ii) if the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continue to do so after a notice in writing of 7 days from the Engineer-in-Charge.
- (iii) If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing In that behalf by the Engineer-in-Charge.
- (iv) If the contractor persistently neglects to carry out his obligations under the Contract and /or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.
- (v) If the contractor shall offer or give or agree to give to any person in TMC service or any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for TMC
- (vi) If the contractor shall enter into a contract with TMC in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer-in-Charge.
- (vii) If the contractor shall obtain a contract with TMC as a result of wrong tendering or other non-bonafide methods of competitive tendering.
- (viii) If the contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the

benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.

- (ix) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed if Circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- (x) If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
- (xi) If the contractor assigns, transfers, sublets (engagement of labor on piece-work basis or of labor with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts With or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof Without the prior written approval of the Engineer-in-Charge.
- (xii) When the contractor has made himself liable for action under any of the cases aforesaid the Engineer-in-Charge on behalf of the Director, TMC of India shall have powers:
 - (a) To determine the contract as aforesaid (of which termination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the contracts shall be liable to be forfeited, and shall be absolutely at the disposal of the TMC.
 - (b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be unexecuted out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work.

In the event of above courses being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provisions aforesaid the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

CLAUSE 3A: Closure of Contract on non-commencement of work:

In case the work cannot be started due to reasons not within the control of the

contractor within 1/8th of the stipulated time for completion of work, either party may close the contract. In such eventuality, the Earnest Money Deposit and the Performance Guarantee of the contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.

CLAUSE 4: Contractor liable to pay compensation even if action not taken under Clause 3:

In any case in which any of the powers conferred upon the Engineer-in-Charge by clause 3 thereof, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Engineer-in Charge which shall final and binding to the contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof, belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work / or any part thereof, paying or allowing for the same in account at the contract rates, or, in the case of these not being applicable at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final and binding on the contractor, his clerk of the works foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice); in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and at his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

CLAUSE 5: TIME AND EXTENSION FOR DELAY:

The time allowed for execution of the works as stipulated in the Schedule "F", or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in Schedule "F" or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money & performance guarantee absolutely.

- 5.1 As soon as possible after the Contract is concluded, the Contractor shall submit a Time and Progress Chart for each mile stone and get it approved by the Department. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall

indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) to complete the work as per mile stones given in Schedule "F".

5.2 If the work(s) be delayed by:

- i. Force majeure, or
- ii. abnormally bad weather, or
- iii. serious loss or damage by fire, or
- iv. civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
- v. delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract, or
- vi. non-availability of stores, which are the responsibility of TMC to supply or
- vii. non-availability or break down of tools and plant to be supplied or supplied by TMC
- viii. any other cause which, in the absolute discretion of the Engineer-in-Charge is beyond the Contractors control then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

5.3 Request for rescheduling of Mile stones and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within 14 days of the happening of the event causing on the prescribed form. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

5.4 In any such case the Engineer-In-Charge may give a fair and reasonable extension of time and reschedule the milestones for completion of work. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 3 months of the date of receipt of such request. On application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-Charge and this shall be binding on the contractor.

CLAUSE 6: MEASUREMENTS OF WORK DONE:

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

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

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

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

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

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

The contractor shall give, not less than 7 days' notice to the Engineer-in-Charge or his authorized representative in-charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorized representative in-charge of the work who shall within the aforesaid period of seven days inspect the work and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing, the same shall be uncovered at the Contractor's expense, or in default thereof no payment or

allowance shall be made for such work or the materials with which the same was executed.

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

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

CLAUSE 6-A: COMPUTERISED MEASUREMENT BOOKS:

Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract. All measurements of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per the format of the department so that a complete record is obtained of all the items of works performed under the contract.

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

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

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

a number as per the Register of Computerized MBs. This should be done before the corresponding bill is submitted in the Office for payment. The contractor shall submit one spare copy of such computerized MB for the purpose of reference and record by the various officers of the department.

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

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

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

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

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

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

contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

CLAUSE 7: PAYMENT ON INTERMEDIATE CERTIFICATE TO BE REGARDED AS ADVANCES:

No payment shall be made for work estimated to cost Rs.20, 000/- or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs.20,000/-, the interim or running account bill shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of the Department in triplicate on or before the date of every month fixed for the same by the Engineer-in- Charge. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment / adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule "F" in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. Engineer-in-Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurement of the work. In the event of the failure of the contractor to submit the bills, Engineer-in-Charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the Engineer-in- Charge certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. The amount admissible shall be paid by 10th working day after the day of presentation of the bill by the Contractor to the Engineer-in-Charge or his representative together with the account of the material issued by the department, or dismantled materials, if any. In the case of works outside the headquarters of the Engineer-in-Charge, the period of 10 working days will be extended to 15 working days.

All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion, interim payments shall continue to be made as herein provided without prejudice to the right of the department to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.

The Engineer-in-Charge In his sole discretion on the basis of a certificate from his representative to the effect that the work has been completed up to the level in question make interim advance payments without detailed measurements for work done (other than foundations, items to be covered under finishing items) up to lintel level (including sunshade etc.) and slab level, for each floor working out at 75% of the assessed value. The advance payments so allowed shall be adjusted in the subsequent interim bill by taking detailed measurements thereof.

CLAUSE 8: COMPLETION CERTIFICATE & COMPLETION PLANS:

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in- Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge shall inspect the work, and if there is no defect in the work, shall furnish the contractor with a certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and / or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed, all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements, required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floors or other parts the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the contractor shall fail to comply with the requirements of this clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of the work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish, etc., and dispose of the same as he thinks fit and clean off such dirt as aforesaid; and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

8. A : CONTRACTOR TO KEEP SITE CLEAN :When the annual repair and maintenance of works are carried out, the splashes and droppings from white washing, color washing, painting etc. on wall, floors, doors, windows etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all the other items of work in contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either departmentally or through any other agency. Before taking such action, the Engineer-in-Charge shall give 10 days' notice in writing to the contractor.

8. B: COMPLETION PLANS TO BE SUBMITTED BY THE CONTRACTOR: The contractor shall submit completion plan required as per Specifications for works as

applicable within 30 days of the completion of the work.

In case, the contractor fails to submit the completion plan as aforesaid, he shall be liable to **pay a sum equivalent to 2.50% of the value of the work subject to a ceiling of Rs.15, 000/-** as may be fixed by the Engineer-in-Charge and in this respect the decision of the Engineer-in-Charge shall be final and binding on the contractor.

CLAUSE 9: PAYMENT OF FINAL BILL:

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

- a. If the Tendered value of work is up to Rs. 15 Lakh, 3 months
- b. If the Tendered value of work exceeds Rs. 15 Lakh, 6 months

CLAUSE 10: MATERIALS SUPPLIED BY GOVERNMENT: Materials which Government will supply are shown in Schedule 'B' which also stipulates quantum, place of issue and rate(s) to be charged in respect thereof. The contractor shall be bound to procure them from the Engineer-in-Charge.

As soon as the work is awarded, the contractor shall finalize the programme for the completion of work as per clause 5 of this contract and shall give his estimates of materials required on the basis of drawings/or schedule of quantities of the work. The Contractor shall give in writing his requirement to the Engineer-in-Charge which shall be issued to him keeping in view the progress of work as assessed by the Engineer-in-Charge, in accordance with the agreed phased programme of work indicating monthly requirements of various materials. The contractor shall place his indent in writing for issue of such materials at least 7 days in advance of his requirement.

Such materials shall be supplied for the purpose of the contract only and the value of the materials so supplied at the rates specified in the aforesaid schedule shall be set off or deducted, as and when materials are consumed in items of work (including normal wastage) for which payment is being made to the contractor, from any sum then due or which may therefore become due to the contractor under the contract or otherwise or from the security deposit. At the time of submission of bills, the contractor shall certify that balance of materials supplied is available at site in original good condition.

The contractor shall submit along with every running bill (on account or interim bill) material-wise reconciliation statements supported by complete calculations reconciling total issue, total consumption and certified balance (diameter/section-wise in the case of steel) and resulting variations and reasons therefore. Engineer-in-Charge shall (whose decision shall be final and binding on the contractor) be within his rights to follow the procedure of recovery in clause 42 at any stage of the work if reconciliation is not found to be satisfactory.

The contractor shall bear the cost of getting the material issued, loading, transporting to site, unloading, storing under cover as required cutting assembling and joining the several parts together as necessary Notwithstanding anything to the contrary contained in any other clause of the contract and all stores/materials so supplied to the contractor or procured with the assistance of the TMC shall remain the absolute property of TMC and the contractor shall be the trustee of the stores/materials, and the said stores/materials shall not be removed/disposed off from the site of the work on any account and shall be at all times open to inspection by the Engineer-in-Charge or his authorized agent. Any such stores/materials remaining unused shall be returned to the Engineer in Charge in as good as condition in which they were originally supplied at a place directed by him at a place of issue or any other place specified by him as he shall require, but in case it is decided not to take back the stores/materials, the contractor shall have no claim for compensation on any account of such stores/materials so supplied to him as aforesaid and not used by him or for any wastage in or damage to in such stores I materials.

On being required to rectum the stores/materials, the contractor shall hand over the stores/ materials on being paid or credited such price as the Engineer-in-Charge shall determine, having due regard to the condition of the stores/materials. The price allowed for credit to the contractor, however, shall be at the prevailing market rate not exceeding the amount charged to him, excluding the storage charge, if any. The decision of the Engineer-in-charge shall be final and conclusive. In the event of breach of the aforesaid condition, the contractor shall be liable to TMC for all advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach. Provided that the contractor shall in no case be entitled to any compensation or damages on account of any delay in supply or non-supply thereof all or any such materials and stores provided further that the contractor shall be bound to execute the entire work if the materials are supplied by the TMC within the original scheduled time for completion of the work plus 50% thereof or schedule time plus 6 months whichever is more if the time of completion of work exceeds 12 months, but if a part of the materials only has been supplied within the aforesaid period, then the contractor shall be bound to do so much of the work as may be possible with the materials and stores supplied in the aforesaid period. For the completion of the rest of the work, the contractor shall be entitled to such extension of time as may be determined by the Engineer-in-Charge whose decision in this regard shall be final and binding on the contractor.

The contractor shall see that only the required quantities of materials are got issued. Any such material remaining unused and in perfectly good/original condition at. The time of completion or determination of the contract shall be returned to the

Engineer-in-Charge at the stores from which it was issued or at a place directed by him by a notice in writing. The contractor shall not be entitled for loading, transporting, unloading and stacking of such unused material except for the extra lead, if any involved, beyond the original place of issue.

CLAUSE 10A: MATERIALS TO BE PROVIDED BY THE CONTRACTOR

The contractor shall, at his own expense, provide all materials, required for the works other than those which are stipulated to be supplied by the TMC.

The contractor shall, at his own expense and without delay, supply to the Engineer-in-Charge/Consulting Architect, and samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Engineer-in-Charge shall within thirty days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval, fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge shall be issued after the test results are received.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analyzed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Engineer-in-Charge. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may require for collecting, and preparing the required number of samples for such tests.at such time and to such place or places as may be directed by the Engineer-in-Charge and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-in-Charge or his authorized representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the Engineer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to require

other proper materials to be substituted thereof and in case of default, the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor.

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

The contractor shall make all arrangements to get sample tested for specialized test on concrete, steel and other material brought to site through NABL accredited material test laboratory. Cost incurred for transportation of samples from Site or any other location to Testing laboratory shall be borne by the contractor and Test Report / Results shall be submitted to Engineer-in-Charge in sealed envelope.

CLAUSE 10B: ADVANCES

I) SECURED ADVANCE ON NON-PERISHABLE MATERIALS: The contractor, on signing an indenture in the form to be specified by the Engineer-in-Charge, shall be entitled to be paid during the progress of the execution of the work up to 90% of the assessed value of any materials which are in the opinion of the Engineer-in-Charge non-perishable, non-fragile and non-combustible and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. When materials on account of which an advance has been made under this sub-clause are incorporated in the work, the amount of such advance shall be recovered / deducted from the next payment made under any of the clause or clauses of this contract.

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

II) MOBILISATION ADVANCE: Mobilization advance not exceeding 10% of the tendered value may be given, if requested by the contractor in writing within one month of the order to commence the work. Rate of interest on advance shall be simple interest @ 10% per annum. The interest on the advance shall be calculated from the date of payment to the day of recovery both days inclusive. Such advance shall be in two or more installments to be determined by the Engineer-in-Charge at his sole discretion. The first installment of such advance shall be released by the Engineer-in-charge to the contractor on a request made by the contractor to the Engineer-in-Charge in this behalf. The second and subsequent installments shall be released by the Engineer-in-

Charge only after the contractor furnishes a proof of the satisfactory utilization of the earlier installment to the entire satisfaction of the Engineer-in-Charge.

Before any Installment of advance is released, the contractor shall execute a Bank Guarantee Bond from Scheduled Bank for the amount of advance & valid for the contract period. This shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery, together with interest.

It shall be ensured that at any point of time, Bank Guarantee is available for the amount of outstanding advance.

The recovery should be commenced after 10% of work is completed and the entire amount together with interest shall be recovered by the time 80% of the work is completed.

Provided always that provision of Clause 10 B (ii) shall be applicable only when so provided in 'Schedule "F"'.

- III) PLANT, MACHINERY & SHUTTERING MATERIAL ADVANCE :** An advance for plant, machinery & shuttering material required for the work and brought to site by the Contractor may be given if requested by the contractor in writing within one month of bringing such plant and machinery to site. Such advance shall be given on such plant and machinery, which in the opinion of the Engineer-in-Charge will add to the expeditious execution of work and improve the quality of work. The amount of advance shall be restricted to 5% percent of the tender value. In the case of new plant and equipment to be purchased for the work, the advance shall be restricted to 90% of the price of such new plant and equipment paid by the contractor for which the contractor shall produce evidence satisfactory to the Engineer-in-Charge. In the case of second hand and used plants and equipment, the amount of such advance shall be limited to 50% of the depreciated value of plant and equipment as may be decided by the Engineer-in-Charge. The contractor shall, if so required by the Engineer-in-Charge, submit the statement of value of such old plant and equipment duly approved by a Registered Valuer recognized by the Central Board of Direct Taxes under the Income-Tax Act, 1961. No such advance shall be paid on any plant and equipment of perishable nature and on any plant and equipment of a value less than Rs. 50,000/-. 75% of such amount of advance shall be paid after the plant & equipment is brought to site and balance 25% on successfully commissioning the same.

Leasing of equipment shall be considered at par with purchase of equipment and shall be covered by tripartite agreement with the following:

1. Leasing company which gives certificate of agreeing to lease equipment to the contractor.
2. Engineer-in-Charge and
3. The contractor.

This advance shall further be subject to the condition that such plant

and equipment.

- (a) are considered by the Engineer-in-Charge to be necessary for the works;
and
- (b) are in working order and are maintained in working order;
- (c) Hypothecated to the TMC as specified by the Engineer-in-Charge before the payment of advance is released.

The contractor shall not be permitted to remove from the site such hypothecated plant and equipment without the prior written permission of the Engineer-in-Charge. The contractor shall be responsible for maintaining such plant and equipment in good working order during the entire period of hypothecation failing which such advance shall be entirely recovered in lump sum. For this purpose, steel scaffolding and form work shall be treated as plant and equipment.

The contractor shall insure the Plant and Machinery for which mobilization advance is sought and given, for a sum sufficient to provide for their replacement at site. Any amounts not recovered from the insurer will be borne by the contractor.

(iv) INTEREST & RECOVERY

The mobilization advance and plant and machinery advance in (ii) & (iii) above bear simple interest at the **rate of 10% per annum and** shall be calculated from the date of payment to the date of recovery, both days inclusive, on the outstanding amount of advance. Recovery of such sums advanced shall be made by the deduction from the contractor's bills commencing after first 10% of the gross value of the works executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time 80% of the gross value of the contract is executed and paid, together with interest due on the entire outstanding amount up to the date of recovery of the installment.

- (v) If the circumstances are considered reasonable by the Engineer-in-Charge, the period mentioned in (ii) and (iii) for request by the contractor in writing for grant of mobilization advance and plant and equipment advance may be extended in the discretion of the Engineer-in-Charge

CLAUSE 10C: PAYMENT ON ACCOUNT OF INCREASE IN PRICES / WAGES DUE TO STATUTORY ORDER(S): DELETED

CLAUSE 10CA: Payment due to variation in prices of materials after receipt of tender: DELETED

CLAUSE 10 (CC): PAYMENT DUE TO INCREASE / DECREASE IN PRICES / WAGES (EXCLUDING MATERIALS COVERED UNDER CLAUSE 10CA) AFTER

RECEIPT OF TENDER FOR WORKS: DELETED

CLAUSE 10D: EXCAVATED / DISMANTLED MATERIAL WILL BE TMC PROPERTY:

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

CLAUSE 11: WORK TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS. DRAWINGS, ORDERS, ETC.:

The contractor shall execute the whole and every part of the work in the most substantial and workman like manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the designs, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the Standard Specifications for Works of TMC and / or as specified in Schedule "F" or in any Bureau of Indian Standard or any other, published standard or code or any other printed publication referred to elsewhere in the contract.

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

CLAUSE 12: DEVIATIONS / VARIATIONS: EXTENT AND PRICING:

The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.

12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended, if requested by the contractor, as follows:

- i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value, plus
- ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.

12.2 DEVIATION, EXTRA ITEMS AND PRICING: In the case of extra item (s) (items that are completely new, and are in addition to the items contained in the contract), the contractor may within fifteen days of receipt of order or occurrence of the item (s) claim rates, supported by proper analysis, for the work and the engineer-in-charge shall within one month of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

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

- a. **DEVIATION, SUBSTITUTED ITEMS, PRICING:** If the-market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
- b. If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).

DEVIATION, DEVIATED QUANTITIES, PRICING: In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in Schedule "F", the contractor may within 15 days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis, for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

12.3 The provisions of the preceding paragraph shall also apply to the decrease in the

rates of items for the work in excess of the limits laid down in Schedule "F", and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within 15 days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of 15 days having regard to the market rates.

12.4 The contractor shall send to the Engineer-in-Charge once every 3 months an up to date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge, which he has executed during the preceding quarter, failing which the contractor shall be deemed to have waived his right. However, the Engineer-in-Charge may authorize consideration of such claims on merits.

12.5 For the purpose of operation of Schedule "F", the following works shall be treated as works relating to foundation.

- i) For buildings, compound walls:** plinth level or 1.2 meters above ground level, whichever is lower, excluding items of flooring and D.P.C. but including base concrete below the floors.
- ii) For abutments, piers, retaining walls of culverts & bridges, walls of water reservoirs and well staining:** All works up to 1.2 m above the bed level.
- iii) For retaining walls, wing walls, compound walls, chimneys, overhead reservoirs/tanks and other elevated structures, where floor level is not determinate:** 1.2 meters above the average ground level or bed level.
- iv) For reservoirs/tanks (other than overhead reservoirs/tanks):** All works up to 1.2 meters above the ground level.
- v) For Basement: All** works up to 1.2m above ground level or up to floor 1 level whichever is lower.
- vi) For roads:** all items of excavations and filling including treatment of sub-base and soling work.
- vii) For water supply lines, sewer lines, underground SWD & similar works:** all items of work below ground level except items of piping work.
- viii) For open storm water drains:** all items of work except lining of drains.

12.6 Any operation incidental to or necessarily has to be in contemplation of tenderer while filing tender, or necessary for proper execution of the item included in the Schedule of quantities mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer. Nothing extra shall be admissible for such operations

CLAUSE 13: FORECLOSURE OF CONTRACT DUE TO ABANDONMENT OR REDUCTION IN SCOPE OF WORK:

If at any time after acceptance of the tender, TMC shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer-in-charge shall give notice in writing to

that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates full amount for works executed at site and in addition, a reasonable amount as certified by the Engineer-in-charge for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure.

- i) Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labor huts, staff quarters and site office, storage accommodation and water storage tanks.
- ii) TMC shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided however, TMC shall be bound to take over the materials or such portions thereof as the contractor does not desire to retain. For materials taken over or to be taken over by TMC cost of such materials as detailed by Engineer-In-charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.
- iii) If any materials supplied by TMC are rendered surplus, the same except normal wastage shall be returned by the contractor to TMC at rates not exceeding those at which these were originally issued less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the contractor. In addition, cost of transporting such materials from site to TMC stores, if so required by TMC shall be paid.
- iv) Reasonable compensation for transfer of T & P from site to contractor's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable.
- v) Reasonable compensation for repatriation of contractor's site staff and imported labor to the extent necessary.

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

The reasonable amount of items on (i), (iv) and (v) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, i.e. total stipulated cost of the work as per accepted tender less the cost of work actually executed under the contract and less the cost of contractor's materials at

site taken over by the TMC as per item (ii) above. Provided always that against any payments due to the contractor on this account or otherwise, the Engineer-in-charge shall be entitled to recover or be credited with any outstanding balances due from the contractor for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by the TMC from the contractor under the terms of the contract.

CLAUSE 14: CARRYING OUT PART WORK AT RISK & COST OF CONTRACTOR

If contractor:

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

iii) Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined, and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-Charge. The Engineer-in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to TMC, by a notice in writing to take the part work/part incomplete work of any item(s) out of his hands and shall have powers to : a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; **and/or**(b) Carry out the part work / part incomplete work of any item(s) by any means **at the risk and cost of the contractor**. The Engineer-in-Charge shall determine the amount, if any, is recoverable from the contractor for completion of the part work/ part incomplete work of any item(s) taken out of his hands and execute at the risk and cost of the contractor, the liability of contractor on account of loss or damage suffered by TMC because of action under this clause shall not exceed 10% of the tendered value of the work. In determining the amount, credit shall be given to the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor. The certificate of the Engineer-in-Charge as to the value of work done shall be final and conclusive against the contractor provided always that action under this clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the department are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor. Any excess expenditure incurred or to be incurred by TMC in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by TMC as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to TMC in law or per as agreement be recovered from any money due

to the contractor or any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days. If the contractor fails to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge shall have the right to sell any or all of the contractors’ unused materials, constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract. In the event of above course being adopted by the Engineer-in-Charge the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.”

CLAUSE 15: SUSPENSION OF WORK:

- (i) The contractor shall, on receipt of the order in writing of the Engineer-in-Charge, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:
 - a. on account of any default on the part of the contractor or;
 - b. for proper execution of the works or part thereof for reasons other than the default of the contractor; or
 - c. for safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.

- (ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:
 - a. the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and;
 - b. If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the contractor shall, in addition, be entitled to such compensation as the Engineer-in-Charge may consider reasonable in respect of salaries and/or wages paid by the contractor to his employees and labor at site, remaining idle during the period of suspension, adding thereto 2% to cover indirect expenses of the contractor provided the contractor submits his claim

supported by details to the Engineer-in-Charge within fifteen days of the expiry of the period of 30 days.

- (iii) If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reason (a) in sub-para (i) above, the contractor may after receipt of such order serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer in- Charge of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by TMC, or where it affects whole of the works, as an abandonment of the works by TMC, shall within ten days of expiry of such period of 15days give notice in writing of his intention to the Engineer-in-Charge. In the event of the contractor treating the suspension as an abandonment of the contract by TMC he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Engineer-in-Charge may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labor at site, remaining idle in consequence adding to the total thereof 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within 30 days of the expiry of the period of 3 months.

Provided, further, that the contractor shall not be entitled to claim any compensation from TMC for the loss suffered by him on account of delay by TMC in the supply of materials in Schedule 'B' where such delay is covered by difficulties relating to the supply of wagons, force majeure Including non-allotment of such materials by controlling authorities, acts of God, acts of enemies of the state/country or any reasonable cause beyond the control of the TMC

CLAUSE 16: ACTION IN CASE OF WORK NOT DONE AS PER SPECIFICATIONS:

All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-in- charge, his authorized subordinates in charge of the work and all the superior officers of the Department or any organization engaged by the Department for Quality Assurance and of the Chief Technical Examiner's Office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for

that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-charge or his authorized subordinates in-charge of the work or his subordinate officers or the officers of the organization engaged by the Department for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months (six months in the case of work costing Rs. 10 Lakh and below except road work) of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default.

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

CLAUSE 17: CONTRACTOR LIABLE FOR DAMAGES, DEFECTS DURING MAINTENANCE PERIOD:

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within 12 months (6 months in the case of work costing Rs. 10,00,000/- and below except road work) after a certificate final or otherwise of its completion shall have been given by the Engineer-in-Charge as aforesaid arising out of defective or improper materials or workmanship, the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense, or in default, the Engineer-in-Charge cause the same to be made good by other workmen and deduct the

expense from any sums that may be due, or at any time thereafter may become due to the contractor, or from his security deposit, or the proceed of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of **ONE COMPLETE MONSOON (as declared by IMD) OR 12 MONTHS WHICHEVER IS LATER** after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later. Provided that in the case of road work, if in the opinion of the Engineer-in-Charge, half of the security deposit is sufficient to meet all the liabilities of the contractor under this contract, half of the security deposit will be refundable after 6 months and the remaining half after 12 months of the issue of the said certificate of completion or till the final bill has been prepared and passed whichever is later. Performance Security shall be refunded to the contractor after completion of the work and recording the completion certificate.

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

CLAUSE 18: CONTRACTOR TO SUPPLY TOOLS & PLANTS ETC. :

The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores), machinery, tools & plants, as specified in Schedule "F". in addition to this, appliances, implements, other plants, ladders, cordage, tackle, scaffoldings and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specification or other documents forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work . The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer-in-Charge at the expense of the contractor and the expenses may be deducted, from any money due to the contractor, under the contract and/or from his security deposit or the proceeds of sale thereof, or of sufficient portions thereof.

CLAUSE 18A: RECOVERY OF COMPENSATION PAID TO WORKMEN:

In every case in which by virtue of the provisions of section 12 sub-section (1) of the Workmen's Compensation Act. 1923, Government is obliged to pay compensation to a workman employed by the contractor, in execution of the works, Government will recover from the contractor the amount of the compensation so paid; and, without prejudice to the rights of the Government under Section 12, sub-section (2) of the said Act ,Government shall be at liberty

to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Government to the contractor whether under this contract or otherwise. Government shall not be bound to contest any claim made against it under section 12, sub-section (1) of the said Act, except on the written request of the contractor and upon his giving to Government full security for all costs for which Government might become liable in consequence of contesting such claim.

CLAUSE 18B: ENSURING PAYMENT AND AMENITIES TO WORKERS IF CONTRACTOR FAILS:

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

CLAUSE 19: LABOUR LAWS TO BE COMPLIED BY THE CONTRACTOR:

The contractor shall obtain a valid license under the Contract Labor (R & A) Act, 1970 and the Contract Labor (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provision of the Child Labor (Prohibition & Regulation) Act-1986.

