

MILITARY ENGINEER SERVICES**REPAIRS TO DRAINAGE, FENCING, PATH AND MISC WORKS AT ARTY CENTRE,
UNDER GE GOLCONDA.**

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SIGNATURE OF THE CONTRACTOR**Offg.AGE (CONTRACTS)
FOR ACCEPTING OFFICER****DATED:**

Telephone: 23513341
 Email id: golcon4-mes@nic.in

REGD POST WITH ACK DUE
 Garrison Engineer, Golconda,
 Hyderabad-500 008

8365/ /E8

Nov 2018

**REPAIRS TO DRAINAGE, FENCING, PATH AND MISC WORKS AT ARTY CENTRE,
 UNDER GE GOLCONDA.**

Dear Sir,

1. Tender documents in respect of above work are uploaded on the site www.eprocuremes.gov.in. The tender is on **Single stage Two cover e tendering system**. The contents of Cover I & Cover II are specified in NOTICE OF TENDER.
2. Bids will be received online by **GARRISON ENGINEER GOLCONDA**

(a) Bid submission start date	08 Dec 2018
(b) Last date of submission	15 Dec 2018
(c) Date of bid opening	17 Dec 2018

as mentioned in the NOTICE INVITING TENDER (NIT). No tender/bid will be received in physical form and any tender/bid received in such manner will be treated as non-bonafide tender/bid.

3. Bid will be opened on due date and time fixed for opening in the presence of tenderers/bidders or their authorized representatives, who have uploaded their quotation bid and who wish to be present at the time of opening the bids.
4. Your attention is also drawn to instruction on filling and submission of tender attached herewith. You may forward your points on tender documents and/or depute your technical representative for discussion on tender/drawings and to clarify doubts, if any, on or before **08 Dec 2018**. You are requested not to write piece meal points and forward your points duly consolidated before due date viz **08 Dec 2018**.
5. Un-enlisted contractors are required to submit the scanned copies (in pdf file) of documents required as per eligibility criteria mentioned in instructions for filling the tender documents and Appendix 'A' to NIT along with EARNEST MONEY DEPOSIT (EMD) and tender fee on e-procurement portal and submit the physical documents in the office of Garrison Engineer Golconda within time limit specified in NIT. Inadequacy/deficiency of documents shall make the bid liable for rejection resulting in disqualification for opening of finance bid.

6. (a) Contractor having not executed standing security bond and standing security deposit in any MES formation shall upload scanned copy of EARNEST MONEY DEPOSIT (EMD) mentioned in Notice of Tender and shall ensure receipt of hard copy of EMD in the office of tender issuing authority before date & time fixed for this purpose. In case of failure to abide by any of these two requirements, the finance bid will not be opened.

(b) Contractor having not executed standing security bond and standing security deposit in any MES formation would be required to deposit individual security deposit on acceptance of tender which will be calculated with reference to the tendered cost as per scales laid down by MES for calculation of "EARNEST MONEY" enhanced by 25% subject to maximum of Rs 1875000/- (Rupees Eighteen Lakhs seventy five thousand only).

7. Enlisted contractors of MES shall submit the scanned copies (pdf file) of enlistment letter, tender fee and such other documents as mentioned in Appx 'A' to NIT on e-procurement portal and submit physical documents in the office of Garrison Engineer Golconda before date & time fixed for this purpose.

8. The contractor must ensure that the tender/bid on the proper form is uploaded in time as the Accepting Officer will take no cognizance of any quotations/offer received in any other electronic or physical form like email/fax/by hand /through post form tenderer/bidder even if they are received in time.

9. In view of delays due to system failure or other communication related failures, it is suggested that tender/bid be uploaded, if necessary, sufficiently in advance of the last due date and time fixed.

10. General Conditions of Contracts (IAFW-2249) (1989 Print) and errata and amendments thereto, schedule of minimum fair wages and MES SSR (Part-I and Part-II) are not enclosed with these documents. These are available for perusal in the Office of GE concerned and this office.

11. ANY TENDERER, WHICH PROPOSES ALTERATIONS TO ANY OF THE CONDITION, SPECIFICATIONS LAID DOWN IN THE TENDER DOCUMENTS OR ANY NEW CONDITION, WHATSOEVER, IS LIABLE TO BE REJECTED.

Yours faithfully,

Encls : (As above)

Offg.AGE (Contracts)
for Accepting Officer

SIGNATURE OF CONTRACTOR

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER**1. EARNEST MONEY DEPOSIT (EMD)**

Contractor(s) who are not enlisted with MES/who are enlisted but have not executed the Standing Security Bond shall submit Earnest Money Deposit as detailed in Notice of Tender in one of the following forms, along with their tender/bid :-

- (a) Deposit at Call Receipt from a Scheduled Bank in favour of Garrison Engineer, Golconda
- (b) Receipted Treasury Challan, the amount being credited to the Revenue Deposit of Garrison Engineer, Golconda

It is advisable that Earnest Money is deposited in the form of deposit call receipt from an approved Schedule Bank for easy refund. In case the tenderer/bidder wants to lodge 'EARNEST MONEY DEPOSIT' in any other form allowed by MES, a confirmation about its acceptability will be obtained from the Accepting Officer well in advance of the bid submission end date and time. Earnest Money Deposit shall be submitted in the name of Garrison Engineer, Golconda.

NOTES: Earnest Money Deposit (EMD) in the form of cheque/Bank Guarantee etc will not be accepted. NON-SUBMISSION OF EARNEST MONEY DEPOSIT (EMD) (scanned copy alongwith Technical Bid & hard copy before the date & time fixed for opening of BOQ) **WILL RENDER THE BID DISQUALIFIED FOR OPENING OF COVER II (FINANCE BID).**

2. SECURITY DEPOSIT

In case the tender/bid submitted by such contractor who is not enlisted with MES is accepted, the contractor will be required to lodge with the Controller of Defence Accounts INDIVIDUAL SECURITY DEPOSIT calculated with reference to TENDERED COST as notified by the Accepting Officer subject to a maximum of Rs 18,75,000/-. The amount is required to be lodged within **30 (thirty)** days of the receipt by the contractor of notification of acceptance of tender/bid, failing which the sum shall be recovered from the 1st RAR payment or from the Final Bill (See Condition 22 of GCC(IAFW-2249).

3. CONTRACTOS ENLISTED WITH CHIEF ENGINEER SOUTHERN COMMAND AND WHO HAVE EXECUTED STANDING SECURITY BOND AND DEPOSITED STANDING SECURITY DEPOSIT BUT OF LOWER CLASS

In case the tender/bid is accepted, the amount of Additional Security Deposit will be as notified by the Accepting Officer. The amount will be the difference between the "Individual Security Deposit: calculated with reference to the "TENDERED COST" and 'Standing Security Deposit' lodged. The amount is required to be lodged within **30 (thirty)** days of the receipt by the contractor of notification of acceptance of tender/bid, failing which the sum shall be recorded from the 1st RAR payment or from the Final Bill (Refer Condition 22 of GCC (IAFW-2249).

4. CONTRACTOS ENLISTED IN MES FORMATIONS OTHER THAN CE SOUTHERN COMMAND

Contractors whose names are on the approved list of any MES formation i.e other than CE Southern Command and who have deposited Standing Security and have executed Standing Security Bond may tender/bid without depositing Earnest Money with the bid and if the Accepting Officer decides to accept the tender/bid, such tenderers will be required to lodge Security Deposit as notified by the Accepting Officer. The amount is required to be lodged within 30 (thirty) days of the receipt by the contractor of notification of acceptance of tender/bid, failing which the sum shall be recovered from the 1st RAR payment or from the Final bill.

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (CONTD)**5. GENERAL INSTRUCTIONS FOR COMPLIANCE**

5.1 The bids received only in the electronic form will be considered. All bids shall be submitted on 'eprocuremes.gov.in' portal. Documents should be scanned and forwarded in 'pdf' form and 'xls' form as indicated.

5.2 Bids shall be uploaded on 'eprocuremes.gov.in' portal on or before the bid closing date mentioned in the tender. No tender/bid in any other electronic or physical form like email/fax/by hand/through post will be considered.

5.3 Bid should be DIGITALLY signed using valid DSC. All pages of tender documents, corrections/alterations shall be signed/initialed by the lowest bidder after acceptance.

5.4 Drawings, if issued in physical form, must be returned duly initialed by the tenderer/bidder in separate envelope indicating his name and address.

5.5 The tender shall be signed, dated and witnessed at all places provided for in the documents after acceptance. All corrections shall be initialed. The contractor shall initial every page of tender and shall sign all drawings forming part of the tender. Any tender/bid, which proposes alterations to any of the conditions whatsoever, is liable to be rejected.

5.6 In the technical bid, a scanned copy of Power of Attorney in favour of the person uploading the bid using his/her DSC shall be uploaded. In case the digital signatory himself is the sole proprietor, scanned copy of an affidavit on stamp paper of appropriate value to this effect stating that he has authority to bind the firm in all matters pertaining to contract including the Arbitration Clause, shall be attached in 'pdf' form. In case of partnership concern or a limited company, digital signatory of the bid/tender shall ensure that he is competent to bind the contractor(through partnership deed, general power of attorney or Memorandum and Articles of Association of the Company) in all the matters pertaining to the contracts with Union of India including arbitration clause. A scanned copy of the documents confirming of such authority shall be attached with the tender/bid in 'pdg' form, if not submitted earlier. The person uploading the bid on behalf of another partner(s) or on behalf of a firm or company using his DSC shall upload with the tender/bid a scanned copy (in 'pdf' form) of Power of attorney duly executed in his favour by such other or all of the Partner(s) or in accordance with constitution of the company in case of company, stating that he has authority to bind such other person of the firm or the Company, as the case may be, in all matters pertaining to the contract including the Arbitration Clause.

5.7 Even in case of Firms or Companies which have already given Power of Attorney to an individual authorizing him to sign tender in pursuance of which bids are being uploaded by such person as a routine, fresh Power of Attorney duly executed in his favour stating specifically that the said person has authority to bind such partners of the Firm, or the Company as the case may be, including the condition relating to Arbitration Clause, shall be uploaded in 'pdf' form with the tender/bid; unless such authority has already been given to him by the Firm or the Company. It shall be ensured that power of attorney shall be executed in accordance with the constitution of the company as laid down in its Memorandum & Article of Association.

5.8 Hard copies of all above documents should be sent by the contractor to the Tender issuing authority well in advance to be received before the date & time fixed for the same.

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (CONTD)

5.9 Bid (Cover 1 & 2) shall be uploaded online well in time.

5.10 The contractor shall employ Indian Nationals after verifying their antecedents and loyalty. Attention is also drawn to special condition 3 referred hereinafter and also conditions 24 & 25 of IAFW-2249 (General conditions of contract).

5.11 Tenderers/bidders who uploaded their priced tenders/bids and are desirous of being present at the time of opening of the tenders/bids may do so at the appointed time.

5.12 The tenderer/bidder shall quote his rate on the BOQ file only. No alteration to the format will be accepted, else the bid will be disqualified and summarily rejected.

5.13 In case the tenderer/bidder has to revise/modify the rates quoted in the BOQ (excel sheet) he can do so only in the BOQ, through eprocuremes.gov.in site only before the bid closing time and date.

6. REVOKATION/REVISION OF OFFER UPWARD/OFFERING VOLUNTARY REDUCTION, AFTER OPENING OF FINANCIAL BIDS BY LOWEST BIDDER

In the event of lowest tenderer/bidder revoking his offer or revising his rates upward/offering voluntary reduction, after closing of bid submission date & time, his offer will be treated as revoked and the Earnest Money deposited by him shall be forfeited. In case of MES enlisted Contractors, the amount equal to the Earnest Money stipulated in the Notice of tender, shall be notified to the tenderer/bidder for depositing the amount through MRO. Bids of such Contractors/bidders shall not be opened till the aforesaid amount equal to the earnest money is deposited by him in Govt Treasury. In addition, bids of such tenderer/bidder and his related firm shall not be opened in second call or subsequent calls. Reduction offered by the tenderer/bidder on the freak high rates referred for review shall not be treated as voluntary reduction.

7. CPM (CRITICAL PATH METHOD)

7.1 The project planning for work covered in the scope of tender is based on CPM.

7.2 The tenderer/bidder is expected to be fully conversant with the CPM technique and employ technical staff who can use the technique in sufficient details. Sufficient books and other literature on the subject are widely available in the market which the tenderer/bidder may make use of.

7.3 The tenderer's /bidder's attention is drawn to special condition of the tender regarding preparation of the detailed network analysis and time schedule for the work and his liability for employing sufficient resources to adhere to this schedule. Any inability on the part of the tenderer/bidder in using the technique will be taken as his technical inefficiency and will affect his class of enlistment and future prospect /invitation to tenders for future works.

7.4 Department may issue amendments/errata in form of CORRIGENDUM to tender /revised BOQ to the tender documents. The tenderer/bidder is requested to read the tender documents in conjunction with all the errata/amendments/corrigendum, if any, issued by the department.