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

Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non-- execution of the work.

CLAUSE 19A: NO LABOUR BELOW 18 YEARS: No labor below the age of **18(Eighteen)** years shall be employed on the work.

CLAUSE 19B: PAYMENT OF WAGES:

- i) The contractor shall pay to labor employed by him either directly or through sub-contractors, wages not less than fair wages as defined In the Contractor 's Labor Regulations or as per the provisions of the Contract Labor (Regulation and Abolition)Act,1970 and the Contract Labor (Regulation and Abolition) Central Rules, 1971,wherever applicable .
- ii) The contractor shall not withstanding the provisions of any contract to the contrary, cause to be paid fair wage to labor indirectly engaged on the work, Inctiding any labor engaged by his subcontractors in connection with the said work, as it the labor had been immediately employed by him.
- iii) In respect of all labor directly or indirectly employed in the works for performance of the contractor's part of this agreement , the contractor shall comply with or cause to be complied with the Contractor Labor Regulations made by Government from time to time in regard to payment of wages, wage period, deductions from wages, recovery of wages not paid and deductions unauthorisidly made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment ,inspection and submission of periodical returns and all other matters at the like nature or as per the provisions of the Contract Labor (Regulation and Abolition) Act, 1970 and the Contract Labor (Regulation and Abolition) Central Rules 1971, wherever applicable.
- iv-a) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reasons of non-- fulfillment of the conditions of the contract for the benefit of the workers, non- payment of wages or of deduction made from his or their wages which are not justified by their terms of the contract or non-observance of the regulations.
- iv b)Under the provisions of the minimum wages act 1948 and the minimum wages (Central) Rules, 1950, the contractor is bound to allow or cause to be allowed to the laborers directly or indirectly employed in the works one day's rest for six days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holiday tony laborer, and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer- in-Charge.
- v) The contractor shall comply with the provisions of the payment of wages Act 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefit Act, 1961 and the Contractor's Labor (Regulation and Abolition) Act, 1970 or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.
- vi) The contractor shall indemnify and keep indemnify TMC against payments to

be made under and for the observance of the laws aforesaid and the Contractor's Labor Regulations without prejudice to his right to claim indemnity from his sub- contractors.

- vii) The laws / regulations aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.
- viii) Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.
- ix) The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

CLAUSE- 19C: SAFETY PROVISIONS FOR LABOUR & PENALTY ON DEFAULT:

In respect of all labor directly or indirectly employed in the work for the performance of the contractor's part of this agreement, the contractor shall at his own expense arrange for the safety provisions as per safety code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangements and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs. 200/- for each default and in addition, the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor .

CLAUSE 19D: SUBMISSION OF LABOUR CHART BY EVERY FORTNIGHT

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

1. The number of labourers employed by him on the work.
2. Their working hours.
3. The wages paid to them.
4. The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them, and
5. The number of female workers who have been allowed Maternity Benefit, according to clause 19 F and the amount paid to them.

Failing which the contractor shall be liable to pay to Government, a sum not exceeding Rs. 200/- for each default or materially incorrect statement. The decision of the Engineer-in-Charge shall be final in deducting from any bill

due to the contractor, the amount levied as fine and be binding on the contractor.

CLAUSE 19E: HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS: In respect of all labor directly or indirectly employed in the works for the performance of the contractors part of this agreement, the contractor shall comply with or cause to be complied with all the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by the TMC and its contractors.

CLAUSE 19F: MATERNITY BENEFIT RULES:

Leave and Pay during leave shall be regulated as follows:

1. LEAVE:

- i. **In the case of delivery :** maternity leave not exceeding 8 weeks, 4 weeks up to and including the day of delivery and 4 weeks following that day.
- ii. **In the case of miscarriage:** up to 3 weeks from the date of miscarriage.

2. PAY:

- i. **In the case of delivery:** leave pay during maternity leave will be at the rate of the women's average daily earnings, calculated on the total wages earned on the days when full time work was done during a period of 3 months immediately preceding the date on which she gives notice that she expects to be confined or at the rate of rupee one only a day whichever is greater.
- ii. **In the case of miscarriage :**leave pay at the rate of average daily earning calculated on the total wages earned on the days when full time work was done during a period of 3 months immediately preceding the date of such miscarriage

3. CONDITIONS FOR THE GRANT OF MATERNITY LEAVE :

No maternity leave benefit shall be admissible to a Woman unless she has been employed for a total period of not less than 6 (six) months immediately preceding the date on which she proceeds on leave.

4. The contractor shall maintain a register of maternity (Benefit) in the prescribed form as given below, and the same shall be kept at the place of work. .

CLAUSE 19G: PENALTY FOR NON COMPLIANCE OF LABOUR REGULATIONS:

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

Should it appear to the Engineer-in-Charge that the Contractor(s) is/are not properly observing and complying with the provisions of the Contractors Labor Regulations and Model rules and the provisions of the Contract Labor (Regulation and Abolition) Act, 1970 and the contract Labor (R&A) Central Rules 1971 for the protection of health and sanitary arrangements for work people employed by the contractor(s) (hereinafter referred as “the said Rules”) the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice. If the contractor(s) shall fail within the period specified in the notice to comply with and/or observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-Charge shall have the power to provide the amenities hereinbefore mentioned at the cost of the contractor(s).

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

CLAUSE 19H: PROVIDING HUTMENTS, W/S. S/I, DRAINAGE, SANITATIONS ETC. FOR WORKERS:

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

1. a) The minimum height of each hut at the eaves level shall be 2.10 m (7'-0") and the floor area to be provided will be at the rate of 2.7 Sq.Mts (30 sq.ft.) for each member of the worker's family staying with the labourer.

- b) The contractor(s) shall in addition construct suitable cooking places having a minimum area of 1.80 m. x 1.50 m (6' x 5') adjacent to the hut for each family.
 - c) The contractor(s) shall also construct temporary latrines and urinals for the use of the laborers each on the scale of not less than four per each one hundred of the total strength, separate latrines and urinals being provided for women.
 - d) The contractor(s) shall construct sufficient number of bathing and washing places, one unit for every 25 persons residing in the camp. These bathing and washing places shall be suitably screened.
2. a) All the huts shall have walls of sun-dried or burnt-bricks laid in mud mortar or other suitable local materials as may be approved by the Engineer-in-Charge. In case of sun dried bricks, the walls should be plastered with mud gobi on both sides. The floor may be katcha but plastered with mud gobi and shall be at least 15 cm (6") above the surrounding ground. The roofs shall be laid with thatch or any other materials as may be approved by the Engineer-in-Charge and the contractor shall ensure that throughout the period of their occupation the roofs remain water-tight.
- b) The contractor(s) shall provide each hut with proper ventilation.
 - c) All doors, windows and ventilators shall be provided with suitable leaves for security purposes.
 - d) There shall be kept an open space of at least 7.2 m (8 yards) between the rows of huts which may be reduced to 6 m (20') according to the availability of site with approval of the Engineer-in-Charge. Back to back construction will be allowed.
3. **Water Supply:** The contractor(s) shall provide adequate supply of water for the use of laborers. The provision shall not be less than 10 Ltrs. of pure and wholesome water per head per day for drinking purposes and 15 Ltrs. of clean water per head per day for bathing and washing purposes. Where piped water supply is available, supply shall be at stand posts and where the supply is from wells or rivers, tanks, which may be of metal or masonry, shall be provided. The contractor(s) shall also at his/their own cost makes arrangements for laying pipe lines for water supply to his/their labor camp from his own source. ACTREC will not supply water for any kind of activities.
4. The site selected for the camp shall be high ground, removed from jungle.
5. **Disposal of Excreta:** The contractor(s) shall make necessary arrangements for the disposal of excreta from the latrines by trenching or incineration which shall be according to the requirements laid down by the Local Health Authorities. If trenching or incineration is not allowed, the contractor(s) shall

make arrangements for the removal of the excreta through the Municipal Committee/authority and inform it about the number of labourers employed so that arrangements may be made by such committee/authority for the removal of the excreta. All charges on this account shall be borne by the contractor and paid direct by him to the Municipality/Authority. The contractor shall provide one sweeper for every 8 seats in case of dry system.

6. **Drainage:** The contractor(s) shall provide efficient arrangements for draining away sewage water so as to keep the camp neat and tidy.
7. **Lighting:** The contractor(s) shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers.
- 8 **Sanitation:** The contractor(s) shall make arrangements for conservancy and sanitation in the labor camps according to the rules of the Local Public Health and Medical Authorities.

CLAUSE 19I: REMOVAL OF INCOMPETENT WORKERS:

The Engineer -in-Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors employ upon the work who may be incompetent or misconduct himself and the contractor shall forthwith comply with such requirements.

CLAUSE 19J: NO PART OF BUILDING TO BE OCCUPIED- ACTION ON BREACH THEREOF:

It shall be the responsibility of the contractors to see that the building under construction is not occupied by anybody unauthorized during construction, and is hand over to the Engineer-in-Charge with vacant possession of complete building. If such building through completed, is occupied illegally, then the Engineer-in-Charge will have the option to refuse to accept the said building / buildings in that position. Any delay in acceptance on this account will be treated as delay in completion and for such delay levy up to 5% of tendered value of work may be imposed by Officer-in-Charge, ES whose decision shall be final both with regard to the justification and quantum and be binding on the contractor.

However Officer-in-Charge, ES, through a notice, may require the contractor to remove the illegal occupation any time on or before construction and delivery.

CLAUSE 19K: EMPLOYMENT OF SKILLED / SEMI SKILLED WORKERS

The contractor shall, at all stages of work, deploy skilled / semi-skilled tradesmen who are qualified and possess certificate in particular trade from Industrial training institute / National Institute of Construction Management and Research (NICMAR)/ any similar reputed and recognized Institute managed / certified by State / Central Government. The number of such qualified tradesmen shall not be less than 20% of total skilled/semi-skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with

requisite certificate from recognized Institute to Engineer- in charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from Engineer-in-Charge. Failure on the part of contractor to obtain approval of Engineer-in-Charge or failure to deploy qualified tradesmen will attract a compensation to be paid by contractor at the rate of Rs.100/- per such tradesman per day. Decision of Engineer in Charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding.

Provided always, that the provisions of this clause, shall not be applicable for works with estimated cost put to tender being less than Rs.5 crores.

CLAUSE 20: MINIMUM WAGES ACT TO BE COMPILED WITH:

The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, Contract Labor (Regulation and Abolition) Act, 1970 and rules framed thereunder and other labor laws affecting contract labor that may be brought into force from time to time.

CLAUSE 21: WORK NOT TO BE SUBLET / ACTION IN CASE OF INSOLVENCY:

The contract shall not be assigned or sublet without the written approval of the Engineer-in-Charge, and if the contractor shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or Indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any public officer or person in the employ of Government in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in -Charge on behalf of the Director, TMC shall have power to adopt any of the courses specified in Clause 3 hereof in the interest of Government and in the event of such course being adopted the consequences specified in the said Clause 3 shall ensue.

CLAUSE 22: SUMS PAYABLE BY WAY OF COMPENSATION.

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

CLAUSE 23: CHANGES IN FIRM'S CONSTITUTION TO BE INTIMATED:

Where the contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concern, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the

contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

CLAUSE 24: WORKS TO BE UNDER DIRECTION OF ENGINEER-IN-CHARGE:

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

CLAUSE 25: SETTLEMENT OF DISPUTES & ARBITRATION:

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned here-in after

- i) If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request the Engineer-In-Charge in writing for written instruction or decision. Thereupon, the Engineer-In-Charge shall give his written instructions or decision within a period of one month from the receipt of the contractor's letter.

If the Engineer-in-Charge fails to give his instructions or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision of the Engineer-in-Charge, the contractor may, within 15 days of the receipt of Engineer-in-Charge's decision, appeal to Officer-in-Charge, ES, who shall afford an opportunity to the contractor to be heard, if the latter so desires, and to offer evidence in support of his appeal. Officer-in-Charge, ES shall give his decision within 30 days of receipt of contractor's appeal. If the contractor is dissatisfied with his decision, the contractor shall within a period of 30 days from receipt of the decision, give notice to the Director TMC for appointment of arbitrator, failing which the said decision shall be final, binding and conclusive and not referable to adjudication by the arbitrator.

- ii) Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above disputes or difference shall be referred for adjudication through arbitration by a sole arbitrator appointed by the Director / TMC in respect of the contracts entered into by any sub-ordinate authority under him. However if the contract is entered into by the Director TMC the arbitrator shall be appointed by the

Department of Atomic Energy. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along-with the notice for appointment of arbitrator and giving reference to the rejection by the Director TMC of the appeal.

It is also a term of this contract that no person other than a person appointed by such Director TMC as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitration at all.

It is also a term of this contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 120 days of receiving the intimation from the Engineer-in-charge that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the Government shall be discharged and released of all liabilities under the contract in respect of these claims.

The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also a term of this contract that the arbitrator shall adjudicate on only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs.1, 00,000/-, the arbitrator shall give reasons for the award.

It is also a term of the contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fixer settle the amount of costs to be so paid.

CLAUSE 25A: NO ARBITRATION FOR DECISION ON SUB-STANDARD WORK

The decision of Chief Engineer regarding the quantum or reduction as well as justification thereof in respect of rates for sub-standard work which may be decided to be accepted will be final and would not be open to arbitration.

CLAUSE 26: CONTRACTOR TO INDEMNIFY TMC AGAINST PATENT RIGHTS:

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

CLAUSE 27: LUMP SUM PROVISION IN TENDER:

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

CLAUSE 28: ACTION WHERE NO SPECIFICATIONS ARE SPECIFIED

In the case of any class of work for which there is no such specification as referred to in clause 11, such work shall be carried out in accordance with the CPWD Specifications and Bureau of Indian Standard (BIS) Specifications. In case there are no such specifications in CPWD and / or BIS, the work shall be carried out as per manufacturer's specifications, if not available then as per District specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

CLAUSE 29: WITH HOLDING AND LIEN IN RESPECT OF SUMS DUE FROM CONTRACTOR:

- i) Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, the Engineer-in-Charge of the Government shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Engineer-in-Charge or the TMC shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or

adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Engineer-in-Charge or the TMC shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-in-Charge or the TMC or any contracting person through the Engineer-in-Charge pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above, by the Engineer-in-Charge or the TMC will be kept withheld or retained as such by the Engineer-in-Charge or TMC till the claim arising out of or under the contract is determined by the Arbitrator (if the contract is governed by the arbitration clause) by the competent court, as the case may be, and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Engineer-in-Charge or the TMC shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.

- ii) TMC shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment it shall be lawful for TMC to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by TMC to the contractor; without any interest thereon whatsoever.

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

CLAUSE 29A: LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS:

Any sum of money due and payable to contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or the TMC or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or the

TMC or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer in-charge or the TMC or with such other person or persons.

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

CLAUSE 30: EMPLOYMENT OF COAL MINING OR CONTROLLED AREA LABOUR NOT PERMISSIBLE:

The contractor shall not employ coal mining or controlled area labor falling under any category whatsoever on or in connection with the work or recruit labor from area within a radius of 32 Km. (20 miles) of the controlled area. Subject as above the contractor shall employ imported labor only i.e. deposit imported labor or labor imported by contractors from area, from which import is permitted.

Where ceiling price for imported labor has been fixed by State or Regional Labor Committees not more than that ceiling price shall be paid to the labor by the contractor.

The contractor shall immediately remove any laborer who may be pointed out by the Engineer-in-Charge as being a coal mining or controlled area laborer. Failure to do so shall render the contractor liable to pay to TMC a sum calculated at the rate of Rs. 10/- per day per labourer. The certificate of the Engineer-in-Charge about the number of coal mining or controlled area labourer and the number of days for which they worked shall be final and binding upon all parties to this contract.

It is declared and agreed between the parties that the aforesaid stipulation in this clause is one in which the public are interested within the meaning of the exemption of Section 74 of Indian Contract Act, 1872 **or the latest Act in force.**

Explanation - "Controlled Area" means the following areas:

Districts of Dhanbad, Hazaribagh, Jamtara - a Sub-Division under of Santha/Paragana Commissionery. Districts of Bankura, Birbhum, Burdwan District of Bilaspur.

Any other area which may be declared as Controlled area by or with the approval of the T M C

CLAUSE 31: UNALTERED WATER SUPPLY:

The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions:

- i) That the water used by the contractor(s) shall be fit for construction purposes, to the satisfaction "of the Engineer- in-Charge.

ii) Deleted

CLAUSE 31-A: DEPARTMENTAL WATER SUPPLY IF AVAILABLE: DELETED

CLAUSE 32: ALTERNATE WATER ARRANGEMENT:

- i) Deleted
- ii) The contractor shall be allowed to construct temporary **Borewells in ACTREC** land for taking water for construction purposes only after he has got permission of the Engineer-in-Charge in writing. No charges shall be recovered from the contractor on this account, but the contractor shall be required to provide necessary safety arrangements to avoid any accidents or damage to adjacent buildings, roads and service lines. He shall be responsible for any accidents or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.

CLAUSE 33: RETURN OF SURPLUS MATERIALS:

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

CLAUSE 34: Hire of plant and machinery: DELETED.

CLAUSE 35: Use of asphaltic materials: DELETED

CLAUSE 36: EMPLOYMENT OF TECHNICAL STAFF AND EMPLOYEES:

Contractors Superintendence, Supervision, Technical Staff & Employees

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

The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge, the name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative (s) who will be supervising the work. Minimum requirement of such technical representative (s) and their qualifications and experience shall not be lower than specified in Schedule "F". The Engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative (s) to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the contractor shall appoint another such representative (s) according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the contractor in this respect. Such a principal technical representative and other technical representative (s) shall be appointed by the contractor soon after receipt of the approval from Engineer-in-charge and shall be available at site before start of work.

All the provisions applicable to the principal technical representative under the clause will also be applicable to other technical representative(s). The principal technical representative and other technical representative (s) shall be present at the site of work for supervision at all times when any construction activity is in progress and also present himself / themselves , as required, to the Engineer-in-Charge and/or his designated representative to take instructions. Instructions given to the principal technical representative or other technical representative (s) shall be deemed to have the same force as if these have been given to the contractor. The principal technical representative and other technical representative (s) shall be actually available at site fully during all stages of execution of work, during recording / checking / test checking of measurements of works and whenever so required by the Engineer-in-Charge and shall also note down instructions conveyed by the Engineer-in-Charge or his designated representative(s) in the site order book and shall affix his / their signature in token of noting down the instructions and in token of acceptance of measurements / checked measurements / test checked measurements.

The representative(s) shall not look after any other work, Substitutes, duly approved by Engineer-in-Charge of the work in similar manner as aforesaid shall be provided in event of absence of any of the representative (s) by more than two days.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) is / are effectively appointed or is /are effectively attending or fulfilling the provision of this clause, a recovery(non-refundable) shall be effected from the contractor as specified in Schedule "F" and the decision of the Engineer-in-Charge as recorded in the site order book and measurement recorded checked / test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint suitable technical/ Principal technical representative and / or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their

responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is / are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative(s) along with every on account bill / final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

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

The Retired Engineer/Asst. Engineer who are holding Diploma may be treated at par with Graduate Engineers for the operation of the Clause. Diploma holder with minimum 10 year relevant experience with a reputed construction company can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

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

CLAUSE 37: LEVY / TAXES PAYABLE BY CONTRACTOR:

(i) **Sales Tax / VAT (except Goods & Service Tax), Building and other Construction Workers Welfare Cess or any other tax or Cess** in respect of this contract shall be payable by the contractor and TMC shall not entertain any claim whatsoever in this respect.

However, in respect of Goods & service tax, same shall be paid by the contractor to the concerned department on demand and it will be reimbursed to him by the Engineer-in-Charge after satisfying that it has been actually and genuinely paid by the contractor.

(ii) The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.

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

CLAUSE 38: CONDITIONS FOR REIMBURSEMENT OF LEVY /TAXES IF LEVIED AFTER RECEIPT OF TENDERS:

- i) All tendered rates shall be inclusive of all taxes and levies (**except Goods & Service Tax**) payable under respective statutes. However, if any further tax or levy **or cess** is imposed by State, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes /levies /**cess**, the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the Engineer-in-Charge (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.
- ii) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the TMC and/or the Engineer-in-Charge and shall **also** furnish such other information/document as the Engineer-in-Charge may require from time to time.
- iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy **or cess**, give a written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

CLAUSE 39: TERMINATION OF CONTRACT INCASE OF DEATH:

Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Engineer-in-Charge on behalf of the Director TMC shall have the option of terminating the contract without compensation to the contractor.

CLAUSE 40: IF RELATIVE WORKING IN TMC THEN THE CONTRACTOR NOT ALLOWED TO TENDER:

The contractor shall not be permitted to tender for works in the TMC (responsible for award and execution of contracts) in which his near relative is posted as AAO / AO or as an officer in any capacity in the grade SO”C” & above. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any TMC Officer in the TMC. Any breach of this condition by the contractor would render him liable to be barred to tender in the

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

CLAUSE 41: NO OFFICER ALLOWED TO WORK AS A CONTRACTOR WITHIN ONE YEAR OF RETIREMENT:

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

CLAUSE 42: RETURN OF MATERIALS AND RECOVERY FOR EXCESS MATERIAL ISSUED:

- (i) After completion of the work and also at any intermediate stage in the event of non-reconciliation of materials issued, consumed and in balance- (see Clause 10), theoretical quantity of materials issued by the TMC for use in the work shall be calculated on the basis and method given hereunder
 - (a) Quantity of cement shall be calculated on the basis of quantity of cement required for different items of work as per the statement in the Specifications / approved designs of mixes for concrete and / or on the basis of standard approved by the Department. In case any item is executed for which standard constants for the consumption of cement are not available in the above mentioned Specification, CPWD Standard Norms shall be followed, or the same shall be calculated on the basis of standard formula to be laid down by Officer-in-Charge, ES / HOD. Permissible variation shall be as specified in the Schedule "F".
 - (b) The provisions of the foregoing sub-clause shall apply Mutatis-Mutandis in the case of steel reinforcement or structural steel sections, except that the theoretical quantity of steel shall be taken as the quantity required as per design or as authorized by the Engineer-in-Charge, including authorized variation (lap pages), plus wastage due to cutting into pieces. Permissible variation / wastage shall be as specified in the Schedule "F".
 - (c) Theoretical quantity of G.I. & C.I. or other pipes, conduits, wires and cables, pig lead and G.I. / M.S. sheets shall be taken as quantity actually required and measured plus 5% for wastage due to cutting into pieces (except in the case of G.I./M.S.sheets it shall be 10%), such determination & comparison being made diameter-wise & category-wise.
 - (d) For any other material as per actual requirements.
- (i) Over the theoretical quantities of materials so computed a variation shall be allowed as specified in Schedule 'F'. The difference in the net quantities of material actually issued to the contractor and the theoretical quantities including such authorized variation, if not returned by the contractor or if not fully reconciled to the satisfaction of the Engineer-in-Charge within fifteen days of the issue of written notice by the Engineer-in-charge to this effect

shall be recovered at the rates specified in Schedule 'F', without prejudice to the provision of the relevant conditions regarding return of materials governing the contract. Decision of Engineer-in-Charge in regard to theoretical quantities of materials, which should have been actually used and recovery at rates specified in Schedule 'F', shall be final & binding on the contractor.

For non-scheduled items, the decision of the Engineer-in-Charge regarding theoretical quantities of materials which should have been actually used, shall be final and binding on the contractor.

- iii) The said action under this clause is without prejudice to the right of the TMC to take action against the contractor under any other conditions of contract for not doing the work according to the prescribed specifications.

CLAUSE 43: COMPENSATION DURING WAR-LIKE SITUATIONS:

The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or war like operations, the contractor shall, when ordered in writing by the Engineer-in-Charge, remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable materials and for reconstruction of all works ordered by the Engineer-in-Charge, such payments being in addition to compensation up to the value of the work, originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the Engineer-in-Charge up to Rs.5,000/- and by Officer-in-Charge, ES for a higher amount. The contractor shall be paid for the damage/destruction suffered and for the restoring the materials at the rate based on the analysis of rates tendered for in accordance with the provisions of the contract. The certificate of the Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract.

Provided always that no compensation shall be payable for any loss in consequence of hostilities or war-like operations (a) unless the contractor had taken all such precautions against Air Raid as are deemed necessary by the A.R.P. Officers or the Engineer-in-Charge, (b) for any materials etc. not on the site of the work or for any tools and plant, machinery, scaffolding, temporary buildings and other things not intended for the work.

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

CLAUSE 44: APPRENTICES ACT- PROVISIONS TO BE COMPLIED WITH:

The contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and Officer-in-Charge, ES may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

CLAUSE 45: APPROVAL FOR APPOINTMENT OF SUBCONTRACTOR/SUBAGENCY FOR SPECIALISED JOB:

Contractor shall have to coordinate with TMC & take approval of Engineer-In-Charge before appointing any agency/subcontractor for carrying out the work in tender. TMC/Consulting architect shall prequalify the sub agencies before appointing by the contractor for any specialized job.

The turnover and financial resources of subcontractors shall be disregarded for the purposes of prequalification, as they will not be a party to the resulting contract. However, their specific experience related to the contract and/or availability of licenses, required by the law of the country, where the works are to be carried out, may be taken into account during prequalification.

At the same time the cumulative experience and capacity of a subcontractor for certain works, depending on the extent of his involvement, scope, nature and magnitude of the works, should also be considered.

SAFETY CODE

- 1) **SAFTEY NET** AT 1st FLOOR along full periphery of the building: Providing safety nets at the 1st floor upto the compound wall or minimum 5m (Horizontal distance) whichever is greater. The supports of the nets should be independent of the building.
- 2) **SAFETYSCREEN:** Providing Safety screen along the full perimeter of the building: The safety screen to start from the GROUND LEVEL Upto 7th or the 8th level depending on the elevation. The safety screen to be made using CUP-LOCK scaffolding with Safety net on the outer perimeter of the Cup lock Scaffolding. This cup-lock scaffolding will be at least 1200mm above the casting level of the slab at any given point of time. The distance of the safety screen should be such that the same can be used as scaffolding for the brickwork and external plaster. This CUP lock system will get terminated at the 7th / 8th level where a Cantilever platform with railing made up of I- Beams / C channels / chequered plates with (red oxide) will be fabricated and erected by the contractor using necessary HILTI FASTNERS. This Platform will be Minimum 2.1m wide and should be capable to hold load of the CUP-LOCK safety system for the upper floor upto 1200mm beyond the highest level of the structure. The contractor to submit the design for approval

before erection. The Cup-lock system under the platform will be in place only till the external plaster work under the platform is complete. Once the same is complete, the Cuplock system can be removed and taken away.