8.0 GENERAL

8.1 **In case of MES enlisted Contractors if all other eligibility criteria met, the financial bid shall be opened and the cost of tender shall be recovered from any amount due to the MES enlisted contractor. Further the Contractor shall be barred to tender during the period of 6 months commencing from the date of opening of financial bid.**

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (CONTD)

8.2 In case of un-enlisted tenderer if original DD pertaining to cost of tender is not received before the tender opening then their T-bid shall be rejected and tenderer shall be barred to tender for six months commencing from date of opening of financial bid.

8.3 In case of Un-enlisted Contractor and enlisted Contractor (who have not executed Standing Security Deposit) if original DD pertaining to earnest money is not received by stipulated date as explained above then the tenderer shall be rejected during opening of T-bid.

8.4 The tenderer should be in possession of Provident Fund code Number issued by EPFO and copy of the same shall be uploaded in Cover-I in Pdf Form/submitted before opening. If the same not found uploaded/submitted, the bid shall be disqualified in T-bid Evaluation and financial bid shall not be opened. Employees Provident Funds and miscellaneous Provision Act-1952 is applicable to contractor for this contract. The contractor and their sub contractors shall be in possession of Provident Fund code number. All the workers deployed in the work by the contractor and sub contractor shall be enrolled as members of Provident fund and shall be given the Universal Account Number (UAN).The Contractor shall submit a certificate stating that all workers employed by him or his sub contractor in the work are registered for EPF and their due contributions have been credited into their account. This certificate duly signed by the contractor shall form Part of Running Account Receipt's and Final Bill.

8.5 The contractor shall employ only Indian nationals after verifying their antecedents and loyalty. Attention is also drawn to special Condition 3 and also condition 24 and 25 of IAFW-2249 (General Conditions of contracts)

8.6 The bidder shall submit their offer online in electronic formats, **however DD/ Banker Cheque for tender fees and EMD required to be submitted manually in the office of Garrison Engineer Golconda as done in conventional tender, before date & time of opening of opening of tender application (Ist cover) but scanned copy of DD/ banker cheque for tender fees and EMD etc must be uploaded at www.eprocuremes.gov.in along with tender documents.**

8.7 Copy of GST registration number shall be uploaded along with the T bid. This will be one of the criteria for qualifying in T bid. Contractor who does not upload "GST Registration No shall be disqualified in the T bid evaluation and his financial bid shall not be opened.

ELIGIBILITY CRITERIA:**Enlisted Contractors:**

1. The applicant contractor shall note that DD/Banker's cheque shall be in favour of Garrison Engineer Golconda, Hyderabad. The cost of tender documents shall be non refundable in the event of tender is issued to the firm. However DD/ Banker Cheque shall be returned to the applicants whose cover No 2 is not opened. Please note that cover No 2 (Price Bid) will be opened only in respect of qualified and eligible contractors who fulfill the eligibility criteria according to their technical Bid submitted in cover No.1.
2. Application received without scanned copy of requisite amount of demand draft along with necessary documents as mentioned in para 7 above shall not be considered their financial bid.
3. Contractors not enlisted with MES will be required to upload the following necessary documents to prove the eligibility for :-
 - (i) Meeting enlistment criteria of MES with regard to having satisfactorily completed requisite value of works,annual turnover,working capital,fixed assets verification of character and antecedents of proprietor/partner/directors etc and affidavit for no recovery outstanding (Enlistment criteria are available in all MES offices and MES website, Also refer instruction for completion of tender in tender documents)

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (CONTD)

(ii) Tenderers shall upload copy of police verification certificate (within last one year) from the police authorities of the area where the registered office is located. For proprietor/each partner/each director, valid passport duly notarized shall also be applicable in lieu of police verification.

(iii) Scanned copy of Demand Draft towards the cost of blank tender and EMD to be uploaded.

(iv) Eligibility criteria to be worked out and submitted as per formula

(A*N-B)

A- Average annual turnover for last three financial years.

N- Period of completion contracted work (in years calculated till two decimal places)

B- value of balance works in running government contracts for the above period.

(v) Document containing list of remaining work to be completed as on date of application duly signed on an affidavit on non judicial stamp paper of rupee 100/- duly notarized to be uploaded is mandatory.

(vi) Scanned copy of Demand Draft/ Bankers Cheque drawn in favour of Garrison Engineer Golconda Hyderabad payable at Hyderabad in addition to all the documents mentioned above in 7 (b)

Experience Criteria for un-enlisted contractor

Past Experience of “similar nature of works” completed in last 5 years

Two works costing not less than Rs 25.00 lacs

or

One work costing not less than Rs 40.00 lakhs

Note :- Please forward details of “similar nature of works” executed by you financial year wise in tabular form giving name of work, Accepting Officer’s details, viz, address, telephone, email etc, date of acceptance of tender and actual date of completion. It should indicate whether extension was granted or compensation was levied. Attested copy of acceptance letter and completion certificate shall be enclosed of each work. In case performance report has been given by the client same shall also be submitted duly attested. and

(b) Average annual turnover for two consecutive financial years shall not be less than Rs 50.00 lakhs.

Note : Please forward turnover certificate issued by Chartered Accountant for this.

Financial Criteria:

(a) Solvent upto Rs 20.00 lakhs OR

Financially sound for engagement upto Rs 50.00 lakhs

(b) Working Capital not less than Rs 7.50 lakhs

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (CONTD)

Note (i) Proforma of above documents is given below. Please forward above documents issued by your Bankers in Original. Above certificates shall not be older than 6 months as on 01 Sep 2014. Signatory shall endorse his rubber seal, indicate his name & bank employee number, bank address particulars like full address, telephone & fax number.

(ii) Alternatively Wealth Tax certificate can also be given, if available.

FORM OF SOLVENCY CERTIFICATE FROM A SCHEDULE BANK

This is certified to the best of our knowledge and information M/s/Shri/Smt _____ having address _____, a customer of our bank are/is respectable and can be considered solvent/financially sound for any engagement upto Rs _____ (Rupees _____). This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

Place : Signature of Bank Manager

Date : Name, No & Seal of Bank

Note : In case of partnership firm, certificate to include names of all partners as recorded with the bank.

WORKING CAPITAL CERTIFICATE

This is certified that M/s/Shri/Smt _____ having address _____ has/have been maintaining a saving bank account/current account / fixed deposit account with this branch of bank since _____ and an amount not less than Rs _____ (Rupees _____) has been available to the credit in his/her/their account Nos _____ for the last three months. The firm is enjoying overdraft/credit facility upto limit of Rs _____.

Place : Signature of Bank Manager

Date : Name, No & Seal of Bank

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (CONTD)**Fixed Assets**

Limit of minimum reserves/total of movable or immovable property or fixed assets (in case of companies) (80% of minimum reserve/assets shall be in shape of immovable property) shall be Rs 12.50 lakhs

- Note : (i) Please forward affidavits on non judicial stamp paper of Rs 100/- each duly notarized and supported by copies of present valuation certificates for both immovable and movable property separately. It should also indicate that immovable property is free from mortgages, hypothecation or any other disputes and encumbrances and clearly belongs to your firm and it should indicate that immovable property will not be sold, transferred, gifted or otherwise disposed off without prior intimation to this office.
- (ii) Immovable asset value indicated should be supported by Valuation Certificate from a registered valuer and last tax paid receipt. Valuation Certificate shall be submitted for immovable property (Other than agricultural lands, plantations, forests, mines and quarries).
- (iii) Movable assets like Scooter/Car etc or NSCs/fixed deposits etc should be supported by certified photocopies of updated RC books, valid current Insurance papers, NSCs/fixed deposits.

Engineering Establishment

- (a) One graduate Engineer from a Government recognized with minimum experience of 02 years.
- (b) One diploma Engineer from Government recognized institution with minimum experience of 4 years.

NOTE :- Please forward affidavits on non judicial stamp paper of Rs 100/- duly notarized from your side having employed each engineer and from engineer side of taking your employment duly supported by attested copy of engineering degree/diploma as applicable to the individual.

- (a) Constitution of firm on an affidavit on non judicial stamp paper of Rs 100/- duly notarized indicating status of firm, ie whether it is proprietorship or partnership or Limited firm.

Note :- Please enclosed notarized copy of partnership deed in case of partnership firm, and notarized Memorandum of Articles of constitution in case of Limited firm.

- (b) Certified copy of Certificate of registration of firm with Registrar of Firms.

- (c) Certified copy of PAN No/TIN No of proprietor/partners/firm.

- (d) Certified copies of enlistment letters with various Govt. Departments/PSUs.

- (e) Certified copy of general power of attorney in case any person(s) have been authorized to represent the firm including signatory of the application.

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (CONTD)

- (f) Postal address and Police Station Area of proprietor/partners/Directors of the firm. Department will carry out Police Verification of Proprietor / Partners / Directors as applicable. Contractor has to pay for fees if the rules of Police Dept have the provision of the same.
- (g) Indemnity Bond on non judicial stamp paper of value of Rs 100/- duly attested by Notary (On format given below)

INDEMNITY BOND

This bond of Indemnity is executed on this _____ day _____ by M/s/Shri _____ having registered office at _____ to indemnify the Government of India of the following :-

1. We undertake to pay the Government of India any damages that may be found to be recoverable on order of our contracts.
2. We undertake that in case Government is put to pay any loss or disadvantage in monetary of contract by the firm which shall indemnify the government for ach loss or disadvantage.
3. This bond of indemnity is executed by M/s _____ and have signed before me. Whatever stated above is true and correct to the best of my knowledge and belief.

Signature of Contractor**Notary**

(h) Certified copy of Sales Tax Certificate/VAT.

- (j) Notarised affidavit on judicial stamp paper of Rs 100/- that there are no recoveries outstanding with any organization and there are no arbitration/litigation cases involving recoveries known to b e existing on the firm at the time of submitting these details to our office.
- (k) Notarised affidavit on non judicial stamp paper of Rs 100/- that there is no relationship with any Gazetted/Commissioned Officers and JEs in MES/Corps of Engineers/Ministry of Defence.
- (l) Affidavit on non judicial stamp paper of Rs 100/- giving details of contracts where arbitration invoked during last five years.

Tenderers shall upload copy of police verification certificate from police authorities of the area where the registered office is located. For proprietor/each partner / each director, scanned copy of valid passport duly notarized shall also be applicable in lieu of police verification.

8. These instructions shall form part of the contract documents.

SIGNATURE OF THE CONTRACTOR**Offg.AGE (CONTRACTS)
FOR ACCEPTING OFFICER**

(In lieu of IAFW-1779A (Revised 1955))

(To be read in conjunction with General Conditions of Contracts IAFW-2249)

MILITARY ENGINEER SERVICES

REGD POST WITH ACK DUE

Telephone: 23513341
Email id: golcon4-mes@nic.in

Garrison Engineer, Golconda,
Hyderabad-500 008

8365/ /E8

Nov 2018

**ITEM RATE TENDER AND CONTRACT FOR WORKS REQUIRED IN EXECUTION OF
REPAIRS TO DRAINAGE, FENCING, PATH AND MISC WORKS AT ARTY CENTRE,
UNDER GE GOLCONDA.**

1. Shri/S/Shri M/s _____ of _____ is/are hereby authorized to tender for the above work. The tender is to be uploaded in the eprocuremes.gov.in site as per critical dates.

2. Any correspondence concerning this tender shall be addressed as indicated at the top of this sheet, quoting the reference as indicated.

THE PRESIDENT OF INDIA DOES NOT BIND HIMSELF TO ACCEPT THE LOWEST OR ANY TENDER

Signature of the officer issuing the
tender documents
Appointment: Offg.AGE (Contracts)
for Accepting Officer

(In lieu of IAFW-1779-A Revised 1955)

SCHEDULE 'A' NOTES

1. **PERIOD OF COMPLETION:** - The entire work covered under this contract shall be completed within **03 (Three)** months from the date of handing over of site.
2. For schedule of items refer BOQ sheet in excel format. Tenderer shall carefully go through the BOQ pages of tender for quoting the rates of each item of the schedules. Contract sum shall be arrived accordingly for finding out lowest quoted tender.
3. The quantities shown in schedule (BOQ sheet) in column 3 of Sch 'A' are approximate and are inserted as a guide only. They do not constitute any guarantee of the ultimate quantities which can be ordered on the contractor. They shall not however be varied beyond the limit laid down in condition 7 of IAFW-2249 (General conditions of contract)
4. The contractor shall enter the unit rate in column 5 of BOQ. The unit rates in figure shall be entered only.
5. Total amount in column 7 is not firm but will be treated as contract sum referred to IAFW-2249. Tenderer has to visit the BOQ pages of the tender for quoting the rate of each item of the schedules.
6. Unless otherwise specifically stated in the description of the items, the unit rates quoted in column 5 shall be deemed to include for all labour and materials complete required for executing the respective items of work.
7. The unit rate quoted by the tenderer against respective items of schedule 'A' shall be deemed to include minor details of construction of work, not specifically mentioned in description of schedule 'A' items and/or in the particular specifications/ drawing and which are fairly and obviously intended/essential to the execution of work in a workmen like manner and sound construction.
8. In case of difference of opinion between the contractor and the GE as to, whether or not certain items of work constitute "Minor construction details" which is deemed to have been included in the contractor's quoted rates, the decision of the accepting officer shall be final, conclusive and binding.
9. The description of schedule 'A' items in BOQ sheet (Excel format) are in brief. The unit rate quoted shall be deemed to include interalia the description given in particular specification read together with schedule of works.
10. The items of work covered under this contract shall be taken up for execution according to priorities given by Engineer-in-Charge.