- 3) **HAND RAILS:** Providing Temporary Railings at the periphery of the building / lift cutouts / Duct cutouts / staircase or anywhere there is a Spilt level and possibility of falling for the full project upto the satisfaction of the site in charge all complete.CONTRACTOR TO GIVE A DETAILED DISCRPTION OF THE METHOD STATEMENT COVERING THIS ITEM AT THE TIME OF QUOTING.
- 4) **SAFETY PPE's :** Providing necessary Safety PPE's, safety officers, fire extinguishers, etc. for the complete project duration all complete the nos of safety staff used, the nos of PPEs ,etc all complete....CONTRACTOR TO GIVE A DETAILED DISCRPTION OF THE METHOD STATEMENT COVERING THIS ITEM AT THE TIME OF QUOTING.
- 5) Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used an extra tandoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1/4 to 1 (1/4 horizontal and 1 vertical).
- 6) Scaffolding or staging more than 3.6 m. (12 feet) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3 feet) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- 7) Working platform, gangways, and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m. (12 feet) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (ii) above.
- 8) Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 90 cm. (3 feet) **wrapped with green / red woven cloth.**
- 9) Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m in length while the width between side rails in rung ladder shall in no case be less than 29 cm for ladder up to and including 3 m in length. For longer ladders this width should be increased at least 1/4" for each additional 30 cm of length. Uniform step spacing or not more than 30 cm. shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident, and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any persons for injury sustained owing to neglect of the above precautions and to pay any damages and

cost which may be awarded in any such suit, action or proceedings to any such persons or which may, with the consent of the contractor, be paid to compensate any claim by any such person.

- 10) **Excavation and trenching:** All trenches, 1.2 m or more in depth, shall at all times be Supplied with at least one ladder for each 30m in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm above the surface of the ground. The side of the trenches which are 1.5 m or more in the depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or under cutting shall be done. **Proper ramp in suitable slope for movement of heavy machinery and truck to be made while doing deep excavation and sturdy enough to take load of loaded trucks and etc: Necessary Danger printed Tapes are to be tied around the deep excavation area at ground level to avoid any accident or fall. Ut most care to be taken while excavation as there will be movement of Public and vehicular movement from ongoing construction activities and Patients Dormitory.**
- 11) **Demolition** :Before any demolition work is commenced and also during the progress of the work:-
- i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - ii) No electric cable or apparatus which is. Liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
 - iii) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
- 12) All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned :The following safety equipments shall invariably be provided:
- i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.
 - iii) Those engaged in welding works shall be provided with welders protective eye shields.
 - iv) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - v) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and are ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.

In addition the contractor shall ensure that the following safety measures are adhered to:

- a) Entry for workers into the line shall not be allowed except under supervision of the EIC or his representative.
- b) At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.
- c) Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes color in the presence of such gases and gives indication of their presence
- d) Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.
- e) Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
- f) The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
- g) No smoking or open flames shall be allowed near the blocked manhole being cleaned.
- h) The melba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the melba.
- i) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.
- j) Gas masks with Oxygen Cylinder should be kept at site for use in emergency
- k) Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blower are recommended for ventilating the manholes. The motors for which shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
- l) The workers engaged for cleaning the manholes / sewers should be properly trained before allowing to work in the manhole.
- m) The workers shall be provided with gum-boots or non-sparking shoes bump helmets and glows gas masks and non-sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer

line.

- n) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rungs fixed to manhole.
 - o) a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
 - p) The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.
 - a. The contractor shall not employ men and women below the age of 18 years the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precautions should be taken:
 - i. No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
 - ii. Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
 - iii. Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on cessation of work.
- 13) The Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use
- i) White lead, sulphate of lead, or product containing these pigment, shall not be used in painting operation, except in the form of paste or of paint ready for use.
 - ii) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
 - iii) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scrapping.
 - iv) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
 - v) Overalls shall be worn by working painters during the whole of the working period.
 - vi) Suitable arrangements shall be made to prevent clothing put off during working hours, being soiled by painting materials.
 - vii) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by a medical man appointed by the competent authority of the Department.
 - viii) The Tata Memorial Centre may require, when necessary, medical examination of workers.

- xi) Instruction with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
- 14) When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first-aid treatment of all injuries likely to be obtained during the course of the work.
- 15) Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions :
- a) These shall be of good mechanical construction, sound material and adequate strength and free from patent defects and shall be kept repaired and in good working order.
 - b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
 - i) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
 - ii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the state working load. In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - iii) In case of departmental machines, the safe working load shall be noticed by the Electrical Engineer-in- Charge. As regards contractors machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.
- 16) Motors, gearing, transmission, electrical wiring and other dangerous parts of hoisting appliances should be provided with efficient safe-guards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials which are the good conductors of electricity.
- 17) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

- 18) These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot the person responsible for compliance of the safety code shall be named therein by the contractor.
- 19) To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labor Officer or Engineer-in-Charge of the Department or their representatives.
- 20) Notwithstanding the above clauses from (i) to (xiv) there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

SAFETY WITH SCAFFOLDING

INTRODUCTION:

1. **Following paragraphs** deals with the safety regulations and precautions to be followed in the construction use, maintenance, etc. of scaffolds. This will serve as a guide to users of scaffolds in the construction and maintenance operations.

2. Suitable scaffolds are used for performing work that cannot be done from the ground, part of a permanent structure, a ladder or other available means of support.

Scaffolds are used in many construction and maintenance operations. Fall of person is the most common hazard accompanying the use of scaffolds because of the height usually involved.

1. General Requirements:

- 1.1 Every scaffold and its supporting members should be designed to support given load, with a safety factor of at least four. No alterations should be made that might impair the strength of such structures, no improvised, make-shift or substandard scaffold should be permitted even for the most temporary use.
- 1.2 All work in connection with such structures, including construction, alteration and removal should be carefully done under the direction and supervision of persons who have had experience in such works.

2. Materials of Construction:

- 2.1. Every scaffold and every part thereof, including supports, should be of good construction, sound material, of adequate strength for the purpose which it is meant to be used and should be properly maintained.

Planks should be laid flat with an overlap, lengthwise, of at least 30 cm. with the center of the overlap directly over a bearer. Boards and planks used for the floors should be of uniform thickness, closely laid and securely fastened in place.

- 2.2 All lumber used in the construction of scaffolds should be sound, straight-grained, free from cross-grains, shakes and loose or dead knots. It should also be free from dry rot, large checks, worm holes, or other defects impairing its strength or durability.
- 2.3 All nails used in the construction of scaffolds, staging and supports should be of ample size and used in sufficient quantities at each connection to develop the designed strength of scaffold. Nails should penetrate to the holding piece to a depth of at least 12times the diameter of nail.
- 2.4 Barrels, boxes, loose tile blocks, loose piles of bricks or other unstable objects should not be used to support planks used as working platforms.

3. Platforms, Railings and Tee-Boards:

- 3.1 The minimum uniformly distributed design load per Sq. m. of platforms should be 250 kg. Any concentrated load at any point in the span should not exceed the designed uniformly distributed load. Planks should not be less than 50 mm thick.
- 3.2 The rear of outer side of every scaffolding, platform and ramp more than 2M above the surrounding ground or solid construction, or adjacent to deep holes, excavations, railroad tracks, high tension electrical wires, should be provided with a substantial guard rail of standard construction consisting of top and intermediate rails, and toe-boards all supported by posts and securely connected to scaffold at intervals of not more than 2.4 M (See figure - 1).
- 3.3 The width of the scaffolds should be such as to provide a clear walkway 50 cm wide. If part of the width of scaffold is to be used for keeping materials such as brick, mortar or lumber, the scaffold should be made wider so as to provide a walkway of the required width.
- 3.4 Where scaffolds are erected over sidewalks or over areas in which persons must work or pass, the space between the railing and toe-board should be fitted with side screens.
- 3.5 There should be a screen or other protection suspended from the scaffold to catch materials that may fall from above. Screens should extend beyond the edge of the scaffold to catch any materials that may fall over the edges.

4. Means of Access:

- 4.1 A safe and convenient means of access should be provided to the platform or scaffold. This requirement does not apply to swinging scaffolds or those with convenient access from adjacent floors (see figure- 2).

Means of access may be a portable ladder, fixed ladder, ramp or it may be a stairway. The use of cross braces or frame work as means of access to the working surface should not be permitted.

- 4.2 If scaffolds are to be used to a great extent or for a long period of time, a regular plank stairway, wide enough to allow two persons to pass, should be erected. Such stairways should have handrails on both sides.
 - 4.2.1 No stairway or run of slope exceeding 2 in 3 should be used.
 - 4.2.2 Where the slope of a stairway or run renders additional foot hold necessary, and in every case where the slope is more than 1 in 4, there should be provided proper stepping laths which should:
 - a) have a minimum section of 50 x 30 mm and be placed at maximum interval of 45 cm and

- b) Be of length to cover the full width of the stairway of run except that they may be interrupted over a width of not more than 10 cm to facilitate the movement of barrows.

5. Overhead Protection:

- 5.1 Overhead protection should be provided on the scaffold whenever persons are working at higher places. This protection should be not more than 3m above the scaffold floor and should be of planks or other suitable materials.

6. Use of Scaffolds:

- 6.1 Good housekeeping should be maintained at all times upon scaffolding, platforms and ramps. Excessive storage of materials thereon should be avoided. Care must be taken to avoid accumulating of small objects, such as boards, tools, pieces of reinforcing steel, waste concrete which may easily be disturbed on knock off. Hand rails should be kept in good repair and securely nailed or otherwise fastened down. Scaffold should be cleared of all tools, materials and rubbish at the end of each working day/shift.
- 6.2 Persons should not be permitted on scaffolds when the platform or guard rails are slippery. Persons should not be permitted to work on scaffolds during a storm or strong winds.
- 6.3 Suspended scaffolds should never be used for the storage of stone or heavy materials. Two or more swinging scaffolds should not at any time be combined into one by bridging the distance between them with planks or any other form of connection. Life lines securely fastened from above should be provided for each person working on a swinging scaffold. Safety belts should be tied to the life lines (See figure- 3).

7. Inspection:

- 7.1 As scaffolds have to remain in position normally for many weeks, they must be inspected at least once a week to make sure that nothing has gone wrong since erection. In addition, they must always be inspected after a spell of bad weather which might have affected their stability.
- 7.2 The inspections must be carried out by someone who knows the faults to look for and how they may be put right. It is important to know that the work of inspection has been completed and what faults have been found, the results of each inspection must, therefore be recorded. Any scaffold damaged or weakened from any cause should be immediately repaired and persons should not be allowed to use it until repairs have been completed.

8. Dismantling:

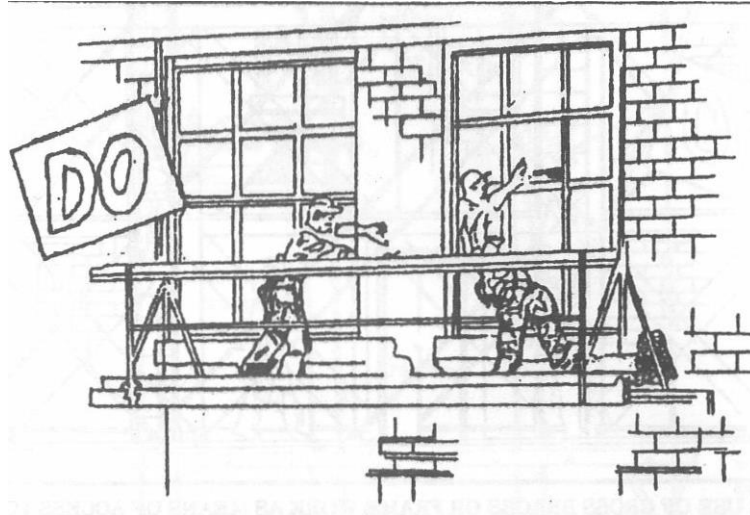
- 8.1 The dismantling of scaffold should be carefully done under experienced supervision. Care should be taken not to drop small, loose objects when removing scaffold planks. All nails should be promptly removed from scaffold planks and the planks safely piled.

9. Precautions against particular Hazards:

- 9.1 Care should be taken to see that no uninsulated electric wire exists within 3M. Of the working platform, stairways, etc. of the scaffold.
- 9.2 While carrying bars, rods or pipes of any conducting material of length greater than 3 M. in the vicinity of electric wires, special care should be taken that these bars do not touch the electric wires.
- 9.3 Care should be taken against any possibility of wooden scaffold catching fire. In suspended scaffolds, if a blow torch or other flame is used for removing paints, only wire ropes not less than 10mm in diameter should be used.
- 9.4 Care should be taken to see that no part of a scaffold is struck by a truck or other heavy moving equipment and no material should be dumped against it.
- 9.5 Scaffolds on thoroughfare should be provided with light.
- 9.6 Access to cable tunnels, hydrants, etc. should remain free at all times.
- 9.7 Care should be taken from damaging underground cables and equipment. This is especially important when parts of scaffolds for other fasteners have to be driven in the ground.

*** GUARD RAILS ***

**THE REAR ON OUTER SIDE OF THE SCAFFOLD SHOULD BE PROVIDED WITH A
SUBSTANTIAL GUARD RAIL OF STANDARD CONSTRUCTION**



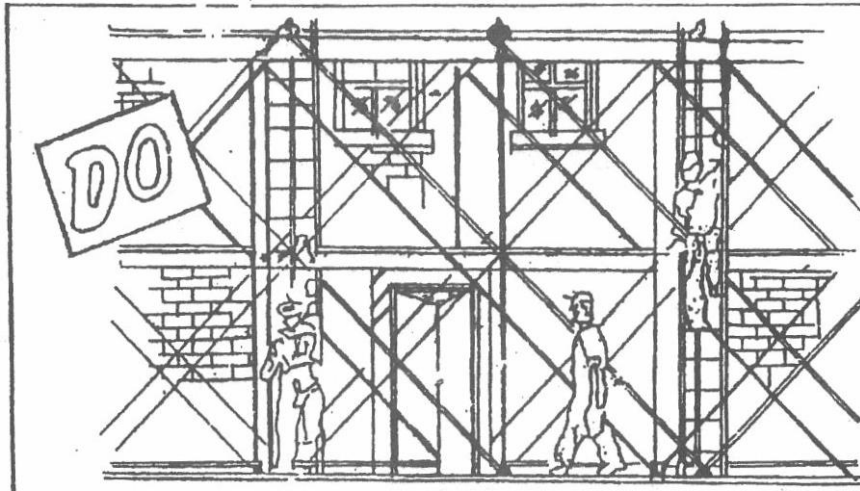
**PERSONS SHOULD NOT BE ALLOWED TO WORK ON SCAFFOLDS WHERE THE
EDGES ARE UNGUARDED. A SLIGHT SLIP WILL RESULT IN SERIOUS INJURY OR
EVEN DEATH.**



FIGURE – 1

FROM INDUSTRIAL SAFETY CHARTS – US DEPT. OF LABOUR * ACCESS *

A SAFE CONVENIENT MEANS OF ACCESS SHOULD BE PROVIDED TO THE SCAFFOLD



THE USE OF CROSS BRACES OR FRAME WORK AS MEANS OF ACCESS TO THE WORKING SURFACE SHOULD NOT BE PERMITTED.

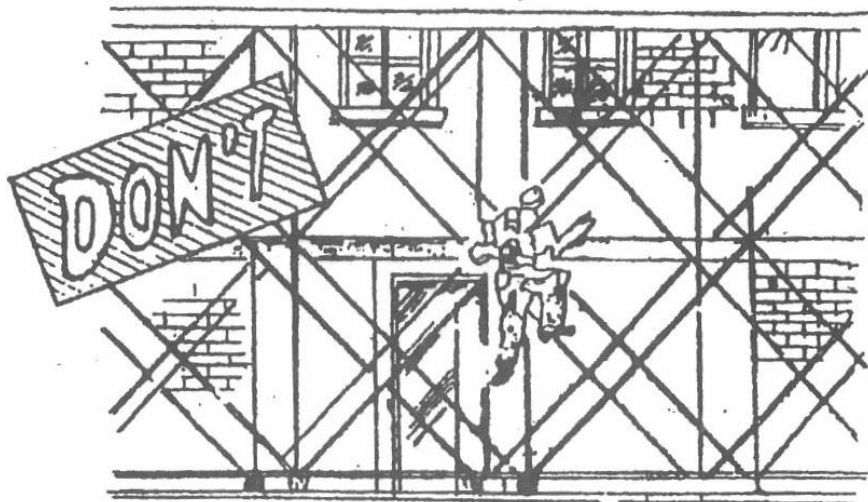
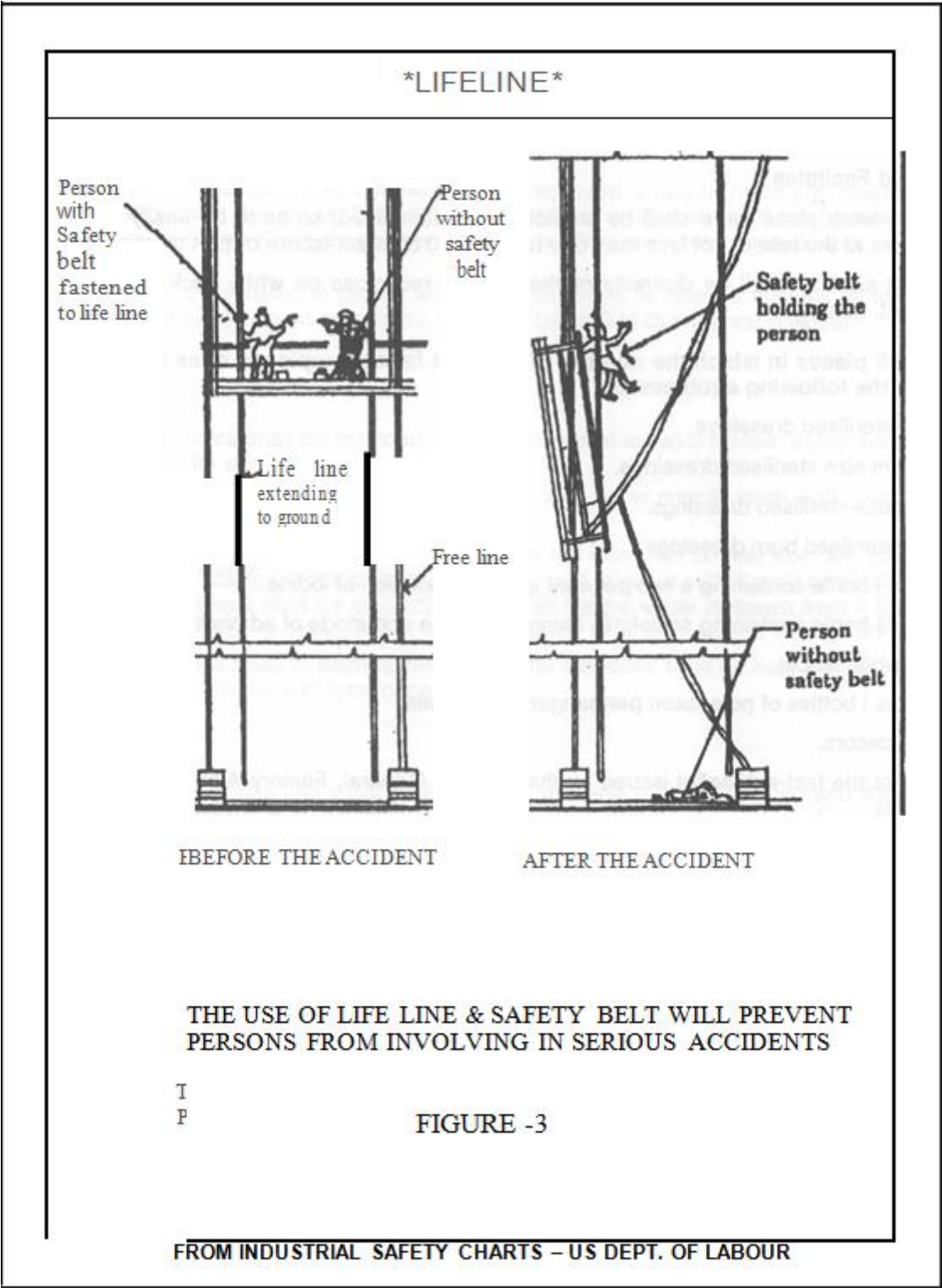


FIGURE – 2

FROM INDUSTRIAL SAFETY CHARTS – US DEPT. OF LABOUR

*** LIFE LINE ***



**MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY
ARRANGEMENTS FOR WORKERS EMPLOYED BY TMC OR ITS CONTRACTORS**

1. **Application: These** rules shall apply to all buildings and construction works in charge of Department in which twenty or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the contract work is in progress.
2. **Definition: Work** place means a place where twenty or more workers are ordinarily employed in connection with construction work on any day during the period during which the contract work is in progress.
3. **First-Aid Facilities :**
 - (1) At every work place there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labor or part thereof ordinarily employed.
 - (2) The first-aid box shall be distinctly marked with a red cross on white background and shall contain the following equipment, namely:
 - a) **For work places in which the number of contract labor employed does not exceed 50. Each first-aid box shall contain the following equipments:**
 - (i) 6 small sterilized dressings.
 - (ii) 3 medium size sterilized dressings.
 - (iii) 3 large size sterilized dressings.
 - (iv) 3 large sterilized burn dressings.
 - (v) 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
 - (vi) 1 (30 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 - (vii) 1 snake-bite lancet.
 - (viii) 1 (30 gms.) bottles of potassium permanganate crystals.
 - (ix) 1 pair scissors.
 - (x) 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labor Institutes, Government of India.
 - (xi) 1 bottle containing 100 tablets (each of 5 gms.) of aspirin.
 - (xii) Ointment for burns.
 - (xiii) A bottle of suitable surgical antiseptic solution.

- b) **For work places in which the number of contract labor exceeds 50. Each first-aid box shall contain the following equipments:**
- (i) 12 small sterilized dressings.
 - (ii) 6 medium size sterilized dressings.
 - (iii) 6 large size sterilized dressings.
 - (iv) 6 large size sterilized burn dressings.
 - (v) 6 (15 gms.) packets sterilized cotton wool.
 - (vi) 1 (60 ml.) bottle containing a two per cent alcoholic solution of iodine.
 - (vii) 1 (60 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 - (viii) 1 roll of adhesive plaster.
 - (ix) 1 snake-bite lancet.
 - (x) 1 (30 gms.) bottle of potassium permanganate crystals.
 - (xi) 1 pair scissors.
 - (xii) 1 copy of the First-Aid leaflet issued by the Director General, Factory Advice Service and Labor Institute, Government of India.
 - (xiii) A bottle containing 100 tablets (each of 5 gms.) of aspirin.
 - (xiv) Ointment for burns.
 - (xv) A bottle of suitable surgical antiseptic solution.
- (3) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.
- (4) Nothing except the prescribed contents shall be kept in the first aid box.
- (5) The First-Aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- (6) A person in charge of the First-Aid box shall be a person trained in First-Aid treatment, in work places where the number of contract labor employed is 150 or more.
- (7) In work places where the number of contract labor employed is 500 or more and hospital facilities are not available within easy distance from the works, First-Aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
- (8) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or persons suddenly taken ill to the nearest hospital.

4. **Drinking water :**

- (i) In every work place, there shall be provided and maintained at suitable places, easily accessible to labor, a sufficient supply of cold water fit for drinking.
- (ii) Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.

- (iii) Every water supply or storage shall be at a distance of not less than 50 feet from any latrine, drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap-door which shall be dust and water proof.
- (iv) 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.

5. Washing facilities:

- (i). In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of contract labor employed therein.
- (ii). Separate and adequate cleaning facilities shall be provided for the use of male and female workers.
- (iii). such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition.

6. Latrines and Urinals:

- (i). Latrines shall be provided in every work place on the following scale, namely:
 - a) Where females are employed, there shall be at least one latrine for every 25 females.
 - b) Where males are employed, there shall be at least one latrine for every 25 males.
Provided that where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25males or females, as the case may be, up to the first 100, and one for every 50 thereafter.
- (ii) Every latrine shall be under cover and so partitioned off as to secure privacy and shall have a proper door and fastening.
- (iii) **Construction of latrines:** The inside walls shall be constructed of masonry or some suitable heat resisting. Non-absorbent materials and shall be cement washed Inside and outside at least once a year. Latrines shall not be of a standard lower than bore-hole system.
- (iv) a) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice In the language understood by the majority of the workers "For Men only" or "For Women only" as the case may be.
b) The notice shall also bear the figure of a man or of a woman, as the case may be.
- (v) There shall be at least one urinal for male workers up to 50 and one for female workers up to 50 employed at a time. Provided that where the number of male or female workmen, as the case may be, exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females up to the first 500 and one for every 100 or part thereof, thereafter.

- (vi) a) The latrines and urinals shall be adequately 'lighted and shall be maintained in a clean and sanitary condition at all times.
- b) Latrines and urinals other than those connected with a flush sewerage system shall comply with the requirements of the Public Health Authorities.
- (vii) Water shall be provided by means of a tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- (viii) **Disposal of excreta:** Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately excreta may be disposed of by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn into manure).
- (ix) The contractor shall, at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of night soil and other conservancy work in respect of the contractor's workmen or employees on the site. The contractor shall be responsible for payment of any charges which may be levied by Municipal or Cantonment Authority for execution of such work on his behalf.

7. Provision of shelter during rest :At every place there shall be provided, free of cost, four suitable sheds, two for meals, and the other two for rest separately for the use of men and women labor. The height of each shelter shall not be less than 3 meters from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 Sq.m.per head.

8. Crèches:

- i) At every work place at which 20 or more women workers are ordinarily employed, there shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One room shall be used as a play room for the children and the other as their bed-room. The rooms shall be constructed with specification as per Clause- 19-H (ii) a, b & c.
- ii) The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.
- iii) The contractor shall supply adequate number of toys and games in the play rooms and sufficient number of cots and beddings in the bed room.
- iv) The contractor shall provide one Ayaa / Dai to look after the children in the crèche when the number of women workers does not exceed 50 and two Dais when the number of women workers exceeds 50.
- v) The use of the rooms earmarked as crèches shall be restricted to children, their attendants and mothers of the children.

9. Canteens :

- (i) In every work place where the work regarding the employment of contract labor is likely to continue for six months and wherein contract labor numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the contractor for the use of such contract labor .
- (ii) The canteen shall be maintained by the contractor in an efficient manner.
- (iii) The canteen shall consist of at least a dining hall, kitchen, store room, pantry and washing places separately for workers and utensils.
- (iv) The canteen shall be sufficiently lighted at all times when any person has access to it.
- (v) The floor shall be made of smooth and impervious material and inside walls shall be lime washed or color washed at least once in each year:
Provided that the inside walls of the kitchen shall be lime washed every four months.
- (vi) The premises of the canteen shall be maintained in a clean and sanitary condition.
- (vii) Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.
- (viii) Suitable arrangement shall be made for the collection and disposal of garbage.
- (ix) The dining hall shall accommodate at a time 30 per cent of the contractor labor working at a time.
- (x) The floor area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chairs shall not be less than one square meter per diner to be accommodated as prescribed in sub-rule (ix).
- (xi) a) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers, in proportion to their number.
b) Washing places for women shall be separate and screened to secure privacy.
- (xii) Sufficient tables, stools, chairs or benches shall be available for the number of diners to be accommodated as prescribed in sub-rule (ix).
- (xiii) (a) (1) there shall be provided and maintained sufficient utensils, crockery, furniture and any other equipments necessary for the efficient running of the canteen.

(a) (2) the furniture, utensils and other equipments shall be maintained in a clean and hygienic condition.

- (b) (1) Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.
- (b) (2) a service counter, if provided, shall have top of smooth and impervious material.
- (b) (3) Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipments.
- (xiv) The food stuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labor.
- (xv) The charges for food stuffs, beverages, and any other items served in the canteen shall be based on No profit, No loss and shall be conspicuously displayed in the canteen.
- (xvi) In arriving at the price of food stuffs and other articles served in the canteen, the following items shall not be taken into consideration as expenditure, namely:-
 - (a) The rent of land and buildings;
 - (b) The depreciation and maintenance charges for the building and equipments provided for the canteen;
 - (c) The cost of purchase, repairs and replacement of equipments including furniture, crockery, cutlery and utensils;
 - (d) The water charges and other charges incurred for lighting and ventilation;
 - (e) The interest and amounts spent on the provision and maintenance and equipments provided for the canteen.
- (xvii) The accounts pertaining to the canteen shall be audited once every 12 months by registered accountants and auditors.

- 10 Anti-Malarial Precautions : The contractor shall at his own expense, conform to 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.
11. Amendments: T M C may, from time to time, add to or amend these rules and issue directions it may consider necessary for the purpose of removing any difficulty .which may arise in the administration thereof.

CONTRACTOR’S LABOUR REGULATIONS

1. Short Title :

These regulations may be called the Director Tata Memorial Centre Contractors. Labor Regulations".

2. Definitions:

- i) **"Workmen"** means any person employed by the Director Tata Memorial Centre or its Contractor directly or indirectly through a sub-contractor, with or without the knowledge of the TMC to do any skilled, semi-skilled or unskilled manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment are expressed or implied but does not include any person-
 - a) Who is employed mainly in a managerial or administrative capacity; or
 - b) Who, being employed in a supervisory capacity draws wages exceeding five hundred rupees per menses or exercise either by the nature of the duties attached to the office or by reason of powers vested in him, functions mainly of managerial nature; or
 - c) Who is an out worker, that is to say, a person to whom any article or materials are given out by or on behalf of the principal employer to be made up, cleaned, washed, altered, ornamental finished, repaired, adopted or otherwise processed for sale for the purposes of the trade or business of the principal employer and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the Control and management of the principal employer.
- ii) **"Fair Wages"** means wages whether for time or piece work fixed and notified under the provisions of the Minimum Wages Act from time to time.
- iii) **"Contractors"** shall include every person who undertakes to produce a given result other than a mere supply of goods or articles of manufacture through contract labor or who supplies contract labor for any work and includes a sub-contractor.
- iv) **"Wages"** shall have the same meaning as defined in the payment of wages act.

- 3 (i)** normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.
- (ii) When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week, he shall be paid over time for the extra hours put in by him at double the ordinary rate of wages.
- (ii) a) Every worker shall be given a weekly holiday normally on a Sunday, in accordance with the provisions of the Minimum Wages (Central) Rules, 1960 as amended from time to time irrespective of whether such worker is governed by the Minimum Wages Act or not.
- b) Where the Minimum Wages prescribed by the Government under the Minimum Wages Act are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages at the rate applicable to the next preceding day, provided he has worked under the same contractor for a continuous period of not less than 6 days.
- c) Where a contractor is permitted by the Engineer-in-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substituted holiday to him for the whole day on one of the five days immediately before or after the normal weekly holiday and pay wages to such worker for the work performed on the normal weekly holiday at over time rate.

4. Display of Notice regarding wages etc.:

The contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clear and legible condition in conspicuous places on the work, notices in English and in the local Indian languages spoken by the majority of the workers, giving the minimum rates of wages fixed under the Minimum Wages Act, the actual wages being paid, the hours of work for which such wages are earned, wage periods, dates of payment of wages and other relevant information as per Appendix - III.

5. Payment of Wages;

- (i) The contractor shall fix wage periods in respect of which wages shall be payable.
- (ii) No wage period shall exceed one month.
- (iii) The wages of every person employed as contract labor in an establishment or by a contractor where less than one thousand, such persons are employed shall be paid before the expiry of the seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.

- (iv) Where the employment of any worker is terminated by or on behalf of the contractor, the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.
- (v) All payments of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.
- (vi) Wages due to every worker shall be paid to him direct or to other person authorized by him in this behalf.
- (vii) All wages shall be paid in current coin or currency or in both.
- (viii) Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the payment of Wages Act, 1956.
- (ix) A notice showing the wages period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the contractor to the Engineer-in-Charge under acknowledgement.
- (x) It shall be the duty of the contractor to ensure the disbursement of wages in the presence of the Engineer-in-Charge or any other authorized representative of the Engineer-in-Charge who will be required to be present at the place and time of disbursement of wages by the contractor to workmen.
- (xi) The contractor shall obtain from the Engineer -in-Charge or any other authorized representative of the Engineer-in-Charge as the case may be, a certificate under his signature at the end of the entries in the "Register of wages" or the "Wage-cum-Muster Roll" as the case may be in the following form:

"Certified that the amount shown in column Nohas been paid to the workman concerned in my presence on..... at.....

6. FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES:

- (i) The wages of a 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 terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.
 - c) Deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money or any other deduction which he is required to account, where such damage or loss is directly attributable to his neglect or default.
 - d) Deduction for recovery of advances or for adjustment of over-payment of wages; advances granted shall be entered in a register.
 - e) Any other deduction which the Central Government may from time to time allow.
- (ii) No fines should be imposed on any worker save in respect of such acts and

omissions on his part as have been approved of by the Chief Labor Commissioner.

Note: An approved list of acts and omissions for which fines can be imposed is enclosed at **Appendix- X**

- (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 an opportunity of showing cause against such fines or deductions.
- (iv) The total amount of fine which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of the total wages, payable to him in respect of that wage period.
- (v) No fine imposed on any worker shall be recovered from him by instalment, or after the expiry of sixty days from the date on which it was imposed.
- (vi) Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

7. Labor Records:

- (i.) The contractor shall maintain a "Register of persons employed" on work on contract in Form XIII of the CL (R&A) Central Rules, 1971 (**Appendix-IV**).
- (ii.) The contractor shall maintain a "Muster Roll" register in respect of all workmen employed by him on the work under contract in form XVI of the CL (R&A) Rules, 1971 (**Appendix-V**).
- (iii.) The contractor shall maintain a "Wage Register" in respect of all workmen employed by him on the work under contract in form XVII of the CL (R&A) Rules, 1971 (**Appendix-VI**).
- (iv.) Register of accidents: The contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:
 - a) Full particulars of the labourers who met with accident.
 - b) Rate of wages.
 - c) Sex.
 - d) Age.
 - e) Nature of accident and cause of accident.
 - f) Time and date of accident.
 - g) Date and time when admitted in Hospital.
 - h) Date of discharge from Hospital.
 - i) Period of treatment and result of treatment
 - j) Percentage of loss of earning capacity and disability as assessed by Medical Officer
 - k) Claim required to be paid under workmen's Compensation Act.
 - l) Date of payment of compensation.

- m) Amount paid with details of the person to whom the same was paid.
 - n) Authority by whom the compensation was assessed.
 - o) Remarks.
- (v) Register of Fines: The contractor shall maintain a "Register of Fines" in the form XII of the CL (R&A) Rules, 1971 (**Appendix-XI**).

The contractor shall display in a good condition and in a conspicuous place of work the approved list of Acts and omissions for which fines can be imposed (**Appendix-X**).

- (vi) **Register of Deductions:** The contractor shall maintain a "Register of deductions for damage or loss" in Form XX of the CL (R&A) Rules, 1971 (**Appendix-XII**).
- (vii) **Register of Advances:** The contractor shall maintain a "Register of Advances" in form XXII of the CL (R&A) Rules, 1971 (**Appendix-XIII**).
- (viii) **Register of Overtime:** The contractor shall maintain a "Register of Overtime" in form XXIII of the CL (R&A) Rules, 1971 (**Appendix-XIV**).

8. Attendance Card-cum-Wage slip:

- (i) The contractor shall issue an attendance card-cum-wage slip to each workman employed by him in the specimen form at (**Appendix-VII**).
- (ij) The card shall be valid for each wage period.
- (iii) The contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work .
- (iv) The card shall remain in possession of the worker during the wage period under reference.
- (v) The contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.
- (vi) The contractor shall obtain the signature or thumb impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself.

9. Employment Card:

The contractor shall issue an Employment Card in form XIV of the CL (R&A) Central Rules, 1971 to each worker within three days of the employment of the worker **(Appendix-VIII)**.

10. Service Certificate:

On termination of employment for any reason whatsoever the contractor shall issue to the workman whose services have been terminated, a service certificate in form XV of the CL (R&A) Central Rule , 1971 **(Appendix-IX)**.

11. Preservation of Labor Records:

All records required to be maintained under Regulations Nos.6 and 7 shall be preserved in original for a period of three years from the date of last entries made in them and shall be made available for inspection by the Engineer-in-Charge or Labor Officer or any other officers authorized by the Department in this behalf.

12. Power of Labor Officers to make Investigations or enquiry:

The Labor Officer or any other person authorized by Central Government on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper, observance of the Fair Wages Clauses and the Provisions of Regulations. He shall investigate into any complaint regarding the default made by the contractor or sub- contractor in regard to such provision.

13. Report of Labor Officer:

The Labor Officer or other persons authorized as aforesaid shall submit a report of result of his investigation or enquiry to the Engineer-in-Charge concerned indicating the extent , if any, to which the default has been committed with a note that necessary deductions from the contractor's bill be made and the wages and other dues be paid to the labourers concerned. In case an appeal is made by the contractor under Clause 13 of these regulations, actual payment to labourers will be made by the Engineer-in-Charge after Officer-in-Charge, ES has given his decision on such appeal.

- (i) The Engineer-in-Charge shall arrange payments to the labor concerned within 45 days from the receipt of the report from the Labor Officer or Officer-in-Charge, ES as the case may be.

14. Appeal against the decision of Labor Officer:

Any person aggrieved by the decision and recommendations of the Labor Officer or other person so authorized may appeal against such decision to Officer-in-Charge, ES concerned within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the Engineer-in-Charge concerned but subject to such appeal, the decision of the Officer shall be final and binding upon the contractor.

15. Prohibition regarding representation through lawyers:

- (i) A workman shall be entitled to be represented in any investigation or enquiry under these regulations by :
 - (a) An officer of a registered trade union of which he is a member.
 - b) An officer of a federation of trade unions to which the trade union referred to in clause (a) is affiliated.
 - c) Where the employer is not a member of any registered trade union, by an officer of a registered trade union, connected with the industry in which the worker is employed or by any other workman employed in the industry in which the worker is employed.
- (ii) An employer shall be entitled to be represented in any investigation or enquiry under these regulations by
 - a) An officer of an association of employers of which he is a member.
 - b) An officer of a federation of associations of employers to which association referred to in Clause (a) is affiliated.
 - c) Where the employer is not a member of any association of employers, by an officer of association of employer, connected with the industry in which the employer is engaged or by any other employer, engaged in the industry in which the employer is engaged.
- (iii) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these regulations.

16. Inspection of Books and slips:

The contractor shall allow inspection of all the prescribed labor records to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labor Officer or any other person, authorized by the Central Government on his behalf.

17. Submission of Returns:

The contractor shall submit periodical returns as may be specified from time to time.

18. Amendments:

The Central Government may, from time to time, add to or amend the regulations and on any question as to the application, interpretation or effect of those regulations the decision of Officer-in-Charge, ES concerned in that behalf shall be final.

APPENDIX-I

REGISTER OF MATERNITY BENEFITS

(Clause 19 F of the conditions of contract)

Name and address of the contractor(s): -----

Name and location of the work: -----

Name of the employee	Father's/ Husband's Name	Nature of employment	Period of actual employment	Date on which notice of confinement given
1	2	3	4	5

Date of delivery / miscarriage	Date on which maternity leave commenced and ended			
	In case of Delivery		In case of Mis-carriage	
	Commenced	Ended	Commenced	Ended
6	7	8	9	10

Leave pay paid to the employee				Remarks
In case of delivery		In case of mis-carriage		
Rate of leave pay	Amount paid	Rate o fleave pay	Amount paid	
11	12	13	14	15

APPENDIX-II

SPECIMEN FORM OF THE REGISTER, REGARDING MATERNITY BENEFIT ADMISSIBLE TO THE contractor's LABOUR IN T.M.C. WORKS.

Name and location of the work: -----

Name and address of the contractor(s): -----

1.	Name of the woman and her husband's Name:	
2.	Designation:	
3.	Date of appointment:	
4.	Date with months and years in which she is employed:	
5.	Date of discharge/dismissal, if <i>any</i> :	
6.	Date of production of certificates in respect of pregnancy:	
7.	Date on which the woman informs about the expected delivery:	
8.	Date of delivery/Miscarriage/death:	
9.	Date of production of certificate in respect of delivery/miscarriage:	
10.	Date with the amount of maternity/death benefit paid in advance of expected delivery:	
11.	Date with the amount of subsequent payment of maternity benefit:	
12.	Name of the person nominated by the woman to receive the payment	
13.	<i>Of the maternity benefit after her death</i> If the woman dies, the date of her death, the name of the person to whom maternity benefit amount was paid, the month the pardon and the date of payment	
14.	Signature of the contractor authenticating entries in the register:	
15.	Remarks column for the use of inspecting Officer :	

APPENDIX-III

LABOUR BOARD

1	Name of work:	
2	Name and address of contractor:	
3	Name and address of Division:	
4	Name and address of Labour Officer:	
5	Name and address of Labour Enforcement officer:	

S.NO.	CATEGORY	MINIMUM WAGE FIXED	ACTUAL WAGE PAID	NUMBER PRESENT	REMARKS

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Kharghar, Navi Mumbai

Weekly holiday:	
Wage period:	
Date of payment of wages:	
Working hours:	
Rest interval:	

APPENDIX-IV

FORM XIII

REGISTER OF WORKMEN EMPLOYED BY CONTRACTOR

Name and address of the contractor: -----

Name and address of establishment in/under which contract is carried on: -----

Name and location of the work: -----

Name and address of Principal Employer: -----

Sl. No.	Name and surname of workmen	Age and Sex	Father's/ husband's Name	Nature of employment /designation	Permanent home address of the workman (Village and Tahsil, Taluka & Dist .)	Local Address	Date of commencement of employment	Signature or thumb impression of the workman	Date of Termination of employment	Reasons for termination	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

APPENDIX-V

FORM XVI
MUSTER ROLL

Name and address of the contractor: -----

Name and address of establishment in/under which contract is carried on: -----

Name and location of the work: -----

Name and address of Principal Employer: -----

For the month of / fortnight: -----

SI No.	Name of workmen	Sex	Father's Husband's Name	Dates					Remarks
1	2	3	4	5					6
				1	2	3	4	5	

APPENDIX-VI

FORM XVII
REGISTER OF WAGES

Name and address of the contractor: -----

Name and address of establishment in/under which contract is carried on: -----

Name and location of the work: -----

Name and address of Principal Employer: -----

Wages period: Monthly/Fortnightly

Sl. No.	Name of workmen	Serial No. in the register of workmen	Designation/Nature of work done	No. of Days worked	Units of work done	Daily rate of wages /Piece rate	Amount of wages earned						Net Amount paid	Signature or thumb impression of workmen	Initial of contractor or his representative
							Basic wages	Dearness Allowance	Over-time	Other cash payments(indicate nature)	Total	Deductions if any (Indicate nature)			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

APPENDIX-VII

Obverse

WAGE CARD

WageCardNo:	Dateofissue:
Nameandaddressof contractor:	Nameandlocationofwork:
Name of workman:	Designation:
Rate of wages:	

Month/Fortnight

PARTICULARS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
MORNING																																Rate:
EVENING																																Amount:
INITIAL																																

Received from----- the sum of Rs. ----- on account of my wages.

The wage card is valid for one month from the date of issue.

APPENDIX-VII

(Reverse)

FORM XIX
WAGE SLIP

Name and address of contractor:	
Name and Fathers/Husbands name of workman:	
Location of work:	
For the Week/Fortnight/Month ending:	

1	No. of days worked:	
2	No. of units worked in case of piece rate workers:	
3	Rate of daily wages/piece rate:	
	Of overtime wages:	
5	Gross wages payable:	
6	Deductions, if any:	
7	Net amount of wages paid:	

Initials of the contractor or his representative

APPENDIX-VIII

(Reverse)

FORM XIV
EMPLOYMENT CARD

Name and address of contractor:	
Name And address of establishment in/under:	
Which contract is carried on	
Name of work and location of work:	
Name and address of Principal employer:	

1	Name of the workman:	
2	Sl. No. in the register of workman :	
3	Employed by	
	of employment/designation :	

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Kharghar, Navi Mumbai

5	Wage rate (with particulars of unit in case of piecework)	
7	Wage period:	
8	Tenure of employment:	
9	Remarks:	

APPENDIX-IX
(reverse)

FORM XV
SERVICE CERTIFICATE

Name and address of contractor:	
Nature & Location of work	
Name and address of workman	
Age or Date of birth	
Identification marks	
Father's /Husband's Name	
Name and address of establishment in/under which contract is carried on	
Name and address of Principal employer:	

Sl. No	Total period for which employed		Nature of work done	Rate of wages (with particulars of Unit in case of piece work)	Remarks
	From	To			
1	2	3	4	5	6

--	--	--	--	--	--

Signature

APPENDIX-X

LIST OF ACTS AND OMISSIONS FOR WHICH FINES CAN BE IMPOSED

In accordance with Tata Memorial Centre Rules to be displayed prominently at the site of work in both English and local language.

1. Willful insubordination or disobedience, whether alone or in combination with other.
2. Theft, fraud or dishonesty in connection with the contractors beside a business or property of Tata Memorial Centre.
3. Taking or giving bribes or any illegal gratifications.
4. Habitual late attendance.
5. Drunkenness fighting, riotous or disorderly or indifferent behavior.
6. Habitual negligence.
7. Smoking near or around the area where combustible or other materials are locked.
8. Habitual indiscipline.
9. Causing damage to work in the progress or to property of the Tata Memorial Centre or of the contractor.
10. Sleeping on duty.

11. Malingering or slowing down work.
12. Giving of false information regarding name, age, father's name etc.
13. Habitual loss of wage cards supplied by the employers.
14. Unauthorized use of employer's property for manufacture or making of unauthorized articles at the work place.
15. Bad workmanship in construction and maintenance by skilled workers which is not approved by the TMC and for which the contractors are compelled to undertake rectifications.
16. Making false complaints and/or misleading statements.
17. Engaging on trade within the premises of the establishments.
18. Any unauthorized divulgence of business affairs of the employees.
19. Collection or canvassing for the collection of any money within the premises of an establishment unless authorized by the employer.
20. Holding meeting inside the premises without previous sanction of the employers.
21. Threatening or intimidating any workman or employee during the working hours within the premises.

APPENDIX-XI

FORM XII

REGISTER OF FINES

Nameandaddressofcontractor:	
Name And addressofestablishmentin/under which contract is carried on:	
Name of workandlocationofwork:	
NameandaddressofPrincipalemployer:	

SI No.	Name of Workmen	Father's /Husband's name	Designation/nature of employment	Act/omission for which fine is imposed	Date of Offence	Whether workmen showed cause against fine	Name of person in whose presence employee's explanation was heard	Wage period and wages payable	Amount of fine imposed	Date on which fine realized	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

APPENDIX-XII

FORM XX

REGISTER OF DEDUCTIONS FOR DAMAGE OR LOSS

Nameandaddressofcontractor:	
Name And addressofestablishmentin/under which contract is carried on:	
Name of workandlocationofwork:	
NameandaddressofPrincipalemployer:	

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Sl No.	Name of Workmen	Father's /Husband's name	Designation/nature of employment	Particulars of damage or loss	Date of damage or loss	Whether workmen showed cause against deduction	Name of person in whose presence employee's explanation was heard	Amount of deduction imposed	No. of Installments	Date of recovery		Remarks
										First Installment	Last Installment	
1	2	3	4	5	6	7	8	9	10	11	12	123

APPENDIX-XIII

FORM XXII
REGISTER OF ADVANCES

Nameandaddressofcontractor:	
Name And addressofestablishmentin/under which contract is carried on:	
Name of workandlocationofwork:	
NameandaddressofPrincipalemployer:	

Sl No.	Name of Workmen	Father's /Husband's name	Designation/nature of employment	Wage period and wages payable	Date and amount of advance given	Purpose (s) for which advance made	No. of Installments by which advance to be repaid	Date and amount of each installment repaid	Date and which last installment was repaid	Remarks
1	2	3	4	5	6	7	8	9	10	11

--	--	--	--	--	--	--	--	--	--	--

APPENDIX-XIV

FORM XXII

REGISTER OF OVERTIME

Nameandaddressofcontractor:	
Name And addressofestablishmentin/under which contract is carried on:	
Name of workandlocationofwork:	
NameandaddressofPrincipalemployer:	

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SI No.	Name of Workmen	Father's /Husband's name	Sex	Designation/nature of employment	Date on which overtime worked	Total over time worked or production in case of piece rated work	Normal rate of wages	Overtime rate of wages	Overtime earning	Rate on which overtime paid	Remarks
1	2	3	4	5	6	7	8	9	10	11	12

FORM OF PERFORMANCE SECURITY – BANK GUARANTEE BOND (BG)

1. In consideration of the Director TMC having agreed under the terms and conditions of Letter of Intent / Agreement No.
Dated.....madebetween.....
And..... (Hereinafter called" the said Contractor{s})" for the work.....
(Hereinafter called " the said Letter of Intent /Agreement') having agreed to production of an Irrevocable bank Guarantee for Rs..... (Rupees only), as a security / guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement, we..... (Indicate the name of the Bank) (Hereinafter referred to as "the Bank") hereby undertake to pay to the TMC an amount not exceeding Rs.(Rs.....only) on demand by the TMC
2. We..... (Indicate the name of Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the TMC stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees..... only).
3. We, the said bank, further undertake to pay to the TMC any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.
4. We..... (Indicate the name of Bank) further agree that the guarantee herein contained shall remain In full force and effect during the period that would be taken for the performance of the said Agreement and that It shall continue to be enforceable till all the dues of the TMC under or by virtue of the said Agreement have been fully paid and Its claims satisfied or discharged or till Engineer-In-charge on behalf of the TMC certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

5. We..... (Indicate the name of Bank) further agree with the Director, TMC that the TMC shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Director, TMC against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the TMC or any indulgence by the TMC to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractors.
7. We, (Indicate the name of Bank) lastly undefaced not to revoke this guarantee except with the previous consent of the TMC In writing.
8. This guarantee shall be valid up to, unless extended on, demand. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.....Rupees..... only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee, all our /liabilities under this guarantee shall stand discharged.

Signed and sealed

Dated the day of..... For..... (Indicate the name of Bank)

(Note: The Letter of Intent shall form part of the Agreement)

INDENTURE FOR SECURED ADVANCE

(For use in case in which the contract is for finished work and the contractor has entered into an agreement for the execution of a certain specified quantity of work in a given time).

Tata Memorial Centre

(Aided Institute of Department of Atomic Energy, Govt. of India)

State : Maharashtra

Administration : Tata Memorial Centre

Division : Engineering Department

THIS INDENTURE made the..... Day of 20.....
BETWEEN admits or implies be deemed to include his executors, administrators and assigns) of the one part and the Director TMC (hereinafter called the Director TMC which expression shall where the context so admits or implies be deemed to include his successors if office and assigns) of the other part.

WHEREAS by an agreement date
..... (Hereinafter called the said agreement) the contractor has agreed.

AND WHEREAS the contractor has applied to the Director TMC that he may be allowed advance on the security of materials absolutely belonging to him and brought by him to the site of the works, he subject of the said agreement for use in the construction of such of the works as he has undertaken to execute at rates fixed for the finished work (inclusive of the cost of materials and labor and other charges).

AND WHEREAS the Director TMC has agreed to advance to the contractor the sum of Rupees..... on the security of materials, the quantities and other particulars of which are detailed in Part-II of a Running Account Bill (B) for the said works signed by the contractor on
And the Director TMC has reserved to himself the option of making any further advance on the security of other materials brought by the contractor to the site of the said works.

NOW THIS INDENTURE WITNESSETH that in pursuance of the said agreement and in consideration of the sum of Rupees on or before the execution of these presents paid to the contractor by the Director TMC (the receipt where of the contractor both hereby acknowledge and of such further advance, if any, as may be made to him as aforesaid the contractor both hereby convenient and agree with the Director TMC and declare as follows:

1. That the said sum of Rupees so advanced by the Director TMC to the contractor as aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the contractor in or towards expenditure the execution of the said works and for no other purpose whatsoever.

2. That the materials detailed in the said Running Account Bill (B) which have been offered to and accepted by the Director TMC as security are absolutely the contractor's own property and free from encumbrances of any kind and the contractor will not make any application for or receives a further advance on the security of materials which are not absolutely his own property and free from encumbrance of any kind and the contractor indemnifies and Director TMC against all claims to any materials in respect of which an advance has been made to him as aforesaid.
3. That the materials detailed in the said Running Account Bill (B) and all other materials on the security of which any further advance or advances may hereafter to be made as aforesaid (hereinafter called the said materials) shall be used by the contractor solely in the execution of the said works in accordance with the directions of Officer-in-Charge, ES ACTREC and in the terms of the said agreement.
4. That the contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protections against all risks of the said materials and that until used in construction as aforesaid said materials shall remain at the site of the said works in the contractor's custody and on his own responsibility and shall at all times be open to inspection by Officer-in-Charge, ES or any officer authorized by him. In the event of the materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the contractor will forthwith replace with the same with other materials of like quality or repair and make good the same as required by Officer-in-Charge, ES.
5. That the said materials shall not on any account be removed from the site of the works except with the written permission of Officer-in-Charge, ES or any officer authorized by him on that behalf.
6. That the advance shall be repayable in full when or before contractor receives payment from the Director TMC of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the contractor on account of work done thereon the occasion of each such payment the Director TMC will be at liberty to make a recovery from the contractor's bill for such payment by deduction there from the value of the said materials than actually used in the construction and in respect of which recovery has not been made previously the value for this purpose being determined in respect of the each description of materials at the rate at which the amounts of the advances made under these presents were calculated.
7. That if the contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances what may still be owing to the Director TMC shall immediately on the happening of such default be repayable by the contractor to the Director TMC together with interest thereon at twelve percent per annum from the date of respective dates of such advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the Director TMC in or for the recovery thereof or the enforcement of this security or otherwise by reasons of the default of the contractor and contractor hereby covenants and agrees with the Director TMC to repay and pay the same respectively, to him accordingly.
8. That the contractor hereby charges all the said materials with the repayment to the Director TMC of the said sum of Rs. and any further sum or sums advanced as aforesaid and all costs, charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the powers contained therein if and whenever the covenant for Payment and repayment

herein before contained shall become enforceable and the money owing shall not be paid in accordance there with the TMC may at any time thereafter adopt all or any of the following courses as he may deemed best.