(In lieu of IAFW-1779-A Revised 1955)

SCHEDULE 'A' NOTES

11. Tenderers quoted rates shall include all statutory levies / duties, construction labour welfare tax including sales tax on works contracts as applicable. It may be noted that conditional tender regarding this **WILL NOT BE CONSIDERED** and shall be liable to be rejected.
12. All the materials to incorporated in the work shall be tested as per the latest IS Code. if otherwise not specified in the tender documents. The cost of the same shall be deemed to be included in the unit rate quoted. If make's of certain item given in Sch 'A' supercede List of Makes in Particular specification.
13. Site for execution of work shall be available as soon as the work is awarded, in case it is not possible for the department to make the entire site available on the award of the contract, the tenderer will have to arrange his working programme accordingly. No claim whatsoever for not giving him the entire site on award of contract and for giving the site gradually will be admissible.
14. **The tenderer's quotation shall be deemed to include all taxes, statutory levies/ duties, such as Octroi, sales tax, Excise, Labour welfare tax, sales tax and GST on works contract, GST, entry tax etc, as levied by the state government payable under respective statues as applicable from time to time. Any conditions stipulated by the tenderer regarding sales tax and GST on works contracts or any other taxes/ duties will not be considered and such tender shall be liable for rejection. The contractor shall note this point and any condition to this effect will be treated as the conditional tender and the tender thus quoted and submitted shall be rejected. Plz also refer the Special Condition Clause No 28 in this tender document.**
15. In case of difference of opinion between the contractor and the GE as to, whether or not certain makes of items which is deemed to have been included in the Schedule 'A' and also in List of makes or anywhere in specifications, That mentioned in Sch 'A' shall supercede overall. However, in case of user requirement or non availability, the decision of the accepting officer shall be final, conclusive and binding.

SIGNATURE OF THE CONTRACTOR**Offg.AGE (CONTRACTS)
FOR ACCEPTING OFFICER**

ELECTRONIC CLEARING SERVICE (CREDIT CLEARING) MANDATE FORM
CONTRACTOR'S OPTION TO RECEIVE PAYMENTS THROUGH CREDIT
CLEARING MECHANISM

1. Scheme name and the periodicity of payment :
2. Contractor's Name / Name of the firm :
3. Particulars of bank account :-
 - (a) Bank Name :
 - (b) Branch Name :
 - Address :
 - Telephone :
 - (c) 9 Digit code number of the bank & branch appearing on the MIGR Cheque issued by the Bank. :
 - (d) Account type (SB account/current account or Cash Credit) without code 10/11/13. :
 - (e) Ledge No / Ledger folio No :
 - (f) Account number (as appearing on the Cheque Book). :

(In lieu of the bank certificate to be obtained as under, please attach a blank cancelled Cheque or photocopy of a Cheque or front page of your bank passbook issued by your bank for verification of the above particulars)

4. Date of effect :

I, hereby, declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold the user institution / department responsible. I have read the option invitation letter and agree to discharge the responsibility expected of me as a participant under the scheme / Tender.

DATED:

(SIGNATURE OF THE CONTRACTOR)

Certified that the particulars furnished above are correct as per our records.

Bankers Stamp

(Signature of the authorized official from the bank)

SCHEDULE OF CREDIT**Notes:**

- 1 The credit for the materials obtained from dismantling/demolition as detailed below. The credit assessed by the department is only rough indication and the contractor shall have no claim what so ever against the Government if the actual cost of the salvaged materials turnout to be different from the amount assessed by the department.
- 2 The quantities inserted in the column 4 are provisional and the tenderer will have no claim if the quantities obtained turnout to be different on execution. The assessed rates of credit shown in column 5 is firm.
- 3 The credit amount will be carried over to Summary to arrive at the contract sum
- 4 The materials listed in this Schedule quantity actually obtained shall be recorded in the Measurement Book and abstracted and this amount shall be deducted from the value of work done under Schedule 'A'. The contractor will not be allowed to remove the materials listed in this Schedule till such time the value of work done by him is more than the value of credit for such of the materials.

SI No	Description of materials	Unit	Approx No. of Units	Unit Rate Assessed Rs.	Amount Rs.
1	U/s Concrete/Brick/stone debris	Cum	176.10	60.00	10566.00
2	U/s reinforced Concrete debris	Cum	8.65	120.00	1038.00
3	U/s MS/SS scrap	Kg	928.00	20.00	18560.00
4	U/s GI Tubing 15mm / 20mm/50mm bore	Rm	110.00	6.00	660.00
5	U/s HDPE tanks	Each	2.00	100.00	200.00
6	U/s Gate valve	Each	4.00	40	160.00
7	U/s bib taps/stop valve/Shower rose/float valve/pillar tap/towel rail/soap dish/Health Faucet/ Wall Mixer/ Paper Holder etc and like.	Each	75.00	5.00	375.00
8	U/s PVC Flushing tank	Each	10.00	75.00	750.00
9	U/s Chowkats with shutters not exc 1.5 Sq. M each incl builders hardware.	Each	5.00	100.00	500.00
10	U/s Chowkats with shutters exc 1.50 Sq. M and not exc 4 Sq. M each incl builders hardware	Each	6.00	125.00	750.00
11	U/s PVC (SWR) Pipes any bore	RM	20.00	5.00	100.00
12	Old stone slabs	Sqm	420.00	5.00	2100.00
13	U/S Chainlink Fencing	Sqm	120.00	10.00	1200.00
14	Old U/s Wooden curtain rods/pelmets	Rm	200.00	5.00	1000.00
15	Old U/s SS wire mesh	Sqm	50.00	10.00	500.00
16	Old U/s false ceiling boards any type	Sqm	300.00	5.00	1500.00
17	Old U/S Hydraulic Door Closer	Each	5.00	20.00	100.00
Total of Schedule of Credit c/o to Summary on page No.					40,059.00

Signature of Contractor

Offg.AGE (Contracts)
for Accepting Officer

SUMMARY

Total Amount of Schedule 'A' on BOQ = Rs. _____

DEDUCT

Total Amount of Schedule of Credit = Minus (-) **Rs. 40,059.00**

TOTAL CONTRACT SUM = **Rs.** _____

(Rupees

_____ **only)**

NOTE: Bidders/Tenderers are required to upload this summary dually filled manually. Incase summary is not uploaded by the Bidders/Tenderer, the contract sum shall be arrived after deduction of Total amount of Schedule of credit from the quoted amount in BOQ.

SIGNATURE OF THE CONTRACTOR

**Offg.AGE (CONTRACTS)
FOR ACCEPTING OFFICER**

SCHEDULE 'B'

ISSUE OF MATERIALS TO THE CONTRACTOR
SEE CONDITION 10 OF IAFW-2249

Sl No.	Particulars	Rates at which materials will be issued to the contractor		Place of issue by name	Remark
		Unit	Rate in Rs		
1	2	3	4	5	6
NIL					

SCHEDULE 'C'

ISSUE OF TOOLS AND PLANTS (OTHER THAN TRANSPORT) WHICH WILL BE HIRED TO THE CONTRACTOR
(SEE CONDITION 15, 34 AND 35 OF IAFW-2249)

Sl No	Quantity	Particulars	Details of MES crew supplied	Hire charges per unit per working day (Rs)	Stand by charges per unit per off day (Rs)	Place of issue by name	Remarks
1	2	3	4	5	6	7	8
NIL							

SCHEDULE 'D'

TRANSPORT TO BE HIRED TO THE CONTRACTOR
(SEE CONDITION 16 & 35 OF IAFW-2249)

Serial No	Quantity	Particulars	Rates per unit per working day	Place of issue by name	Remarks
1	2	3	4	5	6
NIL					

SIGNATURE OF THE CONTRACTOR

Offg.AGE (CONTRACTS)
 FOR ACCEPTING OFFICER

TENDER

To
The President of India

Having examined and perused the following documents:-

1. Specifications signed by AE (QS&C)/Garrison Engineer
2. Drawings as detailed in the specifications.
3. Schedule 'A' [BOQ IN EXCEL SHEET], 'B', 'C' and 'D' attached hereto.
4. MES standard schedule of rates 2009 (Part I) (Specifications) amended Nos 1 to 3 and 2010 (Part II) (rates) here-in-after and in IAFW -2249 referred to as the 'MES SCHEDULE' with amendments 1 to 59 for Part II as applicable to the said schedule.
5. General conditions of Contracts IAFW-2249 (1989 Print) together with amendment No 1 to 40 and errata No 1 to 20 for English version only.
6. WATER CONDITIONS 31 OF IAFW-2249 (GENERAL CONDITIONS OF CONTRACTS):-
Water will be supplied by the MES on payment @ Rs.3.75 per every thousand rupees (1000/-) worth of work done at contracts rates.

SHOULD THIS TENDER BE ACCEPTED I/WE AGREE

*(a) That the sum of **Rs 92,000/- (RUPEES NINETY TWO THOUSAND ONLY)** forwarded as Earnest Money shall either be retained as a part of Security Deposit or be refunded by the Government on receipt of an appropriate amount of Security Deposit, all as per condition 22 of IAFW-2249.

(b) To execute all the works referred to in the said documents upon the terms and conditions contained or referred to therein at the item rates contained in the afore said Schedule 'A.' OR, at such other rates as may be fixed under the provisions of condition 62 and to carry out such deviations as may be ordered vide condition 7 of IAFW-2249 up to a maximum of **10% (TEN)** percent and further agree to refer all disputes, as required by the condition 70 to the sole arbitration of a serving officer having degree in Engineering or equivalent or having passed final/direct final examination of Sub-Division II of Institution of Surveyors (India) recognised by the Govt. of India to be appointed by the Chief Engineer zone, Chennai or in his absence the officer officiating as Chief Engineer zone, Chennai or whose decision shall be final, conclusive and bindings.

* To be deleted where not applicable.

(In lieu of IAFW-1779-A Revised 1955)

TENDER (Contd.....)

Signature: _____
(With Name in Block Letters)

In the capacity of _____ fully authorised to sign the tender for and
on behalf of _____
_____ (In block letters)

Date : _____

Witness : _____

Postal Address: _____

Address : _____

Telephone: (Office) _____

(Res) _____

(Mobile) _____

ACCEPTANCE

_____ alteration have been made in this document and as evidence that these alterations were made before the execution of the contract agreement they have been initialed by the contractor and **Shri. C Rajasekhar, Offg.AGE (Contracts)**.The said officer is/are hereby authorised to sign and initial on my behalf the documents forming part of this contract.

The above tender was accepted by me on behalf of the President of India, at the item rates contained in Schedule `A` on this _____ day of _____ 2018.

(Lokesh Dixit)
EE
Garrison Engineer
(For and on behalf of the President of India)

Dated this _____ day of _____ 2018

Appointment: Garrison Engineer Golconda
Langer House Hyderabad - 500008

GENERAL CONDITIONS OF CONTRACTS (IAFW-2249: PRINT - 1989)

FOR

*** LUMPSUM CONTRACTS (IAFW-2159)**

OR

*** MEASUREMENT CONTRACTS (IAFW-1779 AND 1779A)
AS APPLICABLE**

A copy of the MES GENERAL CONDITIONS OF CONTRACTS (IAFW-2249: Print-1989) with Errata 1 to 20 and Amendments Nos. 1 to 40 has been supplied to me/us and has been perused by me/us and is in my/our possession. I/We have read and understood the Provisions contained in the aforesaid GENERAL CONDITIONS OF CONTRACTS before submission of this tender and I/We agree that I/We shall abide by the terms and conditions thereof, as modified, if any, elsewhere in these tender documents.

It is hereby further agreed and declared by me/us, that the MES General Conditions of Contracts (IAFW-2249 Print - 1989) including Condition 70 & 71 thereof pertaining to settlement of disputes by Arbitration and Conciliation Act-1996 containing 34 pages (Serial page No. ____ to ____ with errata 1 to 20 and Amendment No 1 to 40 (Serial page No. ____ to ____)) form part of these tender documents.

NOTES

In case of difference in interpretation due to wordings of English and Hindi versions to the General Conditions of Conditions (IAFW-2249) (1989 Print), the English version will prevail.

**Offg.AGE (CONTRACTS)
FOR ACCEPTING OFFICER**

SIGNATURE OF THE CONTRACTOR

IN LIEU OF SCHEDULE OF MINIMUM FAIR WAGES

1. It is hereby agreed that the "SCHEDULE OF MINIMUM FAIR WAGES" (SMFW) as published vide Government of India dated 20 May 2009 which specifies minimum rates of wages for various categories of workmen as applicable on the last due date receipt of this tender shall form part of the tender documents and in my/our* possession. I/We* have read and understood the provisions contained in aforesaid Schedule of Minimum Wages before submission of tender.

2. My/our* signature(s) here under amounts to my/our* having signed the aforesaid "SCHEDULE OF MINIMUM FAIR WAGES" forming part of this tender.