- a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provisions in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and the amount due in respect of advances under these present and crediting the contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor he is to pay same to the TMC on demand.
 - b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sum, aforesaid repayable or payable to the TMC under these presents and pay over the surplus (if any) to the contractor.
 - c) Deduct all or any part of the money owing out of the security deposit or any sum due to the contractor under the said agreement.
9. That except in the event of such default on the part of the contractor as aforesaid interest on the said advances shall not be payable.
10. That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been herein before expressly provided for the same shall be referred to Officer-in-Charge, ES/Tender inviting Authority, Director TMC time being in force shall apply to any such reference.

In witness thereof the said And
by the order under the direction of the Director TMC have hereinto set their respective hands
the day and year first above written.

Signed, sealed and delivered by the said contractor in the presence of:

_____ { Signature
Name
Address

Witness

Signed by

By the order and direction of the TMC in the presence of:

_____ { Signature
Name
Address

Witness

GUARANTEE BOND FOR WATERPROOFING WORKS

For Guarantee to be executed by contractors for removal of defects of water-proofing works after maintenance period.

This agreement made this day of.....
Two thousand and..... between
M/s..... (Hereinafter called “the Guarantor of the one part) and the
Director, TMC (hereinafter called “Director, TMC” of the other part.)

Whereas this agreement is supplementary to a contract (hereinafter call “the Contract) dated and made between the Guarantor of the one part and Director, TMC of the other part whereby the Contractor interalia undertook to render the buildings and structure such as roof of buildings, overhead water tanks, underground tanks, lift pits, basement, toilets etc. in the said contract recited completely water and leak-proof.

AND WHEREAS THE GUARANTOR agree to give a guarantee to effect that the said structure will remains water and leak-proof for **ten years** to bereckonedfrom the date after the maintenance period prescribed in the contract expires.

NOW THE GUARANTOR hereby guarantees that waterproofing treatment provided by him will render the structures completely leak-proof and the minimum life of such waterproofing treatment shall be ten years to be reckoned the date after the maintenance period prescribed in the contract expires.

Provided that the Guarantor will not be responsible for leakage caused by earthquake or structural defects or misuse of roof or other structures or alteration and for such purpose:

- a) Misuse of structure shall mean any operation which will damage water - proofing treatment, like chopping of fire wood and things of the same nature which might cause damage to the structure.
- b) Alteration shall mean construction of an additional story or a part of the roof or construction adjoining to existing roof whereby water-proofing treatment is removed in parts.
- c) Damaging or puncturing of the waterproofing treatment provided to overhead tanks or basement or underground tank or lift pit, for providing any P.H./Electric connections etc.
- d) The decision of the Engineer-In-Charge with regard to cause of leakage shall be final.

During this period of guarantee the guarantor shall make good all the defects and for that matter , in case of any defect being found, render the building waterproof to the satisfaction of the Engineer-In-Charge at the cost of the guarantor and shall commence the work for such rectification within seven days from the date of issue of the notice, from the Engineer-In-Charge calling upon him to rectify the defects, failing which the work shall be got done by the Department by some other contractor at the

GUARANTOR'S COST and risk. The decision of the Engineer-In-Charge as to the cost payable by the Guarantor shall be final and binding.

That if the Guarantor fails to execute the waterproofing or commits breach thereunder then the Guarantor will indemnify the Principal and his successors against all loss, damage, cost expense or otherwise which may be incurred by the him by reason of any default on the part of the Guarantor in performance and observance of this supplementary agreement. As to the amount of loss and / or damage and/or cost incurred by the TMC the decision of the Engineer-In-Charge will be final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed by the Obligator
..... And by and for and on behalf of the Director, TMC on the day,
month and year first above written.

SIGNED: sealed and delivered by (obligator) in the presence of:

1. 2.

Signed for and on behalf of the director, TMC by
..... In the presence of:

1. 2.

GUARANTEE BOND FOR ANTI-TERMITE TREATMENT

For Guarantee to be executed by contractors for removal of defects after maintenance period.

This agreement made this day of Two thousand (.....) and between M/s..... (Hereinafter called “the Guarantor” of the one part) and the Tata Memorial Centre (hereinafter called Director TMC of the other part.)

Whereas this agreement is supplementary to a contract (hereinafter called “the Contract”) dated----- made between the Guarantor of the one part and the Director TMC of the other part whereby the Contractor inter-alia undertook to render the buildings and structure completely termite proof.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said structure will remain termite proof for ten years to be reckoned from the date after the maintenance period prescribed in the contract expires.

NOW THE GUARANTOR hereby guarantees that the anti-termite treatment provided by him will render the structures completely termite proof and the minimum life of such anti-termite treatment shall be ten years to be reckoned from the date to be reckoned from the date after the maintenance period prescribed in the contract expires.

Provided that the guarantor will not responsible for damages caused due to structural defects of premises/area.

- a) Misuse of premises shall mean any operation which will disturb the chemical barrier like excavation under floors, breaking of walls at G.L. disturbing the treatment already carried out.

The decision of the Engineer-In-Charge with regard to cause of damage shall be final.

During this period of guarantee the guarantor shall make all the arrangements to do the post constructional anti-termite treatment in all the building in case of any termite nuisance being found in the building to the satisfaction of the Engineer-In-Charge at the Cost of guarantor and shall commence the work for such treatment within seven days from the date of calling upon him to rectify the defects, by the Engineer-In-Charge, failing which the work shall be got done by the TMC by some other contractor at the GURANTOR'S COST and risk. The decision of the Engineer-In-Charge as to the cost payable by the Guarantor shall be final and binding.

That if the Guarantor fails to execute the anti-termite treatment or commits breach hereunder then the Guarantor will indemnify the principal and his successors against all loss, damage, cost, expense or otherwise which may be incurred by the Department by reason of any defaults on the part of the GURANTOR in performance and observance of this supplementary agreement. As to the amount of loss and / or damage and / or cost incurred

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by the Employer the decision of the Engineer-In-Charge will be final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed by the Obligator.....and by.....and for and on behalf of the Director, TMC on the day, month and year first above written.

SIGNED sealed and delivered by (OBLIGATOR) in the presence of:

1. 2.

SIGNED FOR AND ON BEHALF OF THE DIRECTOR TMC BY.....
..... In the presence of:

1.2.

SECTION - V

SPECIAL CONDITIONS OF CONTRACT (SCC)

1. GENERAL:

The following Special clauses of contract shall be read in conjunction with General clauses of contract. The same shall be considered as an extension and not limitation of the obligations of the contractor. In case of any discrepancy between Special clauses of contract and the General clauses of contract, these Special clauses shall take precedence over the General clauses of the Contract.

2. SCOPE AND LOCATION OF WORK :

The contractor carrying this work will be strictly abide by the Local /Municipal / Statutory body / Police / Department's regulations as well as security regulations imposed by such authorities from time to time regarding transshipments of equipment, operations, drainage, late hour working, working on holidays, bringing / taking away of materials, disposal of debris, excavated / surplus materials etc. as and wherever applicable.

The contractor for this work shall co-ordinate his work with other contractors who will be simultaneously carrying out the work in the same area. All workmen working at heights beyond 1st floor shall be provided with safety belts and the workers should be directed to wear safety belts as long as they are working. The instructions issued by the Engineer-in-Charge with regard to safety and security of workmen from time to time to be strictly followed. All other safety measures stipulated in the tender documents shall be strictly followed, failing which the Engineer-in-Charge shall take immediate action deemed fit and the same shall be binding on the contractor.

The work shall be completed as per detailed time-schedule, which shall be prepared after issue of work order. However the entire work shall be completed within the stipulated completion period as specified in the Tender Notice.

3. SITE INVESTIGATIONS:

The tenderers are advised to visit the site of work with prior permission of Officer-in-Charge, ES / Engineer-in-Charge or his authorized representative, to acquaint themselves as to the nature and location of the work, access to the site, the general and local conditions, particularly those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power and road, as also uncertainties of weather or similar physical conditions of the site, the formation and conditions of the ground, the character, quality and quantity of surface and sub- surface materials to be encountered, including subsoil water levels, the character of equipment and facilities needed preliminary to and during the progress of the work, and all other matters which can be, in any way, effect the work or the cost thereof under the contract.

4. STAKING OUT BASE LINES AND LEVELS:

The contractor shall establish at site the layout of the building/road etc. for the work from base lines and grids established by the Department and shall be responsible for all measurements in connection therewith. The contractor shall, at his own expenses,

furnish all stakes, templates, platform, equipments, ranges and labor that may be required in setting out or laying out any part of the work. The contractor shall be held responsible for the proper execution of the work to such lines, levels and grids as may be established or indicated on the drawings and specifications. The contractor shall check the bench marks and stakes existing at the site for laying out lines and levels.

The contractor has to construct and maintain proper bench marks at all salient positions in order that the lines and levels may be accurately checked at all times.

“Total Station” shall be used to mark column center line alignment and from Foundation level to at all floor and all other surveying instruments found necessary on the works shall be provided by the contractors for use at site in connection with this work.

5. COMMENCEMENT AND Completion OF WORK AND PROPER SCHEDULE :

The work shall be completed within the stipulated period of completion. The contractor shall submit detailed time schedule in triplicate within 15 days from the date of issue of work order, for completion of the work, indicating all the important activities of execution of the work / group of the items in sequence of its operation etc. including making ready the sample finishes / finished sample flat for bldg. works, in consultation with the Engineer-in-Charge, and submit the same for approval of the work awarding authority. This time schedule, after approval, shall form part of the contract and the work in all respects shall be carried out as per this time schedule.

Time shall be the essence of the contract. The rate of progress of the whole work as well as for all the important individual items of work shall not be slower than as laid down in the attached Time schedule.

The contractor shall properly assess his capability and fully satisfy himself before tendering that he will be able to adhere to the specified schedule. In this connection the attention of the tenderer is specially invited to clause 2 of the General Conditions of the Contract.

The contractor shall furnish to the Engineer-in-Charge Daily Report and Monthly progress report in triplicate on 5th day of every month indicating the following:

Sl No.	Item of Work	Scheduled Progress for the month	Actual short-fall if any	Reasons for short-fall	Steps taken to makeup the short-fall

- 5(a) the contractor shall employ sufficient number of skilled and unskilled labor required for the work for maintaining the progress of work as stipulated in the Time schedule. The trade-wise labor strength should be intimated to the Engineer-in-Charge every day in writing. The skilled labor shall be increased if required by Engineer-in-Charge to maintain progress of the work.

6. **SEQUENCE OF WORK:** The contractor shall execute the work as per the sequence given by the Engineer- in-Charge from time to time so that all other items of the work to be executed by other agencies are completed progressively along with the main work.
7. **CO-OPERATION WITH OTHER CONTRACTORS:** The contractor shall extend all facilities and give complete co-operation for the execution of various connected works, if required to be carried out simultaneously by other agencies, while his own work is in progress. The co-ordination will be effected in consultation with the Engineer- in-Charge of the work. Other contractors are also likely to be authorized by the Department to work in the same area during the construction stage of the work.

Since Electrical/ Air-conditioning/other agencies will have to carry out their works such as installations of conduits, junction boxes, wiring, distribution boxes, switches, fittings and fixtures etc. in a planned manner in stages which will be in relation to the status and progress of civil construction works, the civil contractor shall accept and take over the inventories of installations of Electrical/Air-conditioning/other agencies when their works are in part/full completion stage. The same inventory in the same condition will have to be handed over back to the electrical/air -conditioning/other agencies for carrying out their remaining works after the stage-wise completion of the civil works. During final handing over of the building(s) to the Department/Users, the civil contractor will again take over the installation/inventories of fittings and fixtures of electrical/air-conditioning/other agencies and will complete all his balance finishing works and hand over his works along with the installations of other agencies to the Department / Users.

The contractor shall afford all facilities:

- a. For the installation of embedded parts, sleeves with its accessories in slabs, beams and walls by the other agencies before the reinforcement is placed, necessary cut-outs in the shuttering will have to be provided by the civil contractor for this purpose for which no extra payment will be admissible.
- b. For the installation of various service lines in the walls, floors, slabs, ducts etc.
- c. For using approach road etc.by the other contractors.

No extra claims on account of facilities provided for carrying out the work mentioned above will be entertained.

8. **CO-ORDINATION :** The contractor will carry out the entire work in a planned manner by co-ordinating his work with other contractors, who will be simultaneously carrying out work in the same area and also co-ordinate in connection with the position of various fixtures, inserts, embedment's and other allied work connected with the completion of the building / subject work.

In case of any dispute between the contractors engaged on the same work, decision of Engineer-in-Charge shall be final and binding.

9. **APPROACH ROADS AND TRANSPORTATION OF EQUIPMENT & MATERIALS:** Contractor will be permitted to use the existing roads in the establishment area for

the purpose of transporting equipment and materials and for use of labor etc. The Engineer-in-Charge, however, will not undertake to provide any approach roads to the actual site of work. It shall be the entire responsibility of the contractor to provide and maintain such temporary approach roads including cross drainage works if any at his own cost for the purpose of movement of men, materials and equipment. Layout of such approach roads shall be submitted to Engineer -in-Charge for his approval before undertaking the construction of the same. Such approach roads shall be made available to other agencies for carrying out the work in the same area in consultation with the Engineer-in-Charge of the works without any cost.

- 10. OPERATIONS AND STORAGE AREAS:** All operations of the contractor shall be confined to areas authorized by the Engineer-in-Charge and storage of materials shall be over the areas specially indicated by the Engineer-in-Charge. Materials like sand and metal of different sizes shall be stored in properly constructed bins with hard floor to avoid inter mixing as well as mixing with objectionable materials. The contractor shall be obliged to keep the premises in hygienic conditions by proper drainages of the area provided with suitable approaches throughout the period of contract. He shall rectify all damages caused to the TMC property within the areas thus allotted. He shall be responsible to clear all rank, vegetation at site at his own cost.
- 11. CONTRACTOR'S STORAGE AND SITE OFFICE:** Suitable area near the site of work shall be allocated to the contractor, @ Re.1/- per month as token compensation, for storing his equipment, plant, materials etc. and for his site office and cement godown. He will, however, be solely responsible for watching or guarding his property and materials issued to him by the Department. Contractor shall cover all materials at site with requisite insurance against theft, larceny, dacoits, fire tempest and flood. He, however, will have to dismantle the shed and vacate the land after the receipt of due notice from the Engineer-in-Charge if the same is obstructing any work.

The contractor should obtain necessary permission / approval from statutory authorities such as Municipal corporations / Local bodies etc. for construction of temporary structures at site of work such as cement godown, stores, site office etc. It will be responsibility of the contractor to prepare proper plans, to pay any requisite fees to statutory authorities and to execute the work for the temporary structure at their own cost as per the conditions and rules laid by statutory authorities.

- 12. TEMPORARY BUILDINGS: Warehouse,** shed, workshop and office facilities as required by the contractor shall be provided by him at his own expense. Area for the same will be made available by the Department @ Re.1/- per month as token compensation. Prior approval of the Engineer-in-Charge shall be obtained in respect of location and layout and details of those buildings. After the work is over; all these temporary facilities shall be removed by the contractor at his own expense to the satisfaction of the Engineer-in-Charge within 10 days from the date of completion.

No labor shall be permitted to stay in the partly completed / completed building at any time. The contractor shall make his own arrangements for labor hutments at his own cost. Unauthorized occupation of any area/partly completed building by the contractor's laborer will be treated as trespass and action will be taken to evict them including termination of contract if deemed fit. Sanitary as well as water supply and

drainage facilities as required by the labor laws in force, are to be provided by the contractor at his own cost.

- 13. TRAFFIC INTERFERENCE & INCONVENIENCE TO THE PUBLIC:** The contractor shall so conduct his operations as to interfere as little as possible with the traffic/public. When interference to traffic is inevitable, a notice of such interference shall be given to the Engineer-in-Charge well in advance (at least 2 days) at any stage, if it becomes necessary to divert the traffic, the contractor shall obtain permission from the local traffic authorities at his own expense. The Department will render reasonable assistance in the matter. The contractor shall take all precautionary and other measure, such as providing warning signals, temporary diversion etc. all as directed by the Engineer-in-Charge.

The contractor shall not deposit materials anywhere at work site which will seriously inconvenience the public. The Engineer-in-Charge may require the contractor to remove any materials which are considered to be a danger or inconvenience to the public or cause them to be removed at the contractor's cost.

The contractor shall exercise full care to ensure that no damage is caused by him or his workmen, during the operation to the existing water supply and power lines. The cost of any such damage and risks arising out of this shall be entirely borne by the contractor.

- 14. DRAINAGE AROUND THE BUILDINGS AND Foundation FOR OTHER WORKS:** The contractor shall be entirely responsible for the provision and maintenance of efficient drainage arrangements in the work site to lead of all water whatsoever pumped from the excavations on account of rains, floods, springs or any other source whatsoever. The foundation trenches shall be kept free from water while all the works below ground level are in progress.

Flooding or ponding of water in the work site shall not be permitted under any circumstances whatsoever and the contractor shall take all necessary precautions to prevent the same by providing suitable pumps and other dewatering arrangement.

The cost of repairing damages if any, to the work under execution or to any TMC property in and around the site shall be entirely borne by the contractor where such damages are due to his non-compliance with the above conditions.

15. SPECIFICATIONS AND DRAWINGS :

- a. The drawings furnished to the contractor for this work shall be interpreted by the use of given dimensions and nomenclature only and the drawings shall not be scaled. Drawings to a large scale shall have precedence over those to a smaller scale. Prior to the execution of the work , the contractor shall check all drawings, specifications and shall immediately report any error, discrepancy and / or omissions discovered therein to the Engineer-in-Charge and obtain appropriate orders on the same. Any adjustment made by the contractor without prior approval of the Engineer- in-Charge shall be at his own risk. Description of item in the schedule of quantities is brief and therefore, shall be read in conjunction with the relevant drawings and the specifications and the contractor's rate shall be deemed to be for such complete work unless

otherwise specified by the contractor while tendering.

- b. In case any difference or discrepancy between the description in the schedule of quantities and the specifications, the schedule of quantities shall take precedence.

In case any difference or discrepancy between the description in the schedule of quantities and the drawing, the description in schedule of quantities shall take precedence. In case of any difference or discrepancy between drawing and specifications, the specifications shall take precedence.

- c. Prior to submission of drawing called for as per specifications or any other drawings, contractor may intend to submit for approval, the contractor shall be responsible for thoroughly checking of all drawings to ensure that they comply with the intend and the requirements of the contract specifications and that they fit in with the overall lay out. Drawing found to be inaccurate or otherwise in error will be returned to the contractor for corrections.
- d. For all drawings to be submitted by the contractor, for the approval of the Engineer-in-Charge, the contractor shall submit 6 (six) copies of each drawing.
- e. The approval of the drawings by the Engineer- in-Charge shall not be construed as a complete dimensional check, but will indicate only that the general method of construction as detailed is satisfactory. The contractor shall be responsible for the dimensions and designs of adequate connection supports, details and satisfactory construction of the work.
- f. Cost of all shop drawings, fabrication drawings or form work drawings and details to be furnished by the contractor shall be deemed to be included in his tendered rates. Approval of shop drawings shall not be construed as authorized additional work of increased costs to the Department.
- g. Based on the concept drawings / construction drawings the contractor should prepare shop drawings of MEP, HVAC & all other utility services and false works, wooden work, partition works, glazing, space frame & such special works.
- h. After final completion of the work, the contractor should prepare as building drawings of all the MEP, HVAC & Utility services and should submit 5 sets of blue prints in appropriate scale free of cost.

- 16. SAMPLES FOR MATERIALS:** Samples of all materials to be incorporated in the work shall be submitted to the Engineer-in-Charge/ Consulting Architect for his approval without any extra cost. The approved samples will be kept with Engineer-in-Charge till completion of the work. Materials not conforming strictly to the approved samples will be rejected.

Samples of various materials required for testing shall be provided free of charge by the contractor. Testing charges if any, including all other expenses required to be incurred for taking the samples, conveyance, packing etc., shall be borne by the contractor.

- 16.1 In addition to submission of samples of materials, the contractor shall make a sample flat (sample finishing works in case of Non-Residential bldgs.) ready in all respects, including the finishing items of works of civil works including installation of fittings as well as those of water supply, plumbing and sanitation work and electrical, internal fittings, fixtures and wiring etc. to determine the acceptable standard of materials and workmanship. The sample flat with all final finishes and installations etc. shall be got approved from the Engineer-in-Charge in advance before taking up the finishing items of the work in the building(s). Each of these samples of items of work / trade / materials approved by the Engineer-in-Charge will be endorsed as "Guide line samples", as per which further works shall be executed in strict conformity with standard of materials & workmanship. This shall be done with no extra cost to TMC.

The provision of co-ordination and co-operation with other agencies shall be mutatis-mutandis applicable to the above mentioned sample flat / Sample finishing works" also.

17. **EXECUTION OF WORK AND INSPECTION:** The work shall be conducted under the general direction of the Engineer-in-Charge and is subject to inspection by his appointed representative to ensure strict compliance with the terms of the contract. No failure of the Engineer-in-Charge or his designated representative during the progress of the work to discover or to reject materials, or work not in accordance with the requirement of this contract shall be deemed as an acceptance thereof or a waiver of defects therein and no payment by the Engineer-in-Charge or partial or entire occupancy of the premises shall be construed to be an acceptance of work or materials which are not strictly in accordance with the requirements of the contract. No changes whatsoever to any provision of specifications shall be made without authorization from the Engineer-in-Charge.

18. **SUPPLY OF WATER:**

The contractor shall make his own arrangement for water required for the construction work, at his own cost, subject to the approval of the Engineer-in-Charge. Alternatively, the contractor will be allowed to take a bore well in the campus and use the water. However after completion of the work the contractor has to handover the bore well with all the installation in working condition to the department without additional charge. **Water to be tested and approved before use at his own cost.**

The contractor shall arrange to provide a minimum storage of 5000 Ltrs. (or two days requirement whichever is higher) of water at building location and all necessary pumps for storage of water shall be built by the contractor at his own cost at location to be approved by the Engineer-in-Charge. The water storage tanks should be leak proof and wastage and misuse of water is strictly prohibited. Contamination and pollution of water to be strictly avoided. Construction water should not be used for drinking or for domestic purpose.

The contractor to make his own arrangement for water required for drinking purposes at site of work and for the labor camp, etc. at his own cost.

19. SUPPLY OF ELECTRICITY:

The contractor to make his own arrangement for electricity required for construction purposes at site of work and for the labor camp, etc. at his own cost.

20 CONSTRUCTION AND MAINTENANCE BY THE CONTRACTOR:

As mentioned above, the contractor shall maintain his entire electrical installation, appliances etc. in good and safe condition as required under relevant rules and codes of practice. However, the following precautions and directives shall be followed in addition to observing other essential rules:

- i) The minimum clearance (measured at the lowest sag point) to be maintained for all overhead lines shall be 4 Mtrs. cross country or along roads and 6.1 meters across roads.
- ii) Metallic poles as a general rule should be avoided and if used should be earthed individually.
- iii) All loose hanging of wires and cables should be avoided. The line wires should be properly supported and an approved method of fixing shall be adopted.
- iv) Installation shall not cause any hindrance to the normal movement of men and materials at site.
- v) All cables and wires should be adequately protected against mechanical damage during construction activity of all contractors, working at site.
- vi) In case the cable is required to be laid in ground, it should be adequately protected by covering the same with bricks, R.C.C. tiles or any other approved means and cable markers provided at suitable intervals as per approval of the Department.
- vii) Laying of cable and wires direct on floor shall not be allowed but if absolutely necessary for some very short lengths, the same shall be taken through suitable mechanical covering like G.I. / M.S. Pipes etc.
- viii) All the cut door switch boards, equipments etc., should be adequately protected against rain or preferably they should not be exposed to weather.
- ix) If overhead lines using bare conductors are installed, a guard wire system of adequate size shall run along the cables / wires and earthed effectively.
- x) The connection for portable machines shall be taken only through suitably rated 3 pin socket points. Iron clad industrial type outlets are preferred. While taking supply through socket outlet a plug top must be used, avoiding inserting of loose wires in the sockets. The third pin of the plug shall invariably be earthed and 3 core wire of appropriate specifications and capacity shall be used.
- xi) All three phase equipment shall be provided with duplicate earthing. All metallic frames, light fixtures, portable equipments etc. should be effectively earthed to main earthing.
- xii) Duly authorized persons having valid wireman's license / competence certificate must be employed under the supervision of a qualified and experienced

Electrical Supervisor for carrying out electrical work and repair of electrical equipments, installation and maintenance etc. at site.

21. TENDER RATES:

The rates quoted by the tenderer in the schedule shall be inclusive of all taxes including Sales tax, Purchase tax, duties, royalty for excavation & use of building materials, labor cess and other statutory levies / taxes etc. imposed by the Government or other public bodies from time to time. The rates quoted shall also cover the cost of necessary protection including labor, materials and equipment to ensure safety and protection against risk or an accident, compensation for injury to life and damage to property if any, caused by the contractor's operations connected with this work. The rates shall be firm and shall not be subject to change due to variations during the entire period of execution of the work in cost of materials, labor and conditions, or any other conditions whatsoever. ~~Except for the provisions contained in clause 10 C, 10 CA and 10 CC of General conditions of contract as applicable for this work.~~

The rates quoted by the tenderer shall also be inclusive of State Sales Tax or any other tax on the transfer of property in goods involved in execution of works contract Act, 1985 (in other words GST) which is to be paid by the tenderer to the government from time to time during the execution of the contract / works. No separate claim on this account will be entertained by the Department. Also no certificate(s) for exemption of Octroi / Entry tax shall be issued by the Department.

Unless otherwise stated in schedule of quantities, rates for item quoted by the tenderer should be for the complete work including supply and fixing with all materials and should be for all heights and depths, lifts and leads, lengths and widths involved in the work.

Any cement slurry added over base surface (or) for continuation of concreting, for better bond, is added to have been in-built in the item (unless otherwise explicitly stated) and nothing extra shall be payable and no extra cement considered in consumption on this account.

Rate for all items, in which use of cement is involved, shall include charges for curing.

The contractor when called for by the Department should furnish detailed rate analysis in support of the rates quoted by him against each item of the tender. The Department reserves the right to utilize the analysis thus supplied in settling the rate of any deviations or claims arising in this contract.

For any deviations or claims or extra items arising out of this contract, the contractor will be entitled for overheads and profits of 2.5% (two and half percent) only towards handling, storing etc. of such materials which are supplied by the Department under Schedule 'B' and / or at fixed issue rates /procurement rates in case of free issue materials.

22. CLAIMS AGAINST THE CONTRACTOR:

Whenever any claim against the contractor for the payment of a sum or money arises out of or under the contract, Department shall be entitled to recover such sum by appropriating in part or whole, the security deposit of the contractor and to sell any Government promissory notes etc. forming the whole or part of such security. In the event of the security deposit having been taken from the contractor, the balance or the total sum recoverable, as the case may be, shall be deducted from any sum then due or which at any time thereafter may become due from the contractor, under this or any other contract with the Department . Should this sum be not sufficient to cover the full amount recoverable, the contractor shall pay the Department, on demand the balance remaining due? Department shall have the right to cause an audit and technical examination of the work and the final bill of the contractor including all supporting vouchers, abstracts etc. to be made after payment of the final bill and if as a result of the due audit and technical examination any sum is found to have been over paid in respect of any work done by the contractor under the contract or any work claimed by him to have been done under the contract and found not have been executed, the contractor shall be liable to refund the amount of the over payment and it shall be lawful for the Department to recover the same from him in the manner prescribed above or in any other manner legally permissible and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, amount of such under payment shall be duly paid by the Department to the contractor.

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

Provided further no recovery of an over payment and no payment of any sum paid short shall be made where such over payment or under payment has remained undiscovered for a period of three years after the date of payment of the final bill.

23 MODE OF MEASUREMENTS:

Measurements for all hidden items once taken jointly and so accepted by the tenderer in the bills, in writing shall be final and binding. No re-recording of measurements for hidden items of work will be permitted. The contractor shall get the bar bending approved and physically checked before pouring the concrete, preferably well in advance. As building drawings are signoff for the concealed works.

The contractor shall provide at his own cost suitable weighing and measuring arrangements at site for checking the weight / dimensions as may be necessary for

execution of the work. All measuring tapes (of steel), scaffolding and ladders which may be required for taking measurements shall be supplied by the contractor.

If the contractor fails to accompany the Engineer-in-Charge or his duly authorized person to take measurements, then he shall be bound by the measurements, recorded by the Engineer-in-Charge or his representative.

24 STORES AND MATERIALS AT SITE:

Stores and materials required for the works are to be deposited by the contractor only in places to be indicated by the Engineer-in-Charge. The Engineer-in-Charge shall have a right at any time to inspect and examine any stores and materials intended to be used in or on the works either on the site or at any factory or workshops or other places where such stores or materials are being constructed or manufactured or processed or any place from where they are being obtained and the contractor shall give such facilities as required to be given for such inspection and examination.

The Engineer-in-Charge shall be entitled to have tests made without any extra cost to the Department at an approved laboratory for any stores and or materials supplied by the Contractor, who shall provide at his own expense all the facilities which the Engineer-in-Charge may require for this purpose.

Any stores and materials brought to site for use on the work shall not be removed off the site without prior written approval of the Engineer-in-Charge, but on final completion of the work, the contractor shall at his own expenses remove from the site all surplus stores and materials originally brought by him.

- 25 **PROPER DRAWINGS AND INSTRUCTIONS:** The Engineer-in-Charge shall have full powers and authority to supply to the contractor from time to time during progress of the work such further drawings and instructions as shall be necessary for the purpose of proper and adequate execution and maintenance of the work and the contractor shall carry out the work and be bound by the same.

One copy each of the drawings furnished to the contractor shall be kept by the contractor at the site and the same shall at all reasonable times be made available for inspection and use by the Engineer-in-Charge and any other person authorized by the Engineer-in-Charge.

- 26 **EMPLOYMENT OF STAFF / SUBCONTRACTORS & STATUTORY APPROVALS NOCs FOR MEP, HVAC & UTILITY SERVICES;**

The contractor should employ licensed & certified staff & subcontractors for all MEP, HVAC & utility services. The contractor should submit require license, authorization, supervision certificate, as build drawings, etc. to the statutory authorities, co-ordinate with authorities & obtain all the require NOCs for obtain Occupancy Certificate. The likely require NOC are final Fire NOC, drainage completion NOC, License to operate the elevators, etc., However, these are only indicative the contractor to get himself updated about the NOCs require for obtain Occupancy Certificate.

- 27 **GOVERNMENT LABOUR ACT:** The contractor has to follow strictly the Government labor Acts, which are and will be in force during the period of execution of work. All necessary arrangement for laborer's safety, insurance will have to be made by the contractor as per Municipal rules / contractor's labor regulations / Other Central or Local statutory body. The contractor shall adequately insure his labourers & the work. The contractor should take workmen compensation policy, contractor's all risk insurance(contract value plus contractor's tools & plants), third party insurance policies (five lakhs per person for any one accident and twenty five lakhs in respect of damage to property for any one accident)at his own cost and keep TMC indemnify all claims on account of his operations on site. All the issuance polices shall be from the first class Insurance Co. If the contractor fail to keep those insurance policies in force, TMC pay such premium/s from the dues of contractor and / or recover the cost rom contractor.
- 28 **DEDUCTION OF INCOME TAX :**As per Section 194-C of Income tax Act 1961, as amended by Letter No. 275/9/72/9-TJ (Circular No. 86) dated 19.5.72 and No. 275/14/9/-IT (B) (Circular No. 593) dated 5.2.91, received from Ministry of Finance, Department of Revenue, Central Board of Direct Taxes, New Delhi, the Income tax@ 2% and Surcharge thereon @12% (or any other amended rate by Ministry of Finance from time to time), of the gross value of the work done will be recovered from the bills. A certificate for the amount so recovered will be issued by the Department.
- 29 **URGENT REPAIRS:** If by reason of any accident or failure or other event occurring to or in connection with the work or any part thereof either during the period of maintenance, any remedial. Or other work or repair shall in the opinion of the Engineer-in-Charge be urgently necessary for security and the contractor is unable or unwilling, at once, to do such work or repair, the Engineer-in-Charge may be his own or other workmen do such work or repair, as he may consider necessary. If the work or repair so done which in the opinion of the Engineer-in-Charge, the contractor was liable to do at his own expenses under the contract and all cost and charges properly incurred by the Engineer-in- Charge in so doing shall on demand be paid by the contractor or may be deducted from any sum due or which may become due to the contractor provided always that the Engineer-in-Charge shall soon after the occurrence of any such emergency as may be reasonable, practicable, notify the contractor thereof in writing.
- 30 **SECURITY Regulation's:** The contractors have to follow strictly the regulations of the Department at the work site regarding entry of personnel, material etc. and any other regulation that might be enforced from time to time. All materials and articles brought by the contractor to the work site shall have to be declared at the security gate. Similarly no materials shall be taken out from the Departmental premises without proper gate pass, which will be issued by the Engineer-in-Charge to the contractor on written request. It is to be noted that loading of contractor's materials in vehicles and trucks shall be done in the presence of Departmental personnel. The contractor's representative will have to escort the materials till the security check is over.

The contractors, suppliers, vendors, workers engaged in work/business will be issued with renewable entry permit to avoid unauthorized entry in the Departmental area/site on scrutiny of applications in prescribed form.

For working on Sundays, Holidays and late hours, even though permission will be accorded by the Engineer-in- Charge, the contractor will have to make application to the Security Department also and keep them informed well in advance.

The area where the proposed work is to be carried is residential/ non-residential area under the control of Security authorities of Department, entry to the site of work shall be through the main gate only. The contractors shall follow strictly the security regulations of the Department at site of work regarding entry of personnel, materials etc. and other regulations that might be enforced from time to time at the work site and also in the campus for smooth and efficient operation. The contractor, his agents, representatives, workmen etc. and his materials, carts, trucks or other means of transport etc. will be allowed to enter through and leave from such point of entry/exit at such times, the authorities in- charge of the area, at their sole discretion, may permit.

The contractor, his agents and representatives are required to be in possession of the individual identity / muster cards or passes. The muster cards or passes are examined by the security staff at the time entry / exit inside the departmental area and also at any time or number of times within such area.

The contractor will have to apply for entry/muster permits of likely number of labor to be engaged during the week for the workers and authorize their representatives to collect the entry permits for labor from the Departmental Security Authorities.

It will be the responsibility of the contractor to maintain the list of labourers permitted to work inside the premises in a register and the representative of contractor's labor will have to issue entry pass to each labor after making necessary entry in the registers.

The contractor, his agents, representatives, workmen shall strictly observe the orders pertaining to prevailing fire precautions.

In addition to the above, other security regulations as may be imposed by the Security authorities / Engineer-in-Charge shall be complied with / observed by the contractor and his workmen, in addition to the above.

Any breach of above security regulations and rules in force from time to time will be viewed seriously. No claim whatsoever will be entertained by the Department on account of the observation of the Security regulations.

- 31 **WATCH AND WARD AND LIGHTING:** The contractor shall in connection with the works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or as required by the Engineer-in-Charge and duly constituted authority for the protection of the workers or for safety and convenience of the public or others. The contractor shall be responsible for all damages and accidents caused due to negligence in this regard.

It will be the entire responsibility of the contractor to protect the work(s) carried out by them including the fittings, fixtures and other accessories provided by them till the entire work is satisfactorily handed over to the Department / Users.

32 **DEPARTMENT'S DRAWINGS, SPECIFICATIONS, PROTO-TYPE ETC. :**

All drawings, specifications, patterns, samples, models and proto-types furnished to the contractor by the Department are intended to be complementary and to provide for and comprise everything necessary for the completion of work / supply and are the property of the Department. These are not to be used for any work or purpose other than those for which these have been provided and shall be returned to the Department immediately on completion of work / supply in good condition.

33 **CONFIDENTIAL INFORMATION :** The drawings, specifications, proto-type, samples and such other information furnished to the contractor relating to the supply / work, sub-systems / equipment etc. are to be treated as confidential which shall be held by the contractor in confidence and shall not be divulged to any third party without the prior written consent of the Department. The contractor, therefore, binds himself, his successors, heirs, executors, administrators, employees and the permitted assignees or such other persons or agents directly or indirectly concerned with the work / supply to the confidential nature of the drawings, specifications, proto-type samples etc. It is a further condition of the contract that the contractor shall not, without prior written permission from the Department, transmit, transfer, exchange, and gift or communicate any such confidential information, and also the component, sub assembly, products, by-products etc. pursuant to the fabrication under taken by the contractor, to any third party.

(a) Patents and Patent Rights Indemnification : All specifications, drawings, patents and such other relevant information furnished to the contractor by the Department shall be the property of the Department. If, during the process of execution of the contract, any improvement, refinement or technical changes and modifications are effected by the contractor, such changes shall not affect the title to the property of the Department and all the information, specifications, drawings etc. Including the improvement / modifications, effected by the contractor shall continue to be the property of the Department. The Department shall also have the absolute right to assign, transfer, sublet, use and transmit all such information and details to the Department's consultants, agents and collaborators and the contractor shall not have any claim or rights whatsoever in respect of the Department's drawings, specifications, patents, prototypes etc. even where improvement, refinement, modifications etc. were effected by the contractor.

(b) Endorsement to be made by the Contractor on Fabrication Drawings for the protection of Departments Interest: "This design / drawing is the property of the Tata Memorial Centre and it must be returned with the tender / quotation or upon delivery of the materials / equipment and must not be used except with the permission of the owner".

34 **Contractor to comply with MOEF/MPCB norms:** During construction the contractor shall follow all green building criteria/norms laid down by MOEF/MPCB & related authority from time to time. Submit, provide reports about the progress of construction with relevant details, documents, etc. (refer section VI)

35 **Employers Requirements :**

A) GENERAL SCOPE OF WORK:

- i) The detailed scope of work for project specific is described in the Schedule of Quantities. However, any item of work required to be carried out as per the Contract for proper satisfactory completion of the work with good standard of workmanship shall be deemed to be included in the scope of work, with no additional cost for such items, whether, or not it is specifically included / described in the Schedule of Quantities.
- ii) The Contractor shall ensure to meet the schedule milestones, quality and safety requirements of all Works as mentioned in the scope of Work.
- iii) The Contractor shall work in close co-ordination with the Engineer and Employer's Representative and shall attend various meetings to meet the schedule and quality requirements of the Work.
- iv) The Contractor shall make his own arrangement for the protection and safety of his material and equipment at site. The Contractor shall also make his own arrangement for the electricity and water for construction purpose. Alternatively the contractor will be allowed to take a bore well in the campus and use the water. However after completion of the work the contractor has to handover the bore well to the department without additional charge Water to be tested and approved before use. The Contractor is to ensure the proper housekeeping of the Site at all times as per the satisfaction of Engineer so as to Work in a very safe and clean manner.
- v) The Contractor shall ensure timely submission of all reports, test results, samples.
- vi) Arranging his own access to the Site.
- vii) The Contractor shall carry out all the survey & layout works in relation to the Contractor. The Contractor shall make the reference pillars etc. required for setting out of the buildings and shall responsible for safeguarding them till the completion of the Contract.
- viii) The Contractor shall submit his Construction Program within 15 days from award of Letter of commencement of work /work order describing in details the mobilization and requirement of labor and equipment in the form of CPM analysis and notes, working process for main activities / critical activities / new activities, Monitoring of work Progress, Financial Planning and cash flow charts, Survey and layout, Construction methodology, Quality plan including initiating process for mix design and appointment of PT Consultant as per requirements within two days from date of award of letter of commencement or letter of intent, Approved external Laboratory facilities, Testing frequencies, Acceptance Criteria, Calibrations, Control of Non-Conformities, Details of Site Quality Records, Various documentation in a formats approved / issued by Engineer, performance of tests etc., Approved vendor list for various standard materials like Cement, steel, bitumen, concrete frames, tiles , plumbing and electrical fixtures, wood, plywood, s.s steel and accessories and flushed doors etc. The Contractor shall prepare requisite documents, its submission on time, coordination, follow-up with concern statutory e.g. Police/ Labor / Health/ Power/ Water / Telecommunication and other Authorities to obtain requisite permission,

- NOC, supply and avail their facilities and to perform legal formalities to avoid any encumbrance on Work programme.
- ix) The Contractor shall submit all necessary reports and data's required for monitoring the progress and quality of Works mentioned in the Scope of Work and in the formats approved by Engineer.
 - x) Shop drawings for all fabrication work of permanent as well as temporary structures.
 - xi) As Built drawings for all works mentioned in the scope of Work.
 - xii) Site safety management and Supervision.
 - xiii) Construction of labor camp at approved space: Permission for Construction of Labor Camp with in the TMC premises will at the discretion of the competent authority. If the request for setting up of Labor Camp is rejected, Contractor has to make his own arrangements outside TMC premises at his own risk and cost with appropriate permissions form local statutory authorities. However no leniency will be given for any delay in construction activities citing any reason. If permission granted to Set up us it will be as per **SCHEDULE 'C'**
 - xiv) Fencing, Barricading and proper illumination of the site at no extra cost. The Contractor shall provide and maintain a suitable approved temporary fencing of approx. 3 meter height of GI sheets and gate/s to adequately enclose all boundaries of the site for the protection of the public and for proper execution of the works including all costs incurred for the security of the works and in accordance with the requirements of the Engineer - In - Charge and regulations of local authorities. These shall be altered, relocated and adapted from time to time as necessary and removed only on completion of the project or as instructed by EIC.
 - xv) The contractor shall include all taxes as applicable and cost towards packing, handling, transportation and placing in position in the rates quoted for various items specified in the Bill of Quantities.
 - xvi) The cost towards all the items listed above is deemed to be covered in the rates quoted by the contractor for the items included in the Bill of quantities and no separate payments shall be made except for the items specifically included in the Bill of quantities.
 - xvii) The contractor shall have to make Coordination with Lift installation Agency & any other agencies at no extra cost.

B) PROJECT SPECIFIC SCOPE OF WORK:

The Scope of work as defined I Vol I, II, III & IV but not limited to the following:

- Detailed Engineering Survey and Joint records/documentation (before & after execution)
- Construction of building including Civil works etc.
- Construction of Infrastructure facilities.
- Quality Control, work schedule and monitoring, documentation and reporting.

DOCUMENTATION, INSTRUMENTATION & RECORDS

The following items shall be deemed to be included in the tendered cost and no additional payment shall be made:

“Operational and Maintenance Manual” (During Defect Liability Period) Manual describing access arrangements to various portion of the Project for maintenance and repair without affecting the intended operation of the project, important arrangements from the point of view of structural safety, procedure for minor and major repairs of each components of the project, renewals of finishes and treatments periodically shall be supplied by the Contractor free of cost.

The Contractor shall train the persons nominated by the TMC during handover of the equipment at site free of cost regarding the operation and maintenance of the various equipment being erected in connection therewith. The persons so nominated shall be supplied with a set of necessary literature, operating instructions, wiring diagrams, etc. so as to enable them to attend to minor faults and maintenance of the equipment at a later date. For these purpose three copies of the operating instructions, literature, wiring diagrams etc. shall be supplied to the employer soon after the completion of Installation of the said equipments.

“Quality Assurance Manual” covering mix-designs, materials, testing, statistical quality control, etc. shall be prepared and supplied by the Contractor free of cost well before starting the work.

“Construction manual” covering various aspects of construction methods, difficulties faced and how they were overcome during execution etc. shall be supplied by the Contractor free of cost at the time of completion of work.

All the records of testing material reports, material challans, labor reports, etc. are to be maintained by the contractor. Records connected with the execution of the work should be maintained in a proper manner. The registers/files, wherein important data such as record of the mandatory test, record of hindrances, record of receipt and supply of materials, record of issue of drawings/design etc. are kept should be properly bound and page numbered. These records should be maintained under the signature of designated senior officials. This will guard against the possibility of manipulation/tempering of these records at any stage.

Following check-points are suggested:

- i. Whether the registers are properly bound and having machine numbered pages?
- ii. Whether the registers to keep record of important data like mandatory test, hindrances etc. are being issued under the signature of designated senior officer?

iii. Whether these records are being maintained properly with signatures and attestation of the designated officers?

iv. Whether any tampering/manipulation is noticed in these records?

The contractor will sign the following registers whether by himself or through his authorized representative.

- i. Cement register
- ii. Roadmetalconsolidationregister
- iii. Log book of Machinery
- iv. Paints register
- v. Testing of materials Register.
- vi. All Field Records
- vii. Site order Book
- viii. Materials at site account
- ix. Hindrance Register
- x. Sieve analysis Register
- xi. Ready Mix Concrete Batch Register
- xii. Drawing Register
- xiii. Site Inspection Register

SITE OFFICES AND FACILITIES

1. The Contractor shall supply, erect and satisfactorily maintain in good condition until final completion of works, a well-lighted, well ventilated and air-conditioned and adequately weather proofed temporary, burglar proof readily available two site offices (Portable Cabins) of approx. 400 sqft with attached toilet lock, about 300 sqfts conference hall (20 persons), sample room, pantry and toilet block as per approved layout for use at all times by the TMC and the Engineer - In - Charge and their Staff. The contractor shall provide adequate access to the office. The Contractor shall be responsible during the continuance of the contract for the security of the office and for all plans, documents and papers and other clauses contained therein. The sitting of the office shall be in accordance with the instructions of the Engineer. Service personnel shall also be made available at the Office at all times and shall clean site office daily. The office shall be adequately equipped with furniture and fittings, including Executive Tables and Chairs, Conference Table and chairs, drawing tables and cabinets, file cabinet, wall display boards, sample storage cabinet, well equipped Tea/Coffee/Drinking Water, pantry with

refrigerator. The Contractor shall provide uninterrupted power and water to the Office as directed for 24 hours. The Contractor shall provide new computer (3 Nos.) of approved brand with LAN connection, Internet Connection (Active) and Licensed Software for Windows XP, MS Office (Latest Edition), MS Projects. On completion of project the hard disk of the computer will be handed over to Engineer. The Contractor shall also provide Printer (Color and Laser) and suitable capacity Photocopier along with the consumables required will be provided and maintained. On completion of work, all that setup will be handover to the contractor as it whereas basis.

The contractor shall dismantle and remove from site all such temporary structures on completion of contract or whenever the TMC may require such dismantling and removal on account of obstruction of work, nuisance value or any other reason.

2. The Contractor shall provide at all times for the duration of the contract all chainmen, staff men, workmen and survey instruments for the exclusive use of the Engineer - In - Charge as directed by the Engineer - In - Charge for carrying out of his duties in connection with the contract.
 - a. Such instruments, which must be approved by the Engineer - In - Charge shall include but not be limited to the following:
 - b. One Total Station and Theodolite and tripod capable of reading to 20 seconds.
 - c. One level with horizontal circle and tripod
 - d. Two metric levelling staffs not less than 3.5 meters high.
 - e. One 100 meter rust less steel band, one 30 meter rust less steel tape and two 30 meter linen tapes.
 - f. An adequate number of ranging rods, drop arrows, wooden setting-out pegs, etc.
 - g. Test laboratory for testing construction materials and test kits.

The contractor shall be solely responsible for all such instruments and equipment and shall ensure that they are at all times in good repair and adjustment.

3. The Contractor shall provide at his own cost, One Site sign Board for each site, at directed location of overall size 2 meters wide and 1.5 meters height and of approved design. The names of the Project, Employer, Consultants, Engineer, and Contractor etc. shall be exhibited as directed.
4. The Contractor shall maintain daily weather record. Daily maximum and minimum temperature and corresponding, humidity shall be recorded and charted. Rainy days shall be recorded when the rain lasting more than one hour hampers the work. Any other inclemency in weather shall be recorded. The records shall be regularly shown to the Engineer - In - Charge and his signature obtained.
5. The Contractor shall arrange at his own cost to maintain a progress record of the works by taking (5" x 7") postcard size color photographs minimum 6 Nos.

or more per month as directed by the Engineer - In - Charge during the construction stages and after completion and shall supply one set to the Employer and one set to the Consultants at no extra cost. These photographs shall also be submitted as part of the contractors R.A Bills.

The same shall be furnished as per requirement of Monthly Progress report.

6. The Contractor shall provide arrangements for firefighting at his own cost. For this purpose, he shall provide requisite number of fire extinguishers and adequate number of buckets, some of which are to be always kept filled with sand and some with water. These equipments shall be provided at suitable prominent and easily accessible places and shall be properly maintained. The Contractor may be subject to periodic fire prevention inspections and any deficiency or unsafe condition shall be corrected by the Contractor at his own cost and to approval of the Engineer - In - Charge and the relevant authorities.

These fire prevention inspections shall include but not limited to the following

- a. Proper handling, storage and disposal of combustible materials, liquids and wastes.
- b. Work operations which can create fire hazards.
- c. Access for fire fighting equipment.
- d. Type, size, number and location of fire extinguishers or other fire fighting equipment.
- e. Inspection and maintenance records for extinguishers
- f. Type, number and location of containers for the removal of surplus materials and rubbish.
- g. General housekeeping

7. For the purpose of quick communication between the Engineer - In - Charge and the Contractor or his Representative, Site Order Books shall be maintained at site in the manner as described below :

Any communication, relating to the works may be conveyed through records in the site order book. Such a communication from one party to the other shall be deemed to have been adequately served in terms of the contract. Each site order book shall have machine-numbered pages in triplicate and shall be carefully maintained and preserved by the Contractor and shall be made available to the Engineer - In - Charge as and when demanded. Any instruction which the Engineer - In - Charge may like to issue to the Contractor may be recorded by him in the site order book and two copies thereof taken by the Engineer - In - Charge for his record. The Contractor or his Agency or Representative may similarly record in the site order book any communication he may like to send to the Engineer. Two copies thereof when sent to the Engineer - In - Charge and receipt obtained thereof, will constitute adequate services of the communication to the Engineer.

8. The Contractor shall provide all materials and also appoint the specialist agency for the specialized works as provided in the tender. The Architect /

Employer shall approve any make / agency after inspection of samples / mockups and after ascertaining their spare capacities.

9. The Contractor shall display all permissions, licenses, registration certificates and other statements required to be displayed under various labor laws and other legislations applicable to the works at the site office and also maintain the requisite register / records factually and up to date and keep them ready for inspection by the concerned authorities and also make available the same to the Engineer – In – Charge / Owner for inspection.
10. The relevant I.S. codes of practice shall be the latest version with their amendments / revisions. The Contractor shall keep and maintain copies of the latest editions of relevant I.S. codes at the work site and make it available to PMC / Architect when required
11. In case of guarantees specified for certain periods for due performance of materials and specialist items of work, the Contractor shall be a co-guarantor with the Specialist Agency or Supplier offering such guarantee and shall offer such co-guarantee in a format approved by the Owner
12. General shift & normal working period means from 8 am to 6 pm.
13. No night or rest day work - A weekly holiday is to be observed on Sunday. No night work without permissions of Engineer-In-Charge.
14. TMC security will not be responsible for contractors belonging, tools & plants, site material, temporary & permanent installations, fittings & fixtures, etc. in the building, temporary office, furniture, store, etc. The contractor has to make own security arrangement.
15. Contractor should maintained up to date record of in & out of the material & labor / staff at the security gate of ACTREC campus at its own expenses and otherwise the record.
16. If desired by the employer, the contractor shall stack and spread at the require profile - the excess soil - with in the campus – without additional cost, etc.
17. The contractor has to tackle to the local issues of their own.
18. If at any time after the commencement of the work the Employer shall for any reason whatsoever not require the whole work thereof as specified in the tender to be carried out, the Project Manager shall give notice in writing of the fact to the contractor who shall have no claim to any payment of compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been carried out , neither shall he have any claim for compensation by reason of any alterations having been made in the original specifications, drawings designs and instruction which shall involve any curtailment of the work as originally contemplated. Provided that the contractor shall be paid the charges on the cartage only of material actually not bonafide brought to the site of the work by the contractor and rendered surplus as a result of the abandonment or curtailment of the work or any portion thereof and then taken back by the contractor, provided however, that the Project Manager shall have in all such cases the option of taking over all or any such materials at their purchase price or at local current rates whichever may be less. In the case of such

stores having been issued from Employer Stores and returned by the contractor to the Employer Stores, credit shall be given to him by the Project Manager at rates not exceeding those at which they were originally issued to him after taking into consideration and deduction for claims on account of any deterioration or damage while in the custody of contractor and in this respect decision of Project Manager shall be final.