*Delete whichever is not applicable.

**Offg.AGE (CONTRACTS)
FOR ACCEPTING OFFICER**

SIGNATURE OF THE CONTRACTOR

SPECIAL CONDITIONS**1 GENERAL**

- 1.1 The following Special Conditions shall be read in conjunction with the General Conditions of Contracts, IAFW-2249 1989 Print including errata/amendments thereto. If any provision in these Special Conditions is at variance with the provisions in the aforesaid documents, the provisions in these special conditions shall be deemed to take precedence there over.

2 MES SCHEDULE

- 2.1 Contractor's special attention is invited to the fact that this tender is based on MES Schedule mentioned on tender page including errata/amendments thereto as applicable.

3 GENERAL CONDITIONS OF CONTRACTS IAFW-2249 (1989 PRINT)

- 3.1 Wherever "IAFW-2249) is mentioned it means General Conditions of contracts IAFW-2249 (1989 Print) including errata/amendments as applicable.

4 SECURITY OF CLASSIFIED DOCUMENTS (REFER CONDITIONS 2A AND 3 OF IAFW-2249)

- 4.1 Contractor's special attention is drawn to condition 2A and 3 of General Conditions of Contracts (IAFW-2249) and also to the Indian Official Secret Act – 1923 (Particularly Section 5). The contractor is bound by the provisions of the Act. The contractor shall not communicate any classified information regarding works either to sub-contractors(s) or other without prior approval of Executive in-charge. The contractor shall also not make copies of the design/drawings and other documents furnished to him in respect of works and shall return all the documents on completion of the work or on earlier determination of the contract. The contractor shall along with final bill attach receipt from Engineer-in-Charge in respect of his having returned the classified documents as per condition 3 of the General Conditions of Contracts (IAFW-2249).

4.2 OFFICIAL SECRETS ACT

- 4.2.1 The contractor shall be bound by the Official Secrets Act and particularly section 5 thereof.

5 INSPECTION OF SITE AND RELEVANT DOCUMENTS (REFER CONDITION 4 OF IAFW-2249)

- 5.1 The contractor is required to visit the site of works and make himself thoroughly acquainted with the working conditions and/or the approaches/accessibility to site, availability of materials and all other relevant conditions affecting the completion of entire work. He is required to make himself fully acquainted with the nature and scope of the work before tendering. For the purpose of inspection of relevant documents other than those sent herewith, the contractor is required to contract the Garrison Engineer who will give reasonable facilities. The contractor shall be deemed to have visited the site before submitting the tender whether he does it or not.

6 MATERIALS AND SAMPLES (REFER CONDITION 10 OF IAFW-2249)

- 6.1 The tenderer is advised to inspect samples of the local building materials maintained by the Garrison Engineer before submitting his tenders. He will be deemed to have full knowledge of these materials whether he inspects them or not the materials to be provided by the contractor shall confirm to/shall be superior to the standard of samples displayed in the office of Garrison Engineer in the matter of quality unless otherwise specified.

Contd.

SPECIAL CONDITIONS (CONTD)

- 6.2 Items conforming to Indian Standard Specifications shall be accepted only when ISI marked materials are not manufactured. Materials such as glazed tiles. AC sheets, AC rain water pipes, paint, bib taps and pillar taps, sanitary fittings etc, which are considered superior to IS specifications by the GE may be used without any extra cost to Government. However before incorporating such materials/items, the contractor shall produce necessary test certificates as required by the GE.
- 6.3 The contractor shall produce samples of materials for incorporating direct to the GE with copy to the Accepting Officer and get them approved in writing by the GE before commencement of work. All approvals of materials shall be in writing from GE to contractor. The materials, articles etc, as approved shall be labeled as such and shall be signed by GE and contractor and kept and displayed at the site of works.

7 PROPRIETARY BRAND MATERIALS

- 7.1 Original vouchers/invoices for the following proprietary materials as and if required for execution of work shall be produced by the contractor before claiming RAR payments.

- (i) Cement
- (ii) Steel
- (iii) Chemical for ant termite treatment
- (iv) Paints
- (v) Conduits, conduit fittings and accessories
- (vi) Bitumen for water proofing treatment and road work
- (vii) Water proofing compound
- (viii) MS/GI/Galvalume sheet
- (ix) CI/GI PVC pipes and fittings
- (x) All cable conductors and the like
- (xi) All water supply items
- (xii) All electrical utility fittings
- (xiii) Any other proprietary articles not mentioned above but catered in the tender documents.

- 7.2 The voucher/invoice shall be from the manufacturers and/or from their authorized agents for full quantity of respective items required for the work under this contract. These vouchers shall be endorsed, dated and initialed by the Engineer-in-Charge giving the contract number and name of work and a certified true copy of each such voucher signed by the Engineer-in-Charge and the contractor shall be kept on MES record.

- 7.3 The quantity brought to site shall be recorded in measurement books and signed by contractor and Engineer-in-Charge as a check to ensure that the required quantity have been brought to site for incorporation in the work.

- 7.4 The contractor shall permit free access are brought to site in original sealed containers or packings bearing manufacturers making.

8. CO-OPERATION WITH OTHER AGENCIES

- 8.1 The contractor shall permit free access and generally afford reasonable facilities to other agencies of specialist nature or department workmen engaged by the Govt to carryout their part of the work, if any, under separate arrangements.

- 8.2 The contractor's price shall be deemed to cater for all the above contingencies and nothing extra shall be admissible on this account.

SPECIAL CONDITIONS (CONTD)**9. DAMAGE TO EXISTING STRUCTURE BUILDING**

- 9.1 Any damage done to the existing structure during the execution of work shall be made good by the contractor at his own and the site of work left clean and tidy on completion. Rectification/reinstatement/making good, etc shall conform to the standard materials originally used in the work and finished work shall match with existing work in all respects to the entire satisfaction of the GE. In case of any dispute on this account, the matter shall be referred to the Accepting Officer whose decision in writing shall be final conclusive and binding.

10. CONTRACTOR LABOUR

- 10.1 The contractor when required to employ more than ten workmen on the works under this contract shall be bound by the Contract Labour (regulation and abolition) Act 1970 and rules framed there under. No contractor can undertake or execute his work without a licence issued by a licencing officer.

11. MINIMUM WAGES PAYABLE

- 11.1 Refer Condition 58 of IAFW-2249. The schedule of minimum Fair Wages is not enclosed to these tender documents. The contractor shall not pay wages lower than minimum wages for labour as fixed by the Govt of India/State Govt/Union Territory under minimum wages Act or Contract labour (Abolition and Regulation Act), whichever is higher.
- 11.2 The fair wage referred to in condition 58 of IAFW-2249 shall be deemed to be the same as the minimum wages payable as referred to above.
- 11.3 The contractor shall have no claim whatsoever, if on account of local factors and/ or regulations or otherwise he is required to pay the wages in excess of minimum wages as described above during the execution of work.

12. CONTRACTOR'S AGENT, REPRESENTATIVES AND WORKMEN

- 12.1 The contractor shall employ only Indian Nationals as his representatives, servants, workmen and verify their antecedents and loyalty before employing them in works. He shall ensure that no person of doubtful antecedents and nationality is in any way associated with the works and if for reasons of technical collaboration or other consideration, the employment of any foreign national is unavoidable the contractor shall furnish full particulars to this effect to the Accepting Officer at the time of submission of tender. The GE shall have full powers and without giving any reasons to order the contractor to immediately cease the employ in connection with this contract any Representative, Agent, Servant and Workmen or employee whose continued employment, in this union is undesirable. The contractor shall not be allowed any compensation in this account.

13. ELECTRICITY SUPPLY

- 13.1 Electricity will not be supplied by MES.

14. RECORD OF CONSUMPTION OF CEMENT

- 14.1 For the purpose of keeping a record of cement, consumed in work, the contractor shall maintain a pucca/bound register in the form approved by the Engineer-in-Charge, quantity used in works and balance in hand.
- 14.2 This Register shall be signed daily by the Contractor/Contractor's representatives and the Engineer-in-Charge in token or their verification of its correctness.
- 14.3 The register shall be kept as site in the safe custody of the contractor during progress of the work and shall on demand produce the same for verification of Inspecting Officer. On completion of the work the register shall be handed over to the Engineer-in-Charge for record with MES.

SPECIAL CONDITIONS (CONTD)**15. GUARANTEE BOND/FIXED DEPOSIT RECEIPT FOR ADDITIONAL SECURITY DEPOSIT/RETENTION MONEY**

15.1 On acceptance of the tender the Government may accept a Guarantee Bond or a fixed Deposit Receipt from State Bank of India and its subsidiaries. Nationalized Banks or Scheduled Banks for Additional Security Deposit/Retention Money. The Bank Guarantee shall be on the form prescribed which is available in the office of the Garrison Engineer, Golconda for tenderers perusal. The period of Bond shall be the period of completion/extended date of completion or till all the liabilities under the bond are discharged. The period of FDR shall be not less than time of completion plus six months.

16. RELEASE OF ADDITIONAL SECURITY DEPOSIT (REFER CONDITION 22 AND 68 OF IAFW -2249)

16.1 The contractor in case he has to deposit Additional Security for the contract is advised to deposit the additional security in two equal parts so as to facilities its release in accordance with condition 68 of IAFW-2249.

16.2 The additional Security Deposit by the contractor will be released in two stages i.e. 50% on payment of final bill and 50% on expiration of Defects liability period as mentioned in paras 6.3 and 16.4 here-in-under.

16.3 The release of 50% of additional security deposit in the first stage will be allowed only if there are no claims outstanding against the contractor in respect of the contract and the final bill is not 'MINUS'. In case any claims are outstanding against the contractor, and/or the final bill is 'MINUS' the amount of Security Deposit to be released will be adjusted against the outstanding amount due to the Government and the balance if any, will be released to the contractor.

16.4 The balance of 50% of additional security deposit will be released to the contractor after expiration of the defects liability period (vide condition 46) in accordance with condition 68 of IAFW-2249 (General Condition of Contracts) after compliance with the requirement stipulated in that condition and/or elsewhere in the contract.

17. SIGNING OF TENDER

17.1 The person signing the tender on behalf of another partner or on behalf of a firm shall attach with the tender, a proper power of Attorney duly executed in his favour by such other person or by all the partners stating that he has authority to bind such other person(s) or the firm as the case may be in all matters pertaining to the contract including the Arbitration clause.

18. PERIOD OF KEEPING THE TENDER OPEN

18.1 The tender shall remain open for acceptance for a period of 60 (Sixty) days from the date on which the tender is due to be submitted.

19. SITE CLEARANCE (REFER CONDITION 49 OF IAFW-2249, GENERAL CONDITIONS OF CONTRACT)

19.1 The contractor shall remove from the site all unused stores and huts and the like belonging to the contractor provided for the executive of work and under this contract and the site of works shall be cleared off all rubbish and waste materials by the contractor and the site or works delivered in clean and tidy man to the satisfaction of the Engineer-in-Charge on or before the date of completion. Nothing extra whatsoever shall be paid to the contractor for such clearance of site.

SPECIAL CONDITIONS (CONTD)

19.2 The contractor shall clean all floors, remove cement/lime/paint drops etc, clean the joinery, glass panes etc tough up all painting work in connection herewith and leave the whole premises clean and tidy to the entire satisfaction of the Engineer-in-Charge before handing over the buildings.

20. STANDARD OF WORKMANSHIP AND FINISHES

20.1 In order to identify the acceptable standards of materials and workmanship under the terms and conditions of the contract, a sample quarter or sample room(s) depicting all items of fittings, fixtures and finishes will be built in a specified period of time in advance of the completion time stipulated in the contract. The dates for completion of different stages of work will be laid down by the GE so that completion of samples of materials and workmanship are achieved well in advance. The various stages of the sample quarter will be passed by the GE on the stage passing register. The standards of work in the remaining part of the accepted contract will not in anyway be inferior to the standards approved in the sample quarter by the GE. The quarter which will serve as sample quarter and separate period of completion, if any shall be as stipulated in note to Schedule 'A'.

21. WORKING HOURS/DAY

21.1 The contractor or his workmen shall not be permitted to work on Sundays, Holidays or after normal working hours without prior written permission of the GE.

22. WATER REFER CONDITION 31 OF IAFW-2249

22.1 Refer Condition 31 of General Conditions of contracts IAFW-2249 and clause 1.13 of MES Schedule.

(a) MES will supply water (unmetered) to contractor at the points shown on site plan or at locations as shown by Engineer-in-Charge. As the water supply of MES is likely to be intermitted the contractor shall make his own arrangements for conveyance and storage the water required for the works, labour and workmen etc, at his own expense.

(b) MES will not be liable for any damage on account of failure of supply of water or curtailment thereof, if the failure or curtailment as the case may be arises may be arises from accident or becomes necessary as a result of drought or any other unavoidable causes.

23. CONDITIONS OF WORKING :-

23.1 **CONDITIONS OF WORKING IN UNRESTRICTED AREA:** - The entire work under this contract lies in "UNRESTRICTED AREA". However, the contractor, his agents, employees, work people and vehicles may pass through the unit lines in which case the Engineer-in-Charge shall, at his own discretion has the right to issue passes, control their admission to the site of work or any part thereof. The contractor shall on demand by the Engineer-in-Charge submit a list of personnel etc., concerned and shall satisfy the Engineer-in-Charge as to the bonafides of such people. Passes shall be returned at any time on demand by the Engineer-in-Charge and in any case on completion of work.

The contractor his agents, employees and work people shall observe all the rules promulgated by the authority controlling the area in which the work is to be carried out e.g. prohibition of smoking, lighting and fire precautions, search of persons at entry and exit, keeping to specified routes, restricted hours of working etc. Any person found violating the security rules laid down by the authority, shall be immediately expelled from the area without assigning any reasons whatsoever and contractor shall have no claim on this account. Nothing shall be admissible for any man hours lost on this account.

SPECIAL CONDITIONS (CONTD)**24. OUT OF POCKET EXPENSES**

24.1 Out of pocket expenses incurred by the tenderer in submitting his tender shall not be reimbursed whether tender is accepted or not.

25. AVAILABILITY OF LAND FOR STORAGE OF MATERIALS/ACCOMMODATION FOR LABOUR

25.1 Delete the following in para 1 of condition 24 of IAFW-2249 General Conditions of contracts. "In the ever of areas of land ----- allotted to him.

25.2 The contractor shall be permitted to store his materials including erecting temporary sheds therefore and also erect his temporary workshops for storage materials and for fabrication at the area of land marked for the purpose on the site plan free of rent. It it is on class 'A-1' land. For other types of land he shall be charged a licence fees of Rs.1/- per year or part of year for each and every separate area of land allotted to him. No defence land is available for accommodation of Labour for which the contractor shall make his own arrangement at his own expenses.

26. FIRE PRECAUTIONS

26.1 The Contractor, his agents, representatives, workmen etc., shall strictly observe the orders pertaining to fire precautions prevailing within the restricted area.

26.2 Motor transport vehicles if allowed by the authorities to enter the restricted area must be fitted with serviceable fire extinguishers.

27. ISSUE OF FORM 'D' FOR INTER STATE SALES TAX

27.1 Form 'D' shall be issued by the department to the contractor only (and not to any nominated suppliers) in respect of items required for the works, the procurement of which shall involve payment of inter state sales tax by the contractor.

28. RE-IMBURSEMENT/REFUND ON VARIATION IN 'TAXES DIRECTLY RELATED TO CONTRACT VALUE'.

(a) The rates quoted by the contractor shall be deemed to be inclusive of all taxes including Service tax Sales Tax/VAT on materials, Sales Tax /VAT or Works Contracts, Turnover Tax, Service Tax, Labour Welfare Cess/tax etc, duties, Royalties, Octroi & other levies payable under the respective Statutes. No reimbursement/refund for variation on rates of taxes, duties, Royalties, Octroi & other levies, and / or imposition/abolition of any new/existing taxes, duties, Royalties, Octroi & other levies, shall be made except as provided in Sub Para (b) here-in-below.

SPECIAL CONDITIONS (CONTD)

(i) The taxes which are levied by Govt at certain percentage rates of contract Sum/Amount shall be termed as 'Taxes directly related to Contract value' such as Sales Tax / VAT/GST on Work Contract, Turnover Tax, Labour Welfare Cess/tax and like but excluding Income Tax. The tendered rates shall be deemed to be inclusive of all taxes directly related to Contract value, with existing percentage rates as prevailing on last due date for receipt of tenders. Any increase in percentage rates of 'taxes directly related to Contract value' with reference to prevailing rates on last due date for receipt of tenders shall be reimbursed to the Contractor and any decrease in percentage rates of 'taxes directly related to Contract value' with reference to prevailing rates on last due date for receipt of tenders shall be refunded by the Contractor to the Govt/deducted by the Govt from any payments due to the Contractor. Similarly imposition of any new 'taxes directly related to Contract value' after the last due date for receipt of tenders shall be reimbursed to the Contractor and abolition of any 'taxes directly related to Contract value' prevailing on last due date for receipt of tenders shall be refunded by the Contractor to the Govt/deducted by the Govt from the payments due to the contractor.

(ii) The contractor shall, within a reasonable time of his becoming aware of variation in percentage rates and / or imposition of any further 'taxes directly related to Contract value' give written notice thereof to the GE stating that the same is given pursuant to this Special Condition, together with all information relating there to which he may be in a position to supply. The Contractors shall submit the other documents proof / informations as the GE may require.

(iii) The Contractor shall, for the purpose of this condition keep such books of account and other documents as are necessary and shall allow inspection of the same by a duly authorized representative of Govt, and shall further, at the request of the GE finish, verified in such a manner as the GE may require, any documents so kept and such other informations as the GE may require.

(iv) Reimbursement for increase in percentage rates/imposition of 'taxes directly related to Contract value' shall be made only if the Contractor necessarily & properly pays additional 'taxes directly related to Contract value' to the Govt, without getting the same adjusted against any other tax liability or without getting the same refunded from the concerned Govt Authority and submits documentary proof for the same as the GE may require.

29 BLANK

30. **TESTING OF MATERIALS**

30.1 Refer condition 10 of IAFW-2249.

30.2 All tests shall be got carried out by the contractor from laboratories/testing agencies as mentioned in Annexure-A to Special Conditions.

30.3 Any test not mentioned in Annexure-I but indicated anywhere else in tender documents are also to be carried out by the contractor.

30.4 The cost of materials, labour to be consumed in testing, transportation charges, testing charges and like shall be borne by the contractor.

30.5 The contractor may however get the materials tested from Zonal laboratory (where available) for which the testing charges shall be borne by the contractor. In case of non-availability of facilities for such tests in the Zonal laboratory, the test may be carried out in National Test House/SEMT Wing/Engineering Colleges or the contractor may set site laboratory at his own option or get the tests to be carried out.

Contd....

(SPECIAL CONDITIONS (CONTD...))

ANNEXURE-1

MATERIALS AND TESTS.

Sl No	Materials	Tests	Method of testing	Frequency of tests			Remarks
1	2	3	4	5			6
1.	Bricks	(i) Compressive strength.	IS 3495 (Part-II)	As per (IS-5454) as given under			Checks for visual and dimensional characteristics shall also be carried out as per IS-5454.
				Lot size	Sample size	Permissible nos of defective bricks	
				1001 to 10000,	5	0	
		(ii) Water Absorption	-do-	10001 to 35000	10	0	
		(iii) Efflorescence.	-do- (Part-I)	35001 to 50000	15	0	
2.	Coarse Aggregate	(i) Sieve Analysis.	IS : 2386 (Part-I)	One test for every 15 cu m of aggregate or part thereof brought to side.			
		(ii) Flakiness Index.	-do-	-do-			
		(iii) Estimation of deleterious materials.	IS : 2386 (Part-I)	One test for every 100 cum of aggregate or part thereof.			
		(iv) Organic impurities.	-do	One test per source of supply			
		(v) Moisture content	-do- Part-II	Regularly as required.			
		(vi) Specific Gravity.	IS : 2386 (Part-II)	One test for each source of supply.			
3.	Fine Aggregate	(i) Sieve analysis	IS : 2386 (Part-I)	One test for every 15 cum of FA or part when brought to site			
		(ii) Test for clay, silt and impurities.	-do- (Part-II)	-do-			
		(iii) Specific gravity.	-do- (Part-II)	One for each source of supply.			
		(iv) Moisture content.	-do- (Part-II)	Regularly as required subject to 2 tests/day when being used.			
		(v) Test for organic impurities	-do- (Part-II)	One test for each source of supply.			
4.	Cement	(i) Setting time	IS : 4031-63 affirmed 1980	Once for each consignment or as and when required.			
		(ii) Soundness	-do-	-do-			
		(iii) Compressive strength	-do-	-do-			
		(iv) Fineness	-do-	-do-			

(SPECIAL CONDITIONS (CONTD...))

1	2	3	4	5	6												
5.	Structural concrete (M-15 grade and above)	(i) Slump test (OR) compacting factor test (OR) Vee-Bee time. (ii) Compressive strength	IS : 1199 IS : 516	The minimum frequency of sampling of concrete of each grade shall be as under <table border="1"> <tr> <th>Qty of concrete in the work (cum)</th> <th>No of samples</th> </tr> <tr> <td>1-5</td> <td>1</td> </tr> <tr> <td>6-15</td> <td>2</td> </tr> <tr> <td>16-30</td> <td>3</td> </tr> <tr> <td>31-50</td> <td>4</td> </tr> <tr> <td>51 & above</td> <td>4 +1 for each addl 50 cum in or part thereof</td> </tr> </table>	Qty of concrete in the work (cum)	No of samples	1-5	1	6-15	2	16-30	3	31-50	4	51 & above	4 +1 for each addl 50 cum in or part thereof	(i) Random sampling shall be carried out to cover all mix units. (ii) Refer IS 456 2000 clause 14 for frequency of sampling.
Qty of concrete in the work (cum)	No of samples																
1-5	1																
6-15	2																
16-30	3																
31-50	4																
51 & above	4 +1 for each addl 50 cum in or part thereof																
6.	(a) PCC Block for waling (Hollow Block) (b) PCC solid Block for walling	(i) Compressive strength (ii) Water absorption. (iii) Density (i) Compressive strength (ii) Water absorption. (iii) Density	IS : 2156-1984 (Appx -B) -do- (Appx 'E') -do- (Appx 'A') IS : 2185 -do-	8 Block out of 14 3 Block out of 14 3 Block out of 14 12 Blocks out of 18 3 blocks out of 18 3 blocks out of 18	Sample : 14 blocks from consignment of every 5000 blocks or part thereof. Sample : 18 blocks from consignment of every 1000 blocks or part thereof. These blocks to be checked for dimension and weight.												
7.	Cement flooring tiles / Terrazzo tiles	(i) Water absorption. (ii) Wet transverse strength (iii) Resistance to wear	-do- IS-1237 (Appx 'D') -do- (Appx E) -do- (Appx F)	6 tiles out of 18 -do- -do-	Samples of 18 tiles from each source of supply selected at random.												
8.	Burnt clay roofing tiles (handmade) as per IS 2690 (Part-II) Length 150mm to 250mm Width 100mm to 200mm Thickness 35mm to 50mm	(i) Water absorption (ii) Compressive strength	IS : 3495 (Part-II) -do- (Part-I)	6 tiles out of 12 -do-	Sample : 12 tiles from each source of supply selected at random.												

(SPECIAL CONDITIONS (CONTD...))

1	2	3	4	5	6																
9.	Mangalore pattern roofing tiles	(i) Water absorption (ii) Breaking load	IS : 654 (Appx A) -do- (Appx C)	6 tiles out of 32 -do-	Sample : 32 tiles from each consignment of 3000 tiles or part thereof. These tiles shall be checked for dimension.																
10.	Timber	(i) Specific gravity and weight (ii) Moisture content	IS : 1708 -do-	Minimum 3 samples from a lot of 4 cum or 250 pieces of seasoned timber. -do-																	
11.	Water for construction purpose	(i) Test for acidity (ii) Test for alkalinity (iii) Test for solid content	IS : 456 & 3015 -do- -do-	Once at the stage of approval of source of water. -do- -do-	Also refer clause 4.3 of IS : 456 and its subsequent sub clauses regarding suitability of water																
12.	Welding of steel work	Visual inspection test	IS : 822 clause 7.1	100% by visual inspection	Specialised tests, their method and frequency to be decided on consideration of their importance by the accepting officer.																
13.	Timber panelized and glazed Door/Window shutters (including factory made shutters)	(a) Dimensions, sizes workmanship and finish (b) Strength test (i) Slamming (ii) Impact indentation (iii) Shock Resistance (iv) Edge Loading	IS : 1003 (Part-I) IS : 1303 -do- -do- -do-	Frequency of sampling from each lot shall be as under :- <table border="1"> <thead> <tr> <th>Lot size</th> <th>Sample size</th> </tr> </thead> <tbody> <tr> <td>26 to 50</td> <td>5</td> </tr> <tr> <td>51 to 100</td> <td>8</td> </tr> <tr> <td>101 to 150</td> <td>13</td> </tr> <tr> <td>151 to 300</td> <td>20</td> </tr> <tr> <td>301 to 500</td> <td>32</td> </tr> <tr> <td>501 to 1000</td> <td>50</td> </tr> <tr> <td>1001 and above</td> <td>80</td> </tr> </tbody> </table> From each lot 5% of the factory made shutters shall be manufacturer tested for strength tests.	Lot size	Sample size	26 to 50	5	51 to 100	8	101 to 150	13	151 to 300	20	301 to 500	32	501 to 1000	50	1001 and above	80	
Lot size	Sample size																				
26 to 50	5																				
51 to 100	8																				
101 to 150	13																				
151 to 300	20																				
301 to 500	32																				
501 to 1000	50																				
1001 and above	80																				
14.	Ply Wood (IS : 303)	Moisture content	IS : 1734 (Part-I)	Six test pieces cut from each of the boards selected as per table shall be subjected to tests.	Sampling shall be as per IS: 7835 tables.																

(SPECIAL CONDITIONS (CONTD...))