19. If it shall appear to the Project Manager or his authorized subordinate in-charge of the work that any work has been executed with unsound, imperfect or unskilled workmanship or with materials of any inferior description or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, the contractor shall on demand in writing which shall be made within six months of the completion of the work from the Project Manager specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for, forthwith rectify, or remove and reconstruct the work so specified in whole or in parts, the case may require or as the case may be, remove the materials or articles so specified & provide other proper and suitable materials or articles at his own proper charge and cost and in the event of his failing to do so within a period to be specified by the Project Manager in his demand aforesaid, then the contractor shall be liable to pay compensation at the rate of one per cent on the estimated amount put to tender for every day not exceeding ten days, while his failure to do so shall continue and in the case of any such failure, the Project Manager may rectify or remove and re-execute the work or remove and replace with others, the materials or articles complained of as the case may be at the risk and expenses in all respects of the contractor.
20. The Contractor shall obtain all approvals required from relevant statutory authorities and coordinate with the statutory authorities and Architect / Consultant for obtaining part CC for Plinth, each floor and Occupancy certificate. The contractor shall provide license and all the assistance for obtaining various NOC (Drainage, storm water, water supply, lift operation, electrical, fire, health, environmental, horticulture, rain water harvesting, Vermiculture Bins etc.) from statutory authorities and provide necessary assistance/cooperation to the architect for obtaining part CC for Plinth, each floor and occupancy certificate, etc. from statutory authorities.

The contractor shall provide license and all the assistance for obtaining various NOC (Drainage, storm water, water supply, lift operation, electrical, fire, health, environmental, horticulture, rain water harvesting, Vermiculture Bins etc.) from statutory authorities and provide necessary assistance/cooperation to the architect for obtaining part CC for Plinth, each floor and occupancy certificate, etc. from statutory authorities.
21. The agreement between principal contractor & sub agencies (MEP & utility services) should have clause regarding obligation by the sub-contractor to enter in to contract with TMC for comprehensive AMC at the rate & terms & condition of this tender after expiry of defects liability period (DLP) successfully.
22. The sub-agencies of Principal contractor shall enter into separate agreement for Comprehensive Annual Maintenance Contract (AMC) with Tata Memorial

Centre towards services and utilities work with the same terms and conditions after expiry of defects liability period (DLP) successfully.

23. Contractor shall deploy security/ watchmen for 24 hours on site at entire execution period.
24. No reimbursement for excise, royalty, etc. will be done by TMC. In fact if such payment is done in advance by TMC to obtain commencement certificate or any NOC, the same shall be returned / paid by the contractor to TMC. The labor CESS will be deducted from the contractor's bill as per the prevailing rates.
25. Contractor shall provide safety gadgets to the client's officer (Approx. 10Nos)
26. Working on extended hours beyond normal working hours with prior agreement and /or determination between Contractor and the Engineer / Employer's Representative to work on extended hours, Contractor has to make arrangement of Transportation for Employer's Representative / the Engineer as determine and agreed jointly.
27. Contractor shall properly cover up & protect all the work throughout the duration of work at his cost until completion, particularly flooring, risers, mouldings, steps, terrace or special floor finishes (by a layer of 25 mm thick Plaster of Paris over Polyethylene sheet as approved by Engineer-In – Charge) staircases and balustrades, doors and glass, paint work, furniture's and all finishing.
28. Contractor shall prepare Mock-up for flooring, false ceiling, and partition & take the approval from TMC & Consulting Architect before proceeding the work.
29. Contractor shall have to coordinate with TMC & take approval of Engineer-In-Charge before appointing any agency/subcontractor for carrying out the work in tender. TMC/Consulting architect shall prequalify the sub agencies before appointing by the contractor for any specialized job.

36 Concrete / Steel / P.T Technologist appointed by Consultant / PMC :

The **Consultant / PMC** may appoint or take the services of a reputed concrete consultant to assist / verify and approve concrete mix designs to ensure they are adequate to meet the specifications for concrete in fresh state and durability of structure, suggest section materials for suitability, assist in ensuring consistency quality of concrete at the time of production and investigate defects in concrete that may arise during construction and suggest remedial / repair methods. The consultant or agency may be a specialist consultant for concrete, with experience in designing high performance and high strength concrete for high rise pumping / infrastructure projects of high durability, well versed with various tests and the interpretation of the test results for durability and are capable of interacting with the structural consultant for the projects and address their concerns regarding various aspects of concrete.

The successful bidder/ Contractor shall follow the following instructions / suggestions of appointed technologist without assigning any reason thereof.

1. The Concrete technologist may alter or suggest change in Design mix submitted by the contractor, and contractor shall follow the same.
2. The contractor shall make necessary arrangement for visit of concrete technologist to RMC plant / NABL accredited Lab to check the quality of material or testing of samples as and when required.
3. The Concrete technologist may visit the Ready mix plant to check the quality of material used for the concrete mix. If the quality material including chemical, water used by the RMC unit is not as per standard noticed by the concrete technologist the same has to be removed/replaced with good quality material. In case if any person is required to be stationed at the RMC plant for monitoring, the same to be appointed by the contractor at no additional cost.
4. Any delay in making or re-arrangement for replacing sub-standard material may result further delay in pouring/pumping of concrete and it is purely at the risk and cost of contractor.
5. The concrete technologist may suggest to change the design mix from time to time depending on weather conditions and type of pouring, the contractor shall follow the same and complete the work.
6. The quality or make of Reinforcement steel shall be as per approved make, The technologist may suggest Lab test of material brought to site. Without acceptance of Lab test result/report the contractor shall not do cutting/bending and placing in position.
7. If the reinforcement steel bought to site and found failed in Lab test and not accepted by the technologist the same shall be removed from vicinity of site and same shall be moved out with proper documentation. The time in re-arranging new quality material, getting testing of these material may result in delay in completion of work, the contractor is solely responsible for it.
8. If the quality / workmanship of poured concrete is not accepted by the concrete technologist, the suggested field tests are to be carried out. To rectify the same the concrete technologist may suggested additional rehabilitation of concrete with epoxy/chemical material or may instruct to dismantle the poor concrete quality of work done, the contractor shall follow the instructions and re-do the work.

9. The Expert will also check the Method statement of the PT works and may supervise the installation and the execution of the same. Any suggestions given by the expert will have to be followed by the contractor at no extra cost.
10. The service of the Concrete / Steel / PT technologist is not a cost to the contractor. However the instructions / suggestions by the technologist has to be followed by the contractor at his own risk and cost, and since it may also require additional time to comply them, no time extension will be accepted to follow the instruction unless there is valid reason accepted by the concrete technologist.
11. The involvement of the Experts does not absolve the contractor from his responsibilities and the final responsibility of the structure still lies with the contractor.

36 **Housekeeping at Site :**

Daily & weekly cleaning schedule shall be strictly followed. Every weekend, the building, surroundings & the site as a whole shall be thoroughly clean. Dedicated adequate labor force shall be deployed to meet the cleaning schedule. Debris, etc. shall be disposed off from the site every weekend. Accumulation of debris shall not be allowed in any case.

If the contractor fails to comply with cleaning schedule, the employer shall make its own arrangement to dispose off the debris at the risk & cost of the contractor. The expenses incurred to the employer for dispose off the debris, etc. – shall be recovered from the outstanding payment of the contractor.

In this case the employer shall not be liable to give clarification / justification regarding amount of work, tools/plants/machine employed, reasonability of rates, etc. for the expenses incurred in disposing off the debris, etc. Minimum cost for disposing of one load of truck (no quantity specific in a load) of debris, etc. – including all tools & plants, labor, machinery, vehicle, etc. is Rs.30,000/-. In such a situation the EIC is not liable to inform the contractor in advance. Inform the contractor in advance about its intension to initiate its action about making its own arrangement to dispose off the debris.

37 **Initial and Final Clearance of Site :**

The Contractor shall be responsible for the clearance of the site of all scrub, debris, rubbish, wild tress, vegetation, etc. to be removed off site to allocation to be provided by the contractor and approved by the Engineer. The site will be handover as it whereas basis. The structures, services and works required to be demolished and removed shall be removed off site to a location as directed by EIC. The Contractor shall obtain necessary permission and approvals from local authorities for such disposals. The demolition shall include digging, excavating and removal of substructures, foundations and buried works. The cost of all this shall be borned by the Contractor.

38 **Cost of Laboratory & Field Test :**

The contractor shall conduct the laboratory & field test for all the building materials as per the frequency mentioned in the tender and as and when asked by EIC. This

includes load test, compaction test, etc. for foundation, plinth filling, road subgrade, etc. The cost of all those test shall be borne by the Contractor.

39 Transport facility to TMC for late working hours :

The contractor should provide well maintained transport facility for the TMC Engineers as detailed below:

- a) If the work extended beyond 07.00 pm drop till Kharghar railway station.
- b) If the work extended beyond 08.00 pm drop till his/her residence in Mumbai.

40 Holdup during construction for inspection/clearance by the regulatory authorities:

The contractor shall provide all onsite assistance to the Architect to get the plinth checked by CIDCO authorities & obtaining the Commencement Certificate (CC) for upper floors.

After completion of the plinth, the contractor may require to hold the progress of the works till CIDCO grant the CC for upper floors. The contractor should plan the works in such a way that during such holdup period the men & machinery are not idle and those may be used for any other work/s within or outside ACTREC campus. In such a case, TMC is not liable to pay any compensation of such idle men & machinery, remobilization, etc. as may be the case.

SECTION - VI

GREEN BUILDING CRITERIA & MEASURES

The criteria / measures mentioned hereafter is only indicative & for ready reference. The scope of contractor is not limited to these measures. During the construction the contractor is to comply with all the related norms laid by MOEF / MPCB & related Environmental Authorities.

All materials and systems used in the project are intended to maximize energy efficiency for operation of project throughout service life (substantial completion to ultimate disposition, reuse, recycling, or demolition) with an emphasis on top quality. Materials and systems are to maximize environmentally-benign construction techniques, including construction waste recycle, reusable delivery packaging, and reusability of selected materials. All vendors / contractors must adhere to best practices related to Green Buildings. Other than the general guidelines outlined here, all vendors/contractors will be furnished with a supplementary set of guidelines more specific to their nature of service/product. Nothing extra shall be paid for the same, unless specifically provided in any item.

11.1 Site planning

Conservation and efficient utilization of resources

Objective: To maximize the conservation and utilization of resources (land, water, natural habitat, avi fauna, and energy) conservation and enhance efficiency of the systems and operations.

Criteria 1 Site Selection:

Commitment: Site plan should be in conformity to the Development Plan/Master Plan/UDPFI guidelines (mandatory). Site should be located within ½ km radius of an existing or planned and funded bus stops, commuter rail, light rail or metro station or the proposed site is a brown field site (to rehabilitate damaged sites where development is complicated by environmental contamination, reducing pressure on undeveloped land).

Criteria 2 Preserve and protect the landscape during construction/compensatory depository forestation.

Commitment Proper timing of construction to minimize site disturbances like soil pollution due to spilling of construction material and its mixing with rain water, preserve top soil- specially done in areas where there is disturbance due to construction activity, a layer of 20 cm to be stripped and stockpiled to a height of 40cm and reapplied during plantation. The topsoil needs to be tested for fertility. Preserve existing vegetation – use of tree guards or fencing, staging and spill prevention – divide the construction area into zones for disturbed areas like construction activity and material storage and undisturbed areas. Spill prevention would include stopping source of spill, contain spill and disposal of contaminated and hazardous material like pesticides, paints, cleaners, petroleum products etc., and erosion and sedimentation control – construction of sediment basin at the lowest point. Replant, on- site, trees in the ratio 1:3 to those removed during construction (compensatory forestation).

Criteria 3 Soil conservation (till post-construction).

Commitment Proper top soil laying and stabilization of the soil and maintenance of adequate fertility of the soil to support vegetative growth.

Criteria 4 Design to include existing site features.

Commitment Minimize the disruption of natural ecosystem and design to harness maximum benefits of the prevailing micro-climate.

Criteria 5 reduce hard paving on-site and /or provide shaded hard- paved surfaces.
Commitment Minimize storm water run-off from site by reducing hard paving on site.

Criteria 6 Enhance outdoor lighting system efficiency.

Commitment Meet minimum allowable luminous efficacy (as per lamp type) and make progressive use of a renewable energy -based lighting system.

Criteria 7 Plan utilities efficiently and optimize on-site circulation efficiency. *Commitment* Minimize road and pedestrian walkway length by appropriate planning and provide aggregate corridors for utility lines.

Health and well being

Objectives To protect the health of construction workers and prevent pollution.

Criterion 8 Provide at least, the minimum level of sanitation/safety facilities for construction workers. *Commitment* Ensure cleanliness of workplace with regard to the disposal of waste and effluent, provide clean drinking water and latrines and urinals as per applicable standard. **The National Building Code 2005 needs to be followed for construction safety as well health and sanitation of the workers. Provide helmets, harnesses safety goggles etc. to the workers.**

Criterion 9 Reduce air pollution during construction.

Commitment Ensure proper screening, covering stockpiles, covering brick and loads of dusty materials, wheel-washing facility, and water spraying. Demarcate areas of activities, provision of dust screens on the perimeter, limit movement of vehicles to predefined areas, dust and pollution control plan, use of water as for spraying etc.

11.2 Building planning and construction stage

Conservation and efficient utilization of resources

Objective To maximize resource (water, energy, and materials) conservation and enhance efficiency of the system and operations.

Water

Criterion 10 Reduce landscape water requirement.

Commitment Landscape using native species and reduce lawn areas while enhancing the irrigation efficiency, reduction in water requirement for landscaping purposes.

Criterion 11 Reduce building water use.

Commitment Reduce building water use by applying low-flow fixtures, water efficient fixtures etc.

Criterion 12 Efficient water use during construction.

Commitment Use materials such as pre-mixed concrete for preventing loss during mixing. Use recycled treated water and control the waste of curing water. Moist curing (gunny bags) to be used.

Energy: end use

Criterion 13 Optimize building design to reduce the conventional energy demand.

Commitment Plan appropriately to reflect climate responsiveness, adopt an adequate comfort range, less air-conditioned areas, daylighting, avoid over-design of the lighting and air-conditioning systems.

Criterion 14 Optimize the energy performance of the building within specified comfort limits.

Commitment Ensure that energy consumption in building under a specified category is 10%–40% less than that benchmarked through a simulation exercise. Ensure that thermal comfort in non-air conditioned spaces are within specified limits.

Energy: embodied and construction

Criterion 15 Utilization of fly ash in the building structure.

Commitment Use of fly ash for RCC (reinforced cement concrete) structures with in-fill walls and load bearing structures, mortar, and binders.

For RCC - Minimum 30% or as approved by Engineer in Charge, replacement of cement with fly ash in PPC (by weight of cement used) in the overall RCC for meeting the equivalent strength requirement.

For building bricks for walls – minimum 40% or as approved by Engineer In Charge, of fly ash by volume of materials used in the total walling system.

For plaster / masonry – minimum 30% or as approved by Engineer in Charge, fly ash in place of cement by weight.

Criterion 16 Reduce volume, weight, and time of construction by adopting an efficient technology (e.g. pre-cast systems, ready-mix concrete, etc.). *Commitment* Replace a part of the energy-intensive materials with less energy-intensive materials and/or utilize regionally available materials, which use low-energy/energy-efficient technologies.

Criterion 17 Use low-energy material in the interiors. *Commitment* Minimum 70% in each of the three categories of interiors (internal partitions, paneling/false ceiling/interior wood finishes/ in-built furniture door/window frames, flooring) from low-energy materials/finishes to minimize the usage of wood.

Energy: renewable

Criterion 18 Renewable energy utilization. *Commitment* Mandatory provides renewable energy system with capacity equivalent to 1% of connected load for artificial lighting (internal as well as external) and space conditioning loads. Meet energy requirements for a minimum of 5% of the internal lighting load (for general lighting) or its equivalent from renewable energy sources (solar, wind, biomass, fuel cells, etc.). Energy requirements will be calculated based on realistic assumptions which will be subject to verification during appraisal.

Criterion 19 Renewable energy - based hot- water system. *Commitment* Meet 20% or more of the annual energy required for heating water through renewable energy

based water-heating systems.

Recycle, recharge, and reuse of water

Objective: To promote the recycle and reuse of water.

Criterion 20 Waste- water treatment Commitment Provide necessary treatment of water for achieving the desired concentration of effluents.

Criterion 21 Water recycle and reuse (including rainwater). *Commitment* Provide wastewater treatment on-site for achieving prescribed concentration, rainwater harvesting, reuse of treated waste water and rainwater for meeting the building's water and irrigation demand.

Waste management

Criterion 22

Commitment: To minimize waste generation, streamline waste segregation, storage, and disposal, and promote resource recovery from waste. Disposal of the construction as well as demolition waste to be appropriate. Segregate waste on site. Recycle the unused chemicals etc. Provision of storage on site with clearly marked areas. Salvage and recycle waste generated.

Criterion 23 Reduction in waste during construction.

Commitment Ensure maximum resource recovery and safe disposal of wastes generated during construction and reduce the burden on landfill.

Criterion 24 Efficient waste segregation.

Commitment Use different colored bins for collecting different categories of waste from the building.

Criterion 25 Storage and disposal of waste.

Commitment Allocate separate space for the collected waste before transferring it to the recycling/disposal stations.

Criterion 26 Resource recovery from waste.

Commitment Employ resource recovery systems for biodegradable waste as per the *Solid Waste Management and handling Rules, 2000 of the MoEF*. Make arrangements for recycling of waste through local dealers.

Health and well-being

Objective To ensure healthy indoor air quality, water quality, and noise levels, and reduce the global warming potential.

Use of low-VOC (volatile organic compounds) paints/ adhesives / sealants.

Commitment Use only low VOC paints in the interior of the building. Use water – based rather than solvent based sealants and adhesives.

Criterion 27 Minimize ozone depleting substances.

Commitment Employ 100% zero ODP (ozone depletion potential) insulation; HCFC (hydro chlorofluorocarbon)/ and CFC (chlorofluorocarbon) free HVAC and refrigeration equipments and/halon-free fire suppression and fire extinguishing systems.

Criterion 28 Ensure water quality.

Commitment Ensure groundwater and municipal water meet the water quality norms as prescribed in the Indian Standards for various applications (*Indian Standards for drinking [IS 10500-1991], irrigation applications [IS 11624-1986]*). In case the water quality cannot be ensured, provide necessary treatment of raw water for achieving the desired concentration for various applications.

Criterion 29 Acceptable outdoor and indoor noise levels.

Commitment Ensure outdoor noise level conforms to the Central Pollution Control Board–Environmental Standards–Noise (ambient standards) and indoor noise level conforms to the *National Building Code of India, 2005, Bureau of Indian Standards, Part 8–Building Services; Section 4–Acoustics, sound insulation, and noise control.*

Criterion 30 Tobacco and smoke control.

Zero exposure to tobacco smoke for non-smokers, and exclusive ventilation for smoking rooms.

Criterion 31 Universal accessibility

Commitment:

To ensure accessibility and usability of the building and its facilities by employees, visitors and clients with disabilities

11.3 Building operation and maintenance

Objective Validate and maintain ‘green’ performance levels/adopt and propagate green practices and concepts.

Criterion 32 Energy audit and validation.

Commitment Energy audit report to be prepared by approved auditors of the Bureau

of Energy Efficiency, Government of India.

Criterion 33 Operation and maintenance protocol for electrical and mechanical equipment. *Commitment* Ensure the inclusion of a specific clause in the contract document for the commissioning of all electrical and mechanical systems to be maintained by the owner, supplier, or operator. Provide a core facility/service management group, if applicable, which will be responsible for the operation and maintenance of the building and the electrical and mechanical systems after the commissioning. Owner/ builder/ occupants/ service or facility management group to prepare a fully documented operations and maintenance manual, CD, multimedia or an information brochure listing the best practices/do's and don'ts/maintenance requirements for the building and the electrical and mechanical systems along with the names and addresses of the manufacturers/suppliers of the respective system.

SCC 11.3 Innovation

Criterion 34 Innovation points.

Four innovation points are available under the rating system for adopting criteria which enhance the green intent of a project, and the applicant can apply for the bonus points some of the probable points, not restricted to the ones enumerated below, could be

- 1 Alternative transportation
- 2 Environmental education
- 3 Company policy on green supply chain
- 4 Life cycle cost analysis
- 5 Any other criteria proposed by applicant

11.4 GREEN BUILDING MEASURES

LIST OF MEASURES TO BE TAKEN BY CONTRACTOR DURING THE ENTIRE PERIOD OF CONSTRUCTION PROCESS TO ACHIEVE THE DESIRED RATING IN LINE WITH GREEN BUILDING (GRIHA) CRITERIONS.

TENDERERS ARE REQUESTED TO STUDY ALL THESE REQUIREMENTS GIVEN BELOW VERY CARE FULLY AND THE SAME TO BE IMPLEMENTED DURING THE ENTIRE TIME OF CONSTRUCTION PERIOD TO THE SATISFACTION OF GREEN CONSULTANTS /USER. NECESSARY DOCUMENTATIONS TO BE PREPARED TO SHOW THE PROOF OF EVIDENCES FOR SUCH CRITERIONS FOLLOWED AT SITE. DOCUMENTATIONS MAY BE OFF PHOTOS, VIDEO CLIPPINGS, AND CERTIFICATES ETC.

THERE WILL BE NO ADDITIONAL COST WILL BE PAID ON ACCOUNT OF THIS AND IT SHOULD BE CONSIDERED IN THE QUOTED RATE OF ALL ITEMS ITSELF

1 Erosion and sedimentation (criterion 3)

An erosion and sedimentation plan needs to be developed to prevent loss of soil during construction by storm water runoff & wind erosion, prevent sedimentation of storm sewer and polluting the air with dust and particulate matter. Top soil has to be removed carefully and stacked for reuse later in the site. Additional measures such as temporary seeding, permanent seeding, mulching, site fencing, sedimentation traps etc. can be taken to ensure control of erosion due to wind and storm water runoff. The Principal Civil contractor shall undertake these measures during the construction stage. Photographs of various measures implemented at the site need to be taken by the civil contractor. It is the responsibility of the contractor to ensure that at all times during excavation and construction these measures are strictly followed. Sample enclosed.

a) Preservation of existing vegetation : Principal Civil contractor needs to ensure that they do not disturb vegetation & earthwork 40 ft. beyond the building perimeter, 5 feet beyond primary roadway curbs, walkways and main utility branch trenches & 25 ft. beyond pervious paving areas, storm water retention facilities etc. Barricading needs to be done along this 40 feet line beyond the building perimeter and it needs to be ensured that no earth beyond this barricade is disturbed: This means that no construction activity can be done outside this 40 feet line including material storage, location of sheds, concrete mixing etc. Again, photographs have to be taken at each stage during construction to ensure all earth and vegetation beyond this 40ft line is kept intact and site disturbance is reduced.

b) Storm water management during construction: Principal Civil contractor needs to take measures to ensure that the storm water runoff during construction does not exceed the runoff before construction. To this effect there is need to provide rain water recharge pits right around the periphery of the site & have rain water harvesting wells to capture rain water and then filter all suspended solids and other materials before recharge into the earth. The details shall be provided by the consultants and executed at site by civil contract.

c) Construction waste management: Principal Civil contractor while construction has to ensure that the hazardous and inert wastages generated during construction, demolition and land clearing is segregated carefully and kept in multicolored bins at a safe and hygienic place within the premises and easy accessible to approach roads. Principal Civil contractor to keep track of total waste generated at site and either use it on-site for other purposes or resell it some agency outside. A table with the total waste generated in tons or kgs for construction waste including scrap steel, concrete debris, cement and mortar waste, empty paint containers, empty cement bags etc. needs to be maintained along with details on What was done with the waste – whether it was resold to scrap agents, reused within our own site for filling or other purposes. Sample templates enclosed. This template needs to be filled on a weekly / fortnightly basis based on site work and updated until completion of project.

d)Utilization of recycled materials and Regional Materials: As per Green building requirements it is recommended to use materials with good recycle content such as cement with fly ash, glass etc. and materials manufactured

locally/regionally (within 800 kms of project site). The specifications for these materials will be included into tender documents, however it is the responsibility of the contractor to coordinate with respective agencies / manufacturers and get letters confirming the recycled content and distance from manufacturing locations to project site.

e) Construction management plan: While construction various measures have to be taken for storage of materials, housekeeping at site, safety measures for labors and isolation of constructed/finished areas from areas under construction dust control etc. Specifically the following needs to be adhered to and done by contractor at site:

- i) **Source/control:** Specify finish materials such as paints, carpet, composite wood, adhesives, and sealants that have low toxicity levels, or none at all. The Management Plan should specify the control measures for materials containing VOCs. Recover, isolate and ventilate containers housing toxic materials. Also, avoid exhaust fumes from idling vehicles and gasoline fueled tools.
- ii) **Pathway Interruption:** During construction, isolate areas of work to prevent contamination of clean or occupied spaces. Depending on the weather conditions, ventilate using 100% outside air to exhaust contaminated air directly to the outside during installation of VOC-emitting materials. Depressurize the work area allowing the air pressure differential between construction and clean areas to contain dust and odors. Provide temporary barriers that contain the construction area.
- iii) **Housekeeping:** Institute cleaning activities designed to control contaminants in building spaces during construction and prior to occupancy. Porous building materials should be protected from exposure to moisture and stored in a clean area prior to installation. Some other strategies are using vacuum cleaners with high efficiency particulate filters, increasing the cleaning frequency and utilizing wetting agents for dust.
- iv) **Scheduling:** Coordinate construction activities to minimize or eliminate disruption of operations in the occupied portions of the building. Construction activities over the duration of the project should be sequenced carefully to minimize the impact on the indoor air quality. It may be necessary to conduct activities with high pollution potential during off-hours, such as on the weekends or in the evenings to allow time for new materials to air out. Plan adequate time to complete work so flush-out and test procedures can be completed prior to occupancy. Upon completion of construction, replace all filtration media immediately prior to occupancy.

f) Top soil preservation

Measures for development and stabilization of the site before construction to be taken up during the dry season.

Removal of topsoil and stacking the same. The top soil (top 20cms) rich in high organic content to be stripped and stacked at suitable location in the site. It shall be reapplied to the site for re-vegetation after construction is complete.

Fabric fences to be constructed around the area of stock piling to reduce wind caused soil erosion and trap sediments. Temporary seeding/mulching

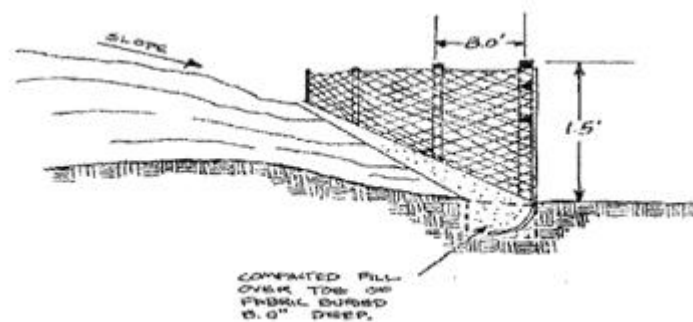
techniques to be employed to stabilize stockpiles of topsoil on the site. Mulching of identified areas can be carried out using gravel during construction.