1	2	3	4	5	6
15.	Wood particle board (Medium density IS 3097)	(a) Density (b) Moisture content (c) Water absorption (d) Swelling due to surface absorption (e) Swelling in water (f) Modulus of rupture (g) Screw withdrawal strength	IS:2360 (Part-III) -do- -do- (Part-16) -do- (Part-17) -do- -do- (Part-4) -do- (Part-4)	Three test specimen from each sample (Size 150mm x 75 mm) -do- -do- (Size 300mm x 300mm) -do- (Size 125mm x 100mm) -do- (Size 200mm x 100 mm) Three test specimen as per IS 2380 -do- as per IS : 2385	Sampling shall be as per IS: 3487 with moisture meter.

31. CONCILIATION

31.1 Scope of Conciliation: The scope of conciliation shall be restricted to the following types of disputes with financial limits as indicated therein:-

- (a) Disputes relating to levy of compensation for delay in completion - actual amount of compensation.
- (b) Disputes relating to technical examination of works.
- (a) Disputes relating to interpretation of the provision of the contract with reference to their application to parties.
- (b) Disputes relating to non return of Schedule 'B' stores over issued to contractors
- (c) Any other dispute having fair chances of being resolved by conciliation and considered fit to be referred to conciliation by the parties.

Note: For Item (b), (c), (d) and (e) each as stated above the financial limit shall be Rupees Two lakhs or one percent of the contract amount whichever less is.

31.2 Commencement of Conciliation Proceedings:

- (a) The party initiating conciliation shall send to the other party a written invitation to conciliate, briefly identifying the subject of the dispute.
- (b) Conciliation proceedings shall commence when the other party accepts in writing the invitation to conciliate.
- (c) If the other party rejects the invitation, there will be no conciliation proceedings. If the party initiating conciliation does not receive a reply within 30 days from the date on which he sends or within such other periods of time as specified in the invitation, he may elect to treat this as a rejection of the invitation to conciliate and if he so elects, he shall inform in writing to the other party accordingly.

SPECIAL CONDITIONS (CONTD)

31.3 Number of Conciliators: There shall be a Sole conciliator.

31.3.1 Appointment of Conciliator:- All disputes brought out in Para 31.1 (a) to (e) above shall be referred to the sole Conciliator viz Serving Officer not below the rank of Superintending Engineer/ Superintending Engineer (QS&C) having degree in Engineering or equivalent or having passed final/ direct final examination of Sub division-II of Institution of Surveyors (India) to be appointed by the Engineer-in-Chief, Army Head quarters, New Delhi or in his absence, the officer officiating as Engineer-in-chief or Director General of Works specifically delegated by the Engineer-in-Chief in writing.

31.3.2 Status of Effect of Settlement Agreement: - The Settlement agreement signed by the parties as a result of conciliation proceedings shall have the same status and effect as it is an arbitral award on agreed terms.

32.0 ADVANCES ON ACCOUNT:

32.1 Refer Condition 64 of IAFW-2249

32.2 However, at times due to non availability / inadequate availability of allotments of funds, the contractor may have to wait for the payment of RAR/ Final bill till adequate funds are allotted even though the RAR/Final bill stands technically checked and audited. No Compensation to contractor for delay in payment on this account shall be entertained.

33. APPLICABILITY OF GST:

33.1 GST promulgated vide GOI, Ministry of finance (department of Revenue) notification No.6/2015 dated 01 Mar 2015 as amended subsequently shall be leviable for this work. The liability of paying GST is on bidder and his rates quoted shall be deemed to include GST inclusive of applicable cess.

34. APPLICABILITY OF EMPLOYEES PROVIDENT FUND

34.1 Employees Provident Funds and miscellaneous Provision Act-1952 is applicable to contractor for this contract. The contractor and their sub contractors shall be in possession of Provident Fund code number. All the workers deployed in the work by the contractor and sub contractor shall be enrolled as members of Provident fund and shall be given the Universal Account Number (UAN).

34.2 The Contractor shall submit a certificate stating that all workers employed by him or his sub contractor in the work are registered for EPF and their due contributions have been credited into their account. This certificate duly signed by the contractor shall form Part of Running Account Receipt's and Final Bill. For Information Please epfoindia.gov.in

SIGNATURE OF CONTRACTOR
Dated

OFFG.AGE (CONTRACTS)
FOR ACCEPTING OFFICER

PARTICULAR SPECIFICATIONS**1. GENERAL**

- 1.1 The work under this contract shall be carried out in accordance with the Schedule 'A' special conditions, particular specifications, General specifications, drawings where applicable and other provisions contained in the MES Schedule read in conjunction with each other.
- 1.2 The term 'General Specifications' referred to in clause 1.1 hereinbefore in IAFW -2249 shall mean the specifications contained in the MES Schedule **2009(Part I) and 2010 (Part II)** including errata and amendments thereto as applicable.
- 1.3 General rules, specifications, special conditions and all other provisions In the MES Schedule shall deemed to apply to the works under this contract, unless otherwise mentioned in these tender documents.
- 1.4 Particular specification given hereinafter shall be applicable to all the works covered in sch 'A' and they are brief and are only particularise, amend and emphasise the specifications given in MES Schedule which are not repeated here.
- 1.5 Where specifications/provisions given in these particular specifications are at variance with that given in MES Schedule, specifications/provisions given in these particular specifications shall be followed.
- 1.6 In the absence of any reference in particular specifications with regard to the items indicated in Sch 'A', the work shall be executed to the specifications given in the MES Schedule.
- 1.7 Where specifications for any item of work is not given in MES Schedule or in these particular specifications, specifications given in relevant Indian Standard specifications or code of the practice shall be followed.

2. SCOPE OF CONTRACT

- 2.1 The contract comprises full, final and entire completion of all works described in Schedule 'A' as specified in the particular specifications of the contract.

3. ACCEPTANCE OF MATERIALS

- 3.1 The order of precedence for acceptance of materials shall be as under :-
 - (a) Materials with ISI markings.
 - (b) In case of non manufacture of ISI marked materials, materials confirming to relevant IS.
 - (c) In case of non availability of materials at (a) and (b) above the best available materials in the market as defined in clause 1.3 (b) of SSR 1991 Part I and as approved by GE.

4. MATERIAL AND SAMPLE BOARDS:

- 4.1 All materials shall conform to relevant IS Specifications or to BSS. If IS is not available.
- 4.2 Approved samples shall be labeled and signed both by the contractor and the GE. They shall be in the custody of concerned JE (B/R) till final completion of the works. The materials shall be brought to site by the contractor in the makers wrappers and shall not installed unless approved by GE. The contractor on demand shall produce necessary test certificates for the materials from the manufacturers.

5. DEMOLITION / DISMANTLING / TAKING DOWN:

- 5.1 Demolition / Dismantling / Taking down shall be down all as directed by GE .All necessary precaution shall be taken while carrying out the demolition/ dismantling / taking down to avoid any damage or losses. If any damage / loss occur the same shall be rectified by the contractor on his own cost and arrangements. The retrieved material shall be material shall be offered to the contractor through schedule of credit and those material offered schedule of credit shall be removed by the contractors from the site after accounting of the same in payment/ advances. The contractor shall not have any claim whatsoever for the removal of those materials offered to him through schedule of credit.

Contd

(PARTICULAR SPECIFICATIONS (CONTD...))**6 CONCRETE****6.1 CEMENT****6.1.1 GENERAL**

Cement required for the work under the contract shall be procured, supplied and incorporated in the works by the contractor under his own arrangement. Cement shall be of tested quality and shall comply with the requirements mentioned in the drawings, SSR, IS specifications as amended and particular specifications given herein after.

6.1.2 The cement shall be Ordinary Portland Cement (OPC) of grade 43 and shall be as per IS: 8112-1989. OPC only shall be used for all RCC works. Portland Pozzolana Cement as per IS: 1489-2009 may be used for all works other than RCC works.

6.2. SOURCES OF PROCUREMENT:

6.2.1 Cement shall be procured by the contractor from any of main producers of cement from
1. STAR BRAND (M/s Cement Manufacturing Company Ltd 2. ULTRATECH (M/s Ultratech Cement Ltd) 3. KONARK CEMENT (M/S OCL India Ltd) 4. DALMIA (M/s Dalmia Cement (Bharat) Ltd 5. CHETTINAD (M/S Chettinad Cement Corporation Ltd) 6. MYCEM (M/S Heidelberg Cement India Ltd 7. MAHA SHAKTHI (M/S My Home Industries Ltd) 8. PARASAKTI (M/S Parasakti Cements Ltd) 9. M/s Zuari Cements Ltd 10. M/s Toshali Cements Pvt Ltd 11.M/s Saifco Cement Pvt Ltd 12. M/s Prism Cement Ltd 13.M/s Shree Guru Kripa cement Pvt Ltd 14. M/s Barak Valley cements Ltd 15. M/s Dhruv Industrial company Ltd 16. Ultra Tech cement 17. Madras Cement 18. Saurashtra cement 19. Lafarge cement (Lafarge india Pvt Ltd) 20. The Associated Cement companies Ltd 21. Grasim Industries Ltd 22. The India Cement 23. Andra Cement Ltd 24. Century Cement 25. Binani Cements Ltd 26. Mangalam Cement Ltd 27. Birla Corporation Ltd 28. Orient Cement 29. Shree cement 30.J K cement 31. J K Lakshmi Cement Ltd 32. Jaypee Rewa cement 33.Ambuja Cement Ltd 34. M/s Cement Corporation of India Ltd

6.2.2 The contractor shall furnish the particulars of the manufacturer/supplier of cement along with the date of manufacturer to the Garrison Engineer for every lot of cement separately. The cement so brought shall be fresh and in no case older than 60 days from the date of manufacture. The documents in support of the purchases of cement shall be verified by the Garrison Engineer. Before placing the order for supply of cement by the contractor, he shall obtain written approval from the GE regarding name of manufacturer, quantity of cement etc. Cement shall be procured for minimum requirement of one month and not exceeding the requirement of the same for more than two months at a time. The cement shall be consumed in the work within three months after receipt. Cement shall conform to the requirement of Indian Standard specification and each bag of cement shall bear relevant ISI mark. The weight of each consignment shall be verified by the GE and recorded. The content of cement shall be checked at random to verify the actual weight of cement per bag. However, the content of cement per bag shall be 50 Kg only, subject to tolerance given in relevant clause and Annexure 'B' of IS - 8112 of 89.

6.3 TESTING OF CEMENT.

6.3.1 The contractor shall submit the manufacturer's test certificate in original along with test sheet giving the result of each physical test as applicable in accordance with the relevant IS provision and the chemical composition of cement or authenticated copy thereof, duly signed by the manufacturer with each consignment, as per the following IS provision:-

- (a) Method of sampling hydraulic cement as per IS - 3535 - 1986
- (b) Methods of physical test for hydraulic cements as per IS - 4031.
- (c) Method of chemical analysis of hydraulic cement as per IS-4032-1985.

(PARTICULAR SPECIFICATIONS (CONTD...))

- 6.3.2 The test certificate and test sheet shall be furnished with each batch of manufacture. The Engineer-in-Charge shall record these details in the cement acceptance register to be maintained by him which will be signed by JE (Civil), Engineer - in - Charge, Garrison Engineer and the contractors as given in the format herein after for verification.
- 6.3.3 The contractor shall however, organise initial and final setting time, soundness test and a compressive strength test at three, seven and twenty eight days of cement through designated laboratory on samples collected from the lot brought at site before incorporation in work. In addition to above additional tests like chemical composition and fineness tests as specified in relevant IS shall also be carried out. The contractor will be allowed to use the cement only after satisfactory compressive strength of seven days. To meet this requirement contractor is required to keep minimum 10 days stock before any new lot brought at site which can be used in the work. The contractor shall be required to remove the cement not meeting the requirement from site within 24 hours. Seven days strength test will be relied up on to accept the lot of cement to commence the work. 28 days compressive strength test will be the final criteria to accept/ reject the lot.
- 6.3.4 The GE shall carry out independent testing as per the test mentioned in the 'CEMENT SUPPLY/ ACCEPTANCE FORM' of random samples of cement drawn from various lots, if samples fails in 7 days compressive strength. The testing shall be carried out through national test house, SEMT, CME, Regional Research Laboratory, Govt approved Laboratories, Zonal Laboratories as per IS - 3535 - 1986 (Method of sampling hydraulic cement), IS- 4031 (Method of physical test for hydraulic cement) and IS - 4032 - 1985 (Method of chemical analysis of hydraulic cement) referred to above. The decision as to where the testing of cement is to be done shall be taken by GE. However, the contractor shall be permitted to establish his own laboratory at site for testing of cement as well as concrete cubes etc; at his own costs. The testing shall be done by the Engineer-in-Charge and the results shall be approved by the GE. In case the cement is not of requisite standard despite manufacturer 's test certificate , the contractor shall remove the total consignment from the site at his own cost after written rejection order of the consignment by the GE. The cost of tests shall be borne by the contractor irrespective of the results of testing.
- 6.3.5 The random samples as per relevant IS shall be selected by GE before carrying out testing. The record of such samples selected by the GE for testing shall be properly maintained in the 'Cement Testing Register ' giving cross reference to relevant consignment of cement and quantity received etc.
- 6.3.6 Cost of transportation of samples to the approved laboratory /test house and all testing charges including cost of sample shall be borne by the contractor.
- 6.3.7 The contractor shall be required to set up adequate testing facilities at site to the entire satisfaction of Garrison Engineer for conducting setting time tests and compressive strength test as per IS codes referred to herein before for the samples collected from the lot brought at site. These tests shall be carried out with in 7 days of receipt of cement at site. The tests can alternatively be carried out at the Zonal laboratory, or any other recognized laboratory so designated by GE.
- 6.3.8 The contractor shall submit original purchase vouchers for the total quantity of cement supplied under each consignment to be incorporated in the work. All consignments received at the work site shall be inspected by the GE along with the relevant documents to ensure the requirements as mentioned herein-before, before acceptance. The original purchase vouchers and the test certificates shall be verified for subject contract & defaced by the Engineer-in-Charge and kept on record in the office of the Garrison Engineer duly authenticated and with cross reference to the consignment/ control number recorded in the cement Acceptance Register. The cement Acceptance Register shall be signed by the Junior Engineer (Civil), Engineer-in-Charge, GE and the Contractor. The contractor shall maintain schedule of supply of cement for each consignment.

(PARTICULAR SPECIFICATIONS (CONTD...))

6.3.9 The Accepting Officer may order a board of officers for random check of cement and verification of connected documents during the currency of contract.

6.4 **STORAGE/ ACCOUNTING / PRESERVATION OF CEMENT**

6.4.1 Cement shall be stored in covered godown over dry platform at least 20 cm high in such a manner as to prevent deterioration due to moisture or intrusion of foreign matter. In case of store room, the stack should be at least 20 cm away from floors and walls.

The stacking of cement shall be done as specified in relevant IS. The storage, accounting and preservation of cement supplied by the contractor shall be done as per standard engineer practice till the same is incorporated in the work and the cost of the same shall be deemed to be included in the unit rate/amount quoted by the tenderer. The EIC shall inspect once a day to verify that cement lying at site is stored, accounted, preserved and maintained as per the norms. The cement shall be stored so as to differentiate each tested and untested consignment separately with distinct identification. If the GE is not satisfied with the storage /preservation of cement, he may order for any test(s) of cement as applicable for that consignment to ensure its conformity to the quality mentioned in the manufacturer 's test certificate. The contractor shall bear the cost of necessary testing(s) in this regard and no claim whatsoever shall be entertained.

Stacking of cement shall be done as per relevant IS and as under:-

- (a) Each cement consignment shall be stacked separately and removal shall be made on the basis of 'First in First out '.
 - (b) Adequate top cover will be provided.
 - (c) Stacks in no case shall be higher than 12 bags. The maximum width of each stack shall be 3.00m. If the stack is to be more than 7 or 8 bags high, the bags shall be arranged in header and stretcher fashion, i.e. alternately lengthwise and cross wise so as to tie the piles together and avoid danger of topping over.
 - (d) Adequate space shall be kept between two stacks.
- 6.4.2 Cement godown shall be provided with two locks on each door. The key of one lock at each door shall remain with the Engineer-in-charge or his representative and that of the other lock with the contractor 's authorised agent at site of works so that cement is removed from the godown only according to daily requirement with the knowledge of both the parties. During the period of storage, if any cement bag(s) found to be in damaged condition due to whatsoever reason, the same shall be removed from the cement godown on written orders of the GE and suitable replacement for the cement bag(s) so removed shall be made and no claim whatsoever shall be admissible on this account.
- 6.4.3 Cement shall be removed from the store only according to daily requirement with the knowledge of both the parties and daily consumption of cement shall be recorded in cement consumption register which shall be signed by the Engineer - in - charge and the contractor. Cement constants given in Appendix 'A 'to E-in-C's Branch letter No.19280/E8 dated 03 May 1976 shall form the basis of consumption of cement for various items of works unless specifically indicated otherwise.
- 6.4.4 In case the consumption of cement as per cement consumption register is found to be more than the estimated quantity of cement due to whatsoever reason, the contractor shall not have any claim whatsoever for such excess consumption of cement.
- 6.5 **SCHEDULE OF SUPPLY**
- 6.5.1 The contractor shall procure the cement timely as required in accordance with CPM chart agreed between GE and the contractor. The contractor will forfeit his right to demand extension of time if the supply of cement got delayed to his failure in placing order in time to the manufacturer.

Contd....

(PARTICULAR SPECIFICATIONS (CONTD...))**6.6 MEASUREMENTS AND PAYMENT OF CEMENT**

- 6.6.1 The entire quantity of cement shall also be suitably recorded in the Measurement Book for record purposes as 'Not to be abstracted' before incorporation in the work and shall be signed by the Engineer-in-Charge and the contractor.
- 6.6.2 The payment shall only be allowed after production of original purchase vouchers, certified copies of test certificates from manufacturer for each consignment and results of testing carried out in laboratory on receipt of cement (7 days compressive strength test) are found satisfactory after testing as specified herein before. Cement shall be paid as material lying at site as per condition 64 of IAFW - 2249 . Rate of cement given in SSR shall be applicable for cement irrespective of grade of cement specified for use in the work.

CEMENT SUPPLY & ACCEPTANCE REGISTER

1. CA No & Name of Work
2. Control No/Consignment No.*
3. Name of Manufacturer/Brand Name/Grade of Cement (a) Manufacturer ____ (b) Brand____ (c) Grade_____
4. Qty of cement & Lot No./Week No.(in Bags): (a) Qty ____ (b) Lot No./Week No.____
5. Manufacturer's test certificates No._____
6. Random Test Details
 - (a) Physical Test Report from ____ vide their letter No.____ (Name of approved lab/Engg College)
 - (b) Chemical test report from _____ vide their letter No._____ (Name of approved lab/College)

6.7 COARSE AGGREGATE

- 6.7.1 Coarse aggregate for cement concrete work shall be hand broken or machine crushed hard granite/black trap graded stone conforming to IS 383 obtained from approved quarries all as specified in clause 4.4 of MES Schedule Part I. The grading of the aggregate shall be as specified in relevant items of Sch 'A'.

6.8 FINE AGGREGATE (SAND)

- 6.8.1 Fine aggregate for concrete shall be approved quality of natural river sand and as specified in MES Schedule. Fine aggregate shall conform to grading Zone II or III of IS – 383 and all as specified in clause 4.4 of MES Schedule Part-I.

6.9 MIX OF CONCRETE

- 6.9.1 The mix, type and grades of cement concrete in various situations shall be as mentioned in relevant items of Schedule 'A'.

6.10 WATER

- 6.10.1 Water shall conform to the requirement stipulated in IS-456 and as per clause 4.9 of MES Schedule part-I.

- 6.11 CURING** Curing shall be done as specified in clause No. 4.11.13 of MES Schedule Part-I.

(PARTICULAR SPECIFICATIONS (CONTD...))

7. Details of Physical & Chemical properties:-

1	Physical Requirements (As per IS-4031)								Chemical Requirements (As per IS 4032)									
	Specific Surfaces area	Soundness by Le Chatelier	Soundness by Auto Clave	Initial setting time	Final setting time	Compressive Strengths (Mpa)			Temp during testing	Standard consistency(%)	Lime saturation factor(Ratio)	Alumina Iron Ratio	Insoluble Residue (%)	Magnesium (%)	Sulphuric Anhydride(%)	Loss on ignition (%)	Alkalies (%)	Chlorides (%)
						03 days	07 days	28 days										
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
As per relevant IS																		
As per manufacturer's test certificate																		
As per random test certificate																		

Remarks with Signature Accepted/Rejected

Contractor Junior Engineer

Engineer-in-Charge GE

Remarks of BOO/Inspecting Officer/CWE

*To be allotted serially by the GE consignment wise

Contd....

(PARTICULAR SPECIFICATIONS (CONTD...))**8. STONE MASONRY**

- 8.1 Stone for masonry shall be hard granite/trap conforming to samples maintained in GE's office and suitable for works specified hereinafter.
- 8.2 Stone masonry shall be carried out all as described here under: -
- 8.2.1 Stone masonry shall be built in CM (1:6) and shall be squared rubble masonry regular coursed, Secunderabad type all as specified in clause 6.10.12 of MES Schedule Part I.
- 8.2.2 The contractor may at his discretion provide at no cost basis bonds stone of size 15cm x 15cm pre-cast PCC (1:3:6) type C1 (in lieu of stone bond stones) of length equal to full width of the wall and shall not be less than 2 Nos per square metre stones of face area and staggered.
- 8.2.3 No extra payment for hammer dressing to face stone shall be made and rate quoted shall include cost of hammer dressing to face stone and dressing of face bed and joints as specified.

9. BRICK WORK

- 9.1 Bricks shall be hand or machine moulded bricks, nominal size, best locally available and as approved by AGE with the crushing strength not less than 35 Kgs/Sq cm. The nominal size of bricks shall be 230mm long, 115 mm wide and 75 mm high with a tolerance of + 8% in each dimensions. The GE at his discretion, may permit use of bricks (without any price adjustment) which may not strictly conform to the said tolerance limit in sizes provided in satisfied that the bricks conform to the specifications in all other respects. With reference to Special Condition 5.1 of MES Schedule Part II half brick shall be taken as 11.5 cm for the purpose of measurements irrespective of size of bricks locally available. The unit rates in Schedule 'A' are deemed to have been worked out on the basis of width/thickness with bricks as specified above and no price adjustment shall be made for any variation (as stated above) in sizes/dimensions of foundations (width) lintels, bands, cills, earth filling, flooring, plastering, painting, white/colour washing etc, due to variation sizes of bricks that are locally available are used center line dimensions shall however, be maintained.
- 9.2 Brick work in one brick thick and above shall be built in cement mortar as specified in schedule.
- 9.3 The thickness of walls shown as 115mm, 230mm, 345 mm etc shall be reckoned as half brick, one brick and one and half bricks etc (i.e. in multiples of half brick) respectively.
- 9.4 In case of deviation, brick work shall be priced at the rates as applicable for sub class 'B' old size bricks given in MES Schedule.
- 9.5 Bedding and pointing to frames in jambs which are required to be plastered need not be done.

9.6 BRICK JOINTS

- 9.6.1 The thickness of the joints shall be as specified in clause 5.2.6 of MES Schedule Part I.

10.1 PRELAMINATED PARTICLE BOARD

- 10.1.1 Where prelaminated particle board is mentioned in sch `A`, it shall be melamine faced prelaminated particle board (MFPB) exterior grade bonded with phenol formaldehyde resin conforming to IS 12823 with one face choice decorative lamination and other face balancing white lamination or both faces with choice decorative lamination.
- 10.2 **PLY WOOD:** All ply woods where indicated on drawings except in doors shall be BWR grade conforming to IS: 303.
- 10.2.1 Pre-laminated particleboard where indicated in schedule shall conform to IS: 12823 exterior grade, both faces/one face laminated

(PARTICULAR SPECIFICATIONS (CONTD...))

- 10.9 **FACTORY MADE PVC DOOR FRAME/DOOR SHUTTERS (FOR WC/BATH/TOILET)**
- 10.9.1 Factory made solid PVC moulded door shutter with factory made PVC solid PVC door frame shall be provided as in Sch 'A'. The size of the door opening shall be 800 mm X 2100 mm / 800 mm X 2000 mm.
- 10.9.2 The chowkats shall be of solid PVC of size 50mmx47mm made out of 5mm thick plain coloured PVC sheet reinforced with MS square tube, edges shall be painted to match with PVC sheet. The details of the door frame shall be all as given at Sl. Page No. 150 of SSR Part-II-2004 and as specified in clause 8B.3.1 of SSR Part-II-2004.
- 10.9.3 The shutter shall be factory made 30mm thick (stiles) with 2 panels all as specified in Item No 879 of MES Schedule Part-II of 2004. The details of the door shutter shall be all as shown on drawing given on Sl. Page No. 146 of MES Schedule Part-II-2004 and as specified in clause 8B.2.1 of SSR Part-II-2004.
- 10.9.4 The door frame shall be fixed to the wall by 6 Nos. expandable fastener bolts of 100mm long. The shutter shall be fixed with 03 Nos. stainless steel butt hinges of 100mm long. The door shutter shall be fitted with 02 Nos. aluminum anodized handles 100mm long and 02 Nos. aluminum anodized tower bolts 100mm long.
- 10.9.5 PVC door shutters and frames shall be of make RAJASHREE/ SINTEX/ DUROPLAST/NANDI as approved by the GE.
- 11 **BUILDERS HARDWARE**
- 11.1 All items of builder's hardware excluding butt hinges, mortice locks and ball catches shall be aluminium anodised. Anodising shall be not less than 10 microns. All fittings shall bear ISI marks.
- 11.2 Butt hinges shall be of stainless steel (with mild steel Pin) and shall be bright finished with smooth surface.
- 11.3 Aluminium hinges shall conform to IS-205 and all as specified in clause 9.7.3 of MES Schedule Part-I.
- 11.4 Barrel bolt shall be as per clause 9.3.3 of MES Schedule Part-I and of as per clause 9.3.3.1(d) of MES Schedule Part-I. The dia of bolt shall be 12mm for size 150mm and above and 10mm for size up to 150mm. Fixing shall be of all as directed by Engineer-in-Charge.
- 11.5 Aldrop bolts (i.e. sliding Door bolts) shall be as per clause 9.5.2(b) and 9.5.2.1 of MES Schedule Part-I and shall be sliding door bolts with hasp, staple and fixing clips of sheet casting or extruded section and fixing and sliding bolts of extruded section.
- 11.6 Aluminium handles shall be D-type, aluminium alloy fabricated handles with continuous base plate and shall be as per clause 9.11 and 9.11.1 of MES Schedule Part-I
- 11.7 Provide floor door stopper and chokes all as directed by Engineer-in-Charge. The rubber for floor door stopper / choke shall be hard rubber as per manufacturer's instructions and as specified in Clause 9.15 of MES Schedule Part I. The floor door stopper shall conform to IS – 1823 – 1980 and shall be aluminium alloy.
- 11.8 **DOUBLE ACTION FLOOR SPRINGS**: Provide double action floor springs shall conform to IS-6315-1992, of approved make and as specified in clause 9.17 of SSR Part-I
- 11.9 **CURTAIN RODS**: 25mm dia aluminium anodized tubular curtain rod shall be provided confirming to IS not less than 1mm thickness with brackets and shall be approved by GE

(PARTICULAR SPECIFICATIONS (CONTD...))**11.10 HYDRAULIC DOOR CLOSER**

11.10.1 Aluminum doors shall be provided with aluminum (Die-cast) body door closers, hydraulically regulated, designation No. 2, universal type conforming to IS-3564 and shall be as specified in Clause No.9.16 & 9.16.1 of SSR Part-I.