Native species of plants can be planted to stabilize runoff areas which are free of construction activity.

For water erosion, temporary seeding using sedimentation fence ground disturbance of the site is confined to areas where structures, roads and landscape will continue after construction is complete. These areas were physically demarcated with signs, barriers and tapes to ensure only necessary land area is cleared and soil in other areas is undisturbed. Development activities and equipment movement are also restricted to demarcated areas. Further, these areas were mulched with gravel to prevent erosion. The remaining areas were temporarily sodded with local grasses to protect the soil.

g) Construction specifications:

Construct Sediment fence on low side of topsoil stockpile to prevent sediment from being washed into the drainage system. Fence to extend around approximately 70% of the perimeter of the stockpile. Alternatively sediment basins can be constructed by locating posts down slope of fabric to help support fencing.



b) Sediment Basin

A sediment basin will be constructed in the suitable location of the property. All water from disturbed areas will be directed to the basin before leaving the site. The intent is to ensure no soil leaves the site in case of water run-off.

c) Soak Pits and Wells

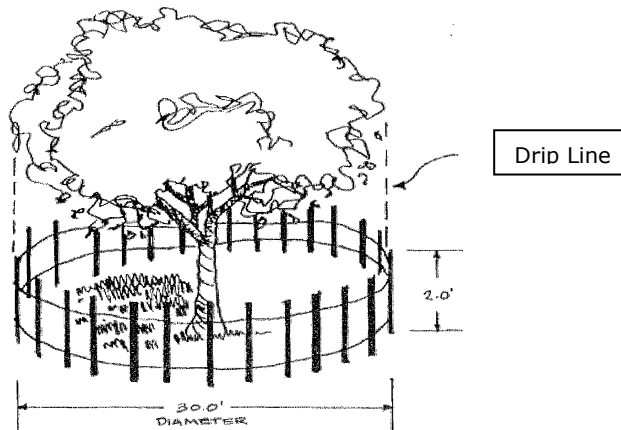
Soak pits and wells would be constructed along the perimeter of the site. The rainwater runoff from rooftop and hard areas is being collected into closed pipe drain and through a sedimentation chamber discharge into rainwater discharge pit. The suspended matter gets collected in sedimentation chambers, which need to be cleaned periodically as needed.

j) Temporary Diversions

Temporary diversions shall be constructed as required to prevent surface runoff from eroding sediment banks. (NOTE: Sediment-free water may be diverted away from the project sediment basin.) This temporary diversion will outlet to the temporary inlet protection device at the construction entrance as the fill elevation increases.

k) Tree Preservation and Protection

A minimum 2.0 ft. high protective fence will be erected around the large tree at the drip line to prevent damage during construction. Sediment fence materials may be used for this purpose.



NOTE:

- SEDIMENT FENCE MATERIAL MAY BE USED TO BUILD FENCE.
- DRIVE STAKES FIRMLY INTO GROUND-AT LEAST 12"

l) SEQUENCE OF IMPLEMENTATION

Development and stabilization measures needed before construction:

These measures have been taken up during the dry season. The following activities were carried out on site during this period of the year when erosion potential is relatively low before commencement of construction activities.

- Marking of areas to be disturbed during construction activity, stockpiling areas and areas for construction activity.
- Clearing removal and stock piling of topsoil.
- Barricading
 - To protect area of stock piled topsoil from wind erosion.
 - To protect areas identified for non-construction activity.

1. Development and stabilization measures during construction

- Sodding of areas identified for non-construction activity, staging etc.
- Protecting topsoil with mulching/temporary seeding as described.

2. Development and stabilization measures post-construction

After the landscape and building civil work is completed the following measures will be taken for stabilization in the following sequence:

- Grading and development around the building including drains, soak pits, and sub-surface drainage over basement slab.
- Planting of all trees, shrubs, and ground covers etc. within 15 days of finishing grading works.
- Laying of gravel much in areas as required by design.
- Final connection to the water harvesting pits will be done.
- The filtration systems, filtration structures and sand filters will be installed only after construction has been completed and the site has been permanently stabilized.

3. Operation and maintenance

Proper operation and maintenance of facilities is necessary for their effective use. The following measures will be followed:

- Inspection of soak pits and rain wells after every major storm for the first few months after construction. Annual inspection of the soak pits and rain water harvesting pits before the onset of the monsoon season.
- Periodic removal and replacement of filter media from trench drains and sand filter.
- Quarterly cleanouts and removal of debris from catch basins, drainage inlets and outlets.
- Periodic removal and disposal of accumulated sediments. Sediments in infiltration devices will be removed frequently enough to prevent premature failure of systems developed on site due to clogging.

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Proposed Construction of “**Shantilal Shanghvi Paediatric Haematolymphoid Cancer Centre**” At ACTREC,
Kharghar, Navi Mumbai

S.No	Description	Source of Waste Generation	Total Wastage Generated	Total Qty of waste Diverted within site/(in-diverted)	Explanation for Waste diverted	Total Qty of Waste Diverted for use Outside the	Explanation for Waste diverted
1							
2							
3							
4							
5							
6							

SECTION - VII

PROFORMA OF SCHEDULES

SCHEDULE 'A' :			
SN	TITLE	PARTICULARS	PAGE
1	<i>Tender Notice No.</i>	NIT No. TMC/ACTREC/ENGG/SSPCC/PT-14/2020 Dated. 28-08-2020	
2	Notice Inviting Tender (NIT) details	<i>i) NIT as uploaded on Web Site</i>	
		<i>ii) NIT as published in News Papers</i>	
3	<i>Scope and location of the work:</i>	<i>As per Tender</i>	
4	<i>Time Schedule for the work:</i>	<i>As per Tender</i>	
5	<i>List of drawings</i>	<i>As per Tender</i>	
6	<i>List of changes in conditions of contract</i>	<i>NA</i>	
7	<i>List of changes in specifications</i>	<i>As shown below</i>	
	<i>a. Civil work</i>	<i>NA</i>	
8	Schedule of Quantities	Please refer Financial Bid	

SCHEDULE 'B' :		Not Applicable		
Schedule of materials to be issued to the contractor				
S. No	Description of item	Quantity	Rates at which the Materials will be charged to the contractor	Place of issue
1	2	3	4	5
1.	Cement in bags	Nil	NA	NA
2.	Re-Bars for RCC	Nil	NA	NA
3.	Water for construction. Purpose	Nil	NA	NA

4.	Electricity for const. purpose	<i>Nil</i>	NA	NA
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SCHEDULE ‘C’ :		Land earmarked for temp. infrastructures and Tools & plants to be hired to the contractor	
S.No	Description	Hire charges	Place of issue
1	2	3	4
1.	Area for storage / site office	As per SCC	Site premises
2.	Temporary Buildings	As per SCC	Site premises
3.	Labor hutments	<p>Permission for Labour hutment / colony is solely at discretion of Director TMC, and may be denied permission without assigning any reason: If Permission not granted for Labour hutment, the contractor has to make his own arrangement outside campus with proper approval from local statutory agency at his risk and cost and safety.</p> <p>Labor hutment permitted at site subject to following terms and conditions,</p> <p>i) Contractor shall submit number of labourers along with postal address proposed to be deployed at site.</p> <p>ii) The contractor shall submit detailed layout plan of labor camp showing number of huts including, provision of water, Electricity and drainage details etc. for prior approval of the Engineer in Charge.</p> <p>iii) The contractor to follow strictly relevant labor welfare measures and other labor laws in force and imposed from time to time.</p> <p>iv) The labor staying inside shall be issued Identity cards by the contractor.</p> <p>v) In case of imposition of security regulation or due to any security requirement the labourers shall vacate the labor huts with immediate effect. The contractor shall arrange his own labor huts outside the campus without disrupting progress of work.</p> <p>vi) The contractor shall demolish the huts including drainage etc. & clean the site after</p>	

		<p>completion of work. The debris shall be disposed to the nearest dumping area by mechanical transport at his own cost.</p> <p>vii) The contractor will be responsible for police verification of the staff & the labors.</p> <p>viii) Only bonafide labors will be allowed to stay in the labor camp. Making & drinking of alcohol is not permitted in the campus. Subject to proper sanitation arrangements and barracking the entire camp with 3 meter height GI sheets with round the clock guards deployed.</p>
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SCHEDULE ‘D’

Extra schedule for specific requirements / documents for the work, if any
Particularly for Security guidelines, Gate pass, lift, tower crane etc.

SCC

SCHEDULE ‘E’ :

Name of Work : Construction of Hematolymphoid “**Shantilal Shanghvi Paediatric Haematolymphoid Cancer Centre**” & Utility building at ACTREC, Kharghar, Navi Mumbai

As per NIT

Estimated cost of work :

Rs. _____

As per NIT

i) Earnest money

Rs. _____

As per NIT

ii) Performance Guarantee

5% of tendered value

As per Tender

iii) Security Deposit

2.5% of tendered value

As per Tender

SCHEDULE ‘F’ :

General Rules & Directions :

Tender inviting authority :

Director , TMC

Maximum percentage for quantity of items of work to be executed beyond

As per clause 12

which rates are to be determined in accordance with Clauses 12.2 & 12.3.	below
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Definitions :

2(v)	Engineer-in-charge	<i>Officer-in-Charge or as nominated by Director, TMC</i>
2(viii)	Accepting Authority	Director, TMC
2(x)	Percentage on cost of materials and labor to cover all overheads & profits	15% (Fifteen percent)
2(xii)	Department	TMC
9(ii)	Standard Contract Form of Dep't.	<i>Item Rate Tender</i>

Clause – 1

i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance / LOI	15 days
ii) Maximum allowable extension beyond the period (provided in – i) above with late fee @ 0.1% per day, of performance guarantee amount.	7 days

Clause – 2

Authority for fixing compensation under clause 2.	Director, TMC
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Clause – 5

Number of days from the date of issue of WO for reckoning date of start.	15 days
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Mile stone(s) as per table given below:

TABLE OF MILE STONE(S)

Sl. No.	Description of Milestone (Physical)	Time in Days from date of start of project	Amount to be with-held in case of non-achievement of milestone
1.	Completion of plinth	60 Days	Recovery of 10.00 lacs for each mile stone missed will be deducted from Current RA Bill and same will be released after completion of Milestone in next RA Bill.
2	Completion of 1 st Floor Slab	90 Days	
3	Completion of 7 th Floor Slab	215 Days	
4	Masonry works upto 7 th Floor	270 Days	
5	Internal Plaster upto 7 th Floor	300 Days	
6	External Plaster upto 7 th Floor	330 Days	
7	Remaining slab above 7 th Floor to Terrace / LMR / OH Tanks etc	415 Days	
8	Masonry works above 7 th Floor to Terrace / LMR / OH Tanks etc	450 days	
9	Internal Plaster above 7 th Floor to Terrace / LMR	480 Days	

	/ OH Tanks etc		
10	External Plaster above 7 th Floor to Terrace / LMR / OH Tanks etc	510 Days	

Clause applicable – (6 or 6A):	Clause 6 for Manual Billing or Clause 6A for Computerized Billing	6A
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Clause – 7:	Gross work to be done together with net payment / adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment.	Billing Cycle will be Montly Basis
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Clause – 10A:	List of testing equipments to be provided by the contractor at site lab	
1. Cube Moulds – 72 Nos. or as required	2. Slump Cones -5No.	3. Micrometer Screw 25mm gauge-5 No
4. Steel tapes – 3m & 30m 5 Nos. each	5. Vernier calipers -10Nos.	6. Pycnometer-2 sets
7. Lab balance-5 kg , 2 Kg 1 Kg – 2 sets	8. I. S. Sieves- for coarse aggregates and fine aggregates – 2 set	9 Glass Flasks and metal container –As required
10 .A Good quality Plumb Bob – 10 Nos.	11. Sprit Level Minimum 30 cm long with 3 bubbles for horizontal vertical- 5 Nos.	12. Wire gauge (Circular Type) Disc.-5 Nos.
13. Foot Rule.- 5 Nos.	14. Long Nylon thread – As required	15. Dynamic penetrometer – 1 set
16. Magnifying Glass- As required	17. Screw driver 30CM Long- As required	18. Ball Pin hammer -100gm -1 set
19. Plastic bags for samples- As required	20. Thermometer – 2 Nos.	21. Cube testing machine- 1 set
22. Moisture meter for timber-1set	23. Rebound hammer for testing concrete -1set	24. Proctor needle- 1 set (for proctor density test)
25. Electrical Kits- 1 set	26. Smoke test kits- 1 set	27. Total Station
28. Megger (for elect. works)-2 sets	29. Electric Oven with thermostat-2 sets	30. Earth Resistance Test (For Electrical Works- 1 set
31. Misc. equipment: As required on site.		

Clause – 10B (ii) :	(Mobilization Advance)	
Whether Clause 10 B (ii) shall be applicable (If yes, Clause of Tender Condition to be followed along with following terms & conditions)		Yes
Mobilization advance on a specific request shall be considered for sanction to a maximum of 10% of		

the quoted amount on the following terms and conditions:

- a) The advance shall be released in two equal installments but not later than 3 months of 1st installment against Bank Guarantees (110%) from Scheduled Bank valid for the contract period. This shall be kept renewed time to time to cover the balance amount and likely period to complete recovery together with interest.
- b) Rate of interest on advance shall be simple interest @ 10% per annum. The interest on the advance shall be calculated from the date of payment to the day of recovery both days inclusive.
- c) It shall be ensured that at any point of time, Bank Guarantee is available for the amount of outstanding advances.
- d) The recovery should be commenced after 10 % of work is completed and the entire amount together with interest shall be recovered by the time 80 % of the work is completed.

Clause – 10C:	Component of labor expressed as percent of value of the work	DELETED
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Clause – 10CA: NOT APPLICABLE

S. No	Materials Covered under this Clause	Nearest Materials for which All India Wholesale Price Index is to be followed	Basic Rate
1	Cement	Grey Cement	NA
2	Steel reinforcement bars	Steel (Rebar's)	NA
3	Structural steel		NA

***Important Note: Base price for materials given above are only for regulating operation of clause 10-CA. The tenderers are requested to consider prevailing market rates while quoting the rates.**

Clause – 10CC:: DELETED

Clause 10 CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column:	12 months
Schedule of component of Cement, Steel, other Materials, Labor, and POL etc. for price escalation:	<i>These components shall be as under</i>

CLAUSE 10-CC:

1	Component of Cement—expressed as percent of total value of work	Xc	07%
2	Component of Steel—expressed as percent of total value of work	Xs	13%
3	Component of civil (except Grey cement & Rebar's) / Electrical/ Mechanical construction Materials—expressed as percent of total value of work:	Xm	55%
4	Component of Labor—expressed as percent of total value of work	Y	25%

5	Component of P.O.L. — expressed as percent of total value of work	Z	<i>Nil</i>
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Clause – 11:

Specifications to be followed for execution of this work

a) Civil Works – Enclosed

Clause – 12: DE

12.2 & 12.3	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for Building works	30%
12.5	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work	100%
12.5	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for maintenance work	50 %

Clause – 16:

Competent Authority for deciding reduced rates :

**Officer-in-charge,
authorized by Director
TMC**

Clause – 18:

List of mandatory machinery, tools & plants to be deployed by the contractor at site: *(To be decided based on nature and magnitude of the work).*

1. Concrete mixer– 1 Nos.	2. Mortar mixing trough-12Nos	3. Needle vibrators- 12Nos
4. Tower crane-1 Nos.	5. Hoist -2Nos.	6. Polishing Machine-4 Nos.
7. Pump sets–5 Nos (suitable HP)	8. Mechanical Rammer-5 Nos.	9. Tipper/Dumper- 2Nos.
10. JCB / Poclain – 1Nos.	11. Centering &Shuttering Material:- 5000 Sqm	
12. Misc. machineries, tools &plants - as required		

Note: The list of machinery, tools & plants to be deployed by the contractor at site are minimum. The contractor shall deploy additional machinery, tool & plants in order to maintain the progress of the work without any extra cost to the department.

Clause – 36(i):

Requirement of Technical Representative(s) & recovery Rate

Sl. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical / Technical representative)	Min. Exp. In yrs.	No .	Rate per month per person at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36(i).
1	Graduate Engineer	Civil	Project Manager	20	1	Rs.60,000.00 per Month per Person

2.	Graduate / Diploma Engineer	Civil/ Elect/ Mech	Dy. Project Manager	12/15	1	Rs.40,000.00 per Month per Person
3.	Graduate Engineer/ Diploma	Civil/ Elect/ Mech	Site Engineer	5/10	5	Rs.25,000.00 per Month per Person
4	Graduate Engineer/ Diploma	Civil/ Elect/ Mech	Quality Engineer	8/12	2	Rs.25,000.00 per Month per Person
5	Diploma	Civil/ Elect/ Mech	Surveyor	8	1	Rs.15,000.00 per Month per Person
6	Graduate Engineer/ Diploma	Civil/ Elect/ Mech	Planning /Billing Engineer	6/10	1	Rs.20,000.00 per Month per Person
7	Safety Officer/Supervisor	-	Safety Engineer	5/10	1	Rs.25,000.00 per Month per Person

Note: i) The Project Manager and Dy. Project Manager should have experience of at least one similar nature of work. Assistant Engineers / Scientific Officer- “C” & above, retired from Govt. services that are holding Diploma, will be treated at par with Graduate Engineers.

ii) The contractor to deploy adequate Nos. of technicians, foreman, supervisors, safety officer, labor welfare officer, storekeeper & office staff till completion of works.

iii) The contractor to submit deployment schedule of all the above mentioned staff before commencement of the work to the Engineer in Charge.

Clause –42:		
(i)	(a) Schedule/statement for determining theoretical quantity of cement on the basis of :	Civil works specifications for TMC
(ii)	Variations permissible on theoretical quantities.	
A	Cement	
	i) for works with estimated cost put to tender not more than Rs.5 Lakhs	5% plus / minus
	ii) for works with estimated cost put to tender more than Rs.5 Lakhs	3% plus / minus
b	Bitumen for All works	2.5% plus only & nil on minus side
c	Steel reinforcement and structural steel sections	(+) 5% for wastage, over & above (+) 5% / (-) 4% being variation in wastage.

D	All other materials.	Nil
RECOVERY RATES		
S. No.	Description of Item	Rates in figures & words at which recovery shall be made from the Contractor
		Excess wastage beyond permissible limit
		Less use Beyond permissible Limit
1	Cement	<i>Nil</i>
2	Steel reinforcement	<i>Nil</i>
3	Structural Sections	<i>Nil</i>

SECTION - VIII

TENDER DRAWINGS

NAME OF PROJECT : Construction of “Shantilal Shanghvi Pediatric Hematolymphoid Cancer Centre” at ACTREC Kharghar, NAVI MUMBAI			
SR. NO.	DRAWING NAME	Drawing No,	Status
List of Architectural Drawing			
1	SSPCC_MASTER_PLAN	SSPCC_001	For Tender
2	WRKN SSPCC ENTIRE PROJECT LOCATION PLAN	SSPCC_001A	For Tender
2	WRKN GROUND FLOOR BRICKWORK DETAIL PLAN	SSPCC_002	For Tender
3	WRKN FIRST FLOOR BRICKWORK DETAIL PLAN	SSPCC_003	For Tender
4	WRKN SECOND FLOOR BRICKWORK DETAIL PLAN	SSPCC_004	For Tender
5	WRKN THIRD FLOOR BRICKWORK DETAIL PLAN	SSPCC_005	For Tender
6	WRKN FOURTH FLOOR BRICKWORK DETAIL PLAN	SSPCC_006	For Tender
7	WRKN FIFTH FLOOR BRICKWORK DETAIL PLAN	SSPCC_007	For Tender
8	WRKN SIXTH FLOOR BRICKWORK DETAIL PLAN	SSPCC_008	For Tender
9	WRKN SEVENTH FLOOR BRICKWORK DETAIL PLAN	SSPCC_009	For Tender
10	WRKN EIGHTH FLOOR BRICKWORK DETAIL PLAN	SSPCC_010	For Tender
11	WRKN NINTH FLOOR BRICKWORK DETAIL PLAN	SSPCC_011	For Tender
12	WRKN TENTH FLOOR BRICKWORK DETAIL PLAN	SSPCC_012	For Tender
13	WRKN ELEVENTH FLOOR BRICKWORK DETAIL PLAN	SSPCC_013	For Tender
12	WRKN TWELFTH FLOOR BRICKWORK DETAIL PLAN	SSPCC_014	For Tender
13	WRKN THIRTEENTH FLOOR BRICKWORK DETAIL PLAN	SSPCC_015	For Tender
14	WRKN FOURTEENTH FLOOR BRICKWORK DETAIL PLAN	SSPCC_015/1	For Tender
10	WRKN TERRACE FLOOR BRICKWORK DETAIL PLAN	SSPCC_016	For Tender

NAME OF PROJECT : Construction of “Shantilal Shanghvi Pediatric Hematolymphoid Cancer Centre” at ACTREC Kharghar, NAVI MUMBAI			
SR. NO.	DRAWING NAME	Drawing No,	Status
11	DELETED		
12	DELETED		
13	FRONT_ELEVATION	SSPCC_013/1	For Tender
14	REAR_ELEVATION	SSPCC_014/1	For Tender
15	SIDE_ELEVATION	SSPCC_021	For Tender
16	3D_NORTHEAST_VIEW	SSPCC_022	For Tender
17	SECTION 1-1’	SSPCC_017	For Tender
18	SECTION 2-2’	SSPCC_017/1	For Tender
19	3D_SOUTHEAST_VIEW	SSPCC_023	For Tender
20	3D_NORTHWEST_VIEW	SSPCC_024	For Tender
21	3D_VIEW_FRONT_ELEVATION	SSPCC_025	For Tender
22	3D_VIEW_REAR_ELEVATION	SSPCC_026	For Tender
23	3D_VIEW_SIDE_ELEVATION	SSPCC_027	For Tender
24	DELETED		
25	DELETED		
26	CONNECTION_CORRIDOR_DETAILS	SSPCC_001/1	For Tender
27	WRKN SSPCC_UGWT_LOCATION & DETAILS	SSPCC_029	For Tender
28	WRKN_STAIRCASE_RAILING_DETAILS	SSPCC_031A	For Tender
29	WRKN_STAIRCASE_RAILING_DETAILS_2	SSPCC_031B	For Tender
30	WRKN_STAIRCASE_RAILING_DETAILS_3	SSPCC_031C	For Tender
31	WRKN_SSPCC_DOUBLE HEIGHT_RAILING_DETAILS	SSPCC_032	For Tender
32	DELETED		
33	DELETED		
34	DELETED		
List of Interior Drawing			
35	DELETED		
36	DELETED		
37	TOILET LAYOUT DETAILS-01	SSPCC_030A	For Tender
38	TOILET LAYOUT DETAILS-02	SSPCC_030B	For Tender
39	TOILET LAYOUT DETAILS-03	SSPCC_030C	For Tender

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SR. NO.	DRAWING NAME	Drawing No,	Status
40	TOILET LAYOUT DETAILS-04	SSPCC_030D	For Tender
41	TOILET LAYOUT DETAILS-05	SSPCC_030E	For Tender
42	TOILET LAYOUT DETAILS-06	SSPCC_030F	For Tender
43	TOILET LAYOUT DETAILS-07	SSPCC_030G	For Tender
44	TOILET LAYOUT DETAILS-08	SSPCC_030H	For Tender
45	TOILET LAYOUT DETAILS-09	SSPCC_030I	For Tender
46	TOILET LAYOUT DETAILS-010	SSPCC_030J	For Tender
List of Structural Drawing			
47	1 ST FLOOR TENDON LAYOUT	181472/T/1-P1	For Tender
48	4 TH FLOOR TENDON LAYOUT	181472/SD/4-P1	For Tender
49	TERRACE FLOOR TENDON LAYOUT	181472/SD/TE-P1	For Tender
50	GENERAL DRAWING -1	GEN-01	For Tender
51	GENERAL DRAWING -2	GEN-02	For Tender
52	GENERAL DRAWING -3	GEN-03	For Tender
53	GENERAL DRAWING -4	GEN-04	For Tender
54	FOUNDATION LAYOUT & COLUMN LINKS DETAILS	T-201	For Tender
55	PART PLAN AT STAIRCASE & LIFT	T117	For Tender
56	UG_TANK LAYOUT AND DETAILS	T118	For Tender
57	LAYOUT AT GROUND FLOOR	T101	For Tender
58	LAYOUT AT FIRST FLOOR	T102	For Tender
59	LAYOUT AT SECOND FLOOR	T103	For Tender
60	LAYOUT AT THIRD FLOOR	T104	For Tender
61	LAYOUT AT FOURTH FLOOR	T105	For Tender
62	LAYOUT AT FIFTH FLOOR	T106	For Tender
63	LAYOUT AT SIXTH FLOOR	T107	For Tender
64	LAYOUT AT SEVENTH FLOOR	T108	For Tender
65	LAYOUT AT EIGHTH FLOOR	T109	For Tender
66	LAYOUT AT NINTH FLOOR	T110	For Tender
67	LAYOUT AT TENTH FLOOR	T111	For Tender

NAME OF PROJECT : Construction of “Shantilal Shanghvi Pediatric Hematolymphoid Cancer Centre” at ACTREC Kharghar, NAVI MUMBAI			
SR. NO.	DRAWING NAME	Drawing No,	Status
68	LAYOUT AT ELEVENTH FLOOR	T112	For Tender
69	LAYOUT AT TWELFTH FLOOR	T113	For Tender
70	LAYOUT AT THIRTEENTH FLOOR	T114	For Tender
71	LAYOUT AT FOURTEENTH FLOOR	T115	For Tender
72	LAYOUT AT TERRACE FLOOR	T116	For Tender
73	TYPICAL FLOOR TENDON LAYOUT	T121	For Tender
74	DELETED		
75	TYPICAL STAIRCASE DETAILS	T119	For Tender
Utility Building			
76	FOUNDATION LAYOUT	T201	For Tender
77	GROUND FLOOR LAYOUT	UT-101	For Tender
78	TERRACE FLOOR LAYOUT	UT-102	For Tender
79	DELETED		
80	TYPICAL STAIRCASE DETAILS	UT-102/1	For Tender
Road works and Cross Drainage works			
81	DELETED		
82	TYPICAL ROAD CROSSING AND DRAIN DETAILS	T120	For Tender
83	DELETED		

Proposed Construction of **“Shantilal Shanghvi Paediatric Haematolymphoid Cancer Centre”** At ACTREC,
Kharghar, Navi Mumbai