11.11 Screws for all fittings shall match the respective fittings, both in materials and finish except for anodised aluminum fittings which shall be steel cadmium plated screws.

12. STEEL AND IRON WORK

12.1 Steel and iron work in various situations shall be carried out as specified in MES Schedule Part I Section 10.

12.2 SOURCES OF PROCUREMENT

12.2.1 The Contractor shall procure all the steel from any one of the following manufacturers /producers or from their authorized conversion agents through main producers, however purchase vouchers of steel shall be from main producers only ever if steel procured from the conversion agents in case steel procured from conversion agents, two test certificates (one for the billet of main producers and other of authorized conversion agent of finished product) shall be mandatory for each lot of steel brought at site. The test certificate and purchase voucher shall be interlinked with one another with particular reference to lot numbers etc :-

12.2.2 The Accepting officer may permit procurement of reinforcement steel from one of the following Primary manufacturers approved for MES works:-

SL No	Firm Name & Address	Size/Dia and Type
1	Rashtriya Ispat Nigam Limited (RINL) Visakhapatnam Steel Plant Visakhapatnam – 530031, India Tel : (91 891) 518226, 518376 Fax : (91891) 518316 Email: cmdvsp@itpvis.ap.nic.in	For all types & dia of TMT bars
2	Tata Iron & Steel Company (TISCO or TATA Steel) Bombay House,2,4 Homi Modi Street Mumbai-400 001 India Tel (91 22) 204 9131 Fax (91 22) 204 9522 287 0840 Email : corpcomm@jsr.tatasteel.com (Br office for North : Jeevan Tara Bldg, Patel Chowk, New Delhi	-do-
3	Steel Authority of India Limited Central Marketing Organization, Northen Region, 17 th Floor, Scope Minar, Laxmi Nagar Distt Delhi-110092	-do-
4	M/S Jai Balaji Industries Ltd Registered office : 5 Benteck street, Kolkata- 700001, Delhi Office : 510 Block-b, Navraung House, 21 Kasturba Gandhi marg, New Delhi-110001 011-43620219, 43620220 Mob : 7838272772/9958936103 Email ID: info@jaibalajigroup.com	Fe 500 & Fe 500D TMT Rebars

(PARTICULAR SPECIFICATIONS (CONTD...))

5	M/S Shyam Steel Industries Ltd Shyam Towers EN-32, Sector-V Salt Lake, Kolkata-700091 Tel : 033-40074007, Fax- 033-40074010, Email : marketing@shyamsteel.com	Fe 500 & Fe 500D TMT Rebars
6	M/S SPS Steel Rolling Mills Ltd 68 Ballygunge circular road, Kolkata- 700019 Ph- 033-2895160/67 Fax- 033- 22894386 Email : spsdelhi@spsgroup.co.in	Fe 500, Fe 550 & Fe 500 D (Elegant TMT rebars)
7	M/S Steel Exchange India Ltd, My Home Laxminivas Apartments, Ameerpet, Hyderabad-500016, A.P Tel- 040-23403725 Fax – 040-23413267, Email : info@seil.co.in	Fe 500 & Fe 500 D (Simhadri TMT Rebars) and Corrosive resistant TMT bars (Simhadri' TMT HSCRM rebars)

12.2.2 The Accepting officer may permit procurement of reinforcement steel from one of the following Primary manufacturers approved for MES works:-

8	M/S Jindal Steels and Power Ltd (TMT) Plot No 2, Sector-32 Gurgaon-122001, Haryana Tel- 91 1662 222471-84 Fax – 91 1662 220476	Fe 500, Fe 500 D, Fe 550 & Fe 550 D TMT bars
9	M/S SRMB Srijan Ltd Srmh House,7,Khetra Das Lane, Kolkata- 700012 Tel : 033-6600 6600 Fax : 033-2211 0483	Fe 500, Fe 500 D, Fe 550 & Fe 550 & Fe 550 D TMT bars (8mm to 32mm)
10	M/S Concast Steel & Power Ltd, Kolkata 21 Hemant Basu Sarani, Suit Nos- 511 & 512 5 th Floor Kolkata-700001 Tel- 91-33-2213 0481-87 / 91-33-2213 0488 Email : info@concastgroup.com	Fe 500 (8mm to 32mm)
11	M/S Adhunik Metaliks Ltd, Orissa Lansdowne Towers, 2/1A Sarat Bose Road, Kolkata-700 020 Tel : 033 3051 7100 Fax : 91 33 2289 0285 Email : info@adhunikgroup.com	Fe 500 & Fe 500 D (8mm to 32mm)
12	M/S Shri Bajrang Power & Ispat Ltd, Raipur, Chhattisgarh Tel : 0771 4288019/29/39	-Do-
13	M/S JSW Steel Ltd, Karnataka Jindal Mansion, 5A Dr G Deshmukh Marg, Mumbai-400026	Fe 500, 500D & CRS steel bars (8mm to 40mm)
14	M/S Electrosteel Steels Ltd, Bokaro, Jharkhand G k Tower 2 nd & 3 rd floor 19 Camac street, Kolkata, WB-700017 Ph No- 91-33-2283-9990	Fe 500 D (10mm to 32mm)
15	M/S Jindal Steels and Power Ltd (For Structural Steel) Plot No 2, Sector-32 Gurgaon-122001, Haryana Tel- 0124 661 2000 Fax – 0124 661 2125 Website : www.jindalsteelpower.com	(For Structural Steel) Angle, Beam, Column, Channel & plates

(PARTICULAR SPECIFICATIONS (CONTD...))

12.3 Steel supplied by the contractor shall conform to the following grades and quality :-

(a) Steel for concrete reinforcement

(i) High strength deformed steel bars shall conform to IS-1786 -1985 and Grade Fe-415.

(ii) Mild steel bars shall conform to IS-432 (Part I) and Grade I.

(b) Structural Steel

(i) Structural steel standard quality shall conform to IS-226-1875 and grade Ge-410-S. The above mentioned steel shall be provided in the location mentioned in drawings and in clause 10.4.1 of MES Sch Part I.

(ii) Structural steel ordinary quality shall be used for structures not subjected to dynamic loading. This steel shall not be used where welding is used in fabrication and in earth quake zone where severe damage is expected and design of structure based on plastic theory. The steel shall conform to IS-1877-1875 and Grade Fe-410-0. The above mentioned steel shall be provided in the location specified in drawings and in clause 10.4.2 of MES Sch Part I.

(iii) Structural steel ordinary quality shall be used in door and window frames, guard bars, grills etc., and shall conform to IS-1877-1975, Grade Fe-310-0. The above mentioned steel shall be provided in the location specified in drawing and in clause 10.4.3 of MES Sch Part I.

(c) Hard drawn steel wire fabric for concrete reinforcement

Fabric reinforcement shall conform to IS-1966-1982.

NOTE : Any items of steel specified above not conforming to grade and quality shall be rejected and the particular consignment removed from the site by the contractor at his own cost within seven days. he contractor will have no claim on this account.

12.4 ALUMINIUM JOINERY DOOR, WINDOWS/VENTS

12.4.1 All Aluminium sections and fittings as directed by AGE shall be of anodized aluminium with minimum anodizing thickness of 15 microns. These shall be of design and make as approved by the AGE and shall be procured from any of the standard manufactures given below :-

(a) M/s Hindal &Co

(b) M/s Indal & Co

(c) M/s Bharat Aluminium Co. Ltd

(d) Jindal Aluminium Co. Ltd.

12.4.2 Aluminium joinery shall be manufactured out of heavy extruded sections.

12.4.3 The size of various components such as frame, styles and rails, beading and other components, the thickness of the aluminium sheet out of which these are fabricated shall be all as per details shown on drawings. The heights as directed by AGE shall be the minimum heights based on which the contractor shall quote his unit rates in Sch 'A'.

12.5 CHAIN LINK FENCING

12.5.1 Chain link fencing shall be galvanised steel and shall be all as described in clause 10.34 of MES Schedule Part-I .

(PARTICULAR SPECIFICATIONS (CONTD...))**15 FALSE CEILING**

- 15.1 False ceiling shall be carried in true horizontal level with thickness as mentioned sch 'A' using medium duty system members snap grid frame as mentioned Sch 'A' items and specified in section 12 SSR Part-I
- 15.2 The false ceiling shall be of ARMSTRONG SUSPENDED ceiling system or equivalent. The snap grid shall be with sections as specified in schedule 'A' @1200mm C/C suspended from the ceiling with 2mm dia GI wire supported from existing RCC slab fixed with Metal dash fastner as shown on drawing as guideline with other component all as shown as guidelines. The ceiling board shall be non asbestos designer board as approved finish.

16. FLOORING**16.1 GENERAL**

- 16.1.1 Workmanship shall be all as specified in clause 13.25 of MES schedule Par-I unless otherwise specified hereinafter.
- 16.1.2 Floors shall be laid to levels and or/to slopes as directed by the GE. Floors shall be sunk where directed to the required depth. The floors shall be carried through all opening in walls at floor level. In case of doors/openings with different floor finishes on two sides the meeting line of the finish shall be as described in subsequent paras.
- 16.1.3 In case of openings without door shutters, the floor finish of main room shall be extended for the full width of the openings.
- 16.1.4 In case of openings with door shutters, the floor finish of main room shall be extended upto outside of door shutter when shutter is closed.
- 16.1.5 Where floor finish is to be done the top surface of slab shall be cleaned with hard wire brush and applied a coat of cement slurry at 3 Kg cement/SM just before laying the floor.
- 16.1.6 Unless otherwise mentioned, glass dividing strips 3mm thick shall be provided to from joints in PCC floors, (except WC, toilet and both). The width of glass strips shall be equal to thickness of the floor concrete. The top of glass dividing strips shall be grounded smooth. Glass dividing strips need not be provided in sub base.

16.2 PLAIN CEMENT CONCRETE FLOORS:

- 16.2.1 Provide PCC floors and thickness over sub base RCC slab all as specified is Sch 'A'
- 16.2.2 PCC floors (except floors in sub base) shall be laid in bays adopting panel dimension of 1200mmx1200mm. The bays shall be so arranged that the end of bays shall be of equal width not exceeding 1200mm. Top of PCC floors shall be steel toweled to a smooth and even finish using extra cement. The floor shall be laid in alternative bays.

16.3 GLAZED TILES /SKIRTING/DADO:

- 16.3.1 Glazed tiles Skirting/Dado shall be laid in the manner as specified in relevant clause of MES Schedule Part-I and as mentioned in items in Sch 'A'. Height of dado/skirting shall be as indicated as directed GE. White /Colour glazed tiles shall be of size and thickness as mentioned in Sch 'A' items. These shall be laid over backing coat of cement mortar as mentioned in relevant item Sch 'A'. and set and jointed in neat cement slurry and pointed in white/coloured cement to match.

(PARTICULAR SPECIFICATIONS (CONTD...))**16.4 NON SKID CERAMIC TILES FLOORING**

16.4.1 Non skid ceramic tiles flooring shall conform to IS-777-1970 and shall be laid in the manner as specified in relevant clause of MES Schedule Part-I and as mentioned in items in Sch 'A'. White /Colour Non skid ceramic tiles shall be of size and thickness as mentioned in Sch 'A' items. These shall be laid over backing coat of cement mortar as mentioned in relevant item Sch 'A'. and set and jointed in neat cement slurry and pointed in white/coloured cement to match.

16.5 VITRIFIED TILE FLOORING

16.3.1 Provide Polished vitrified tiles shall be of size as described in schedule 'A'. Vitrified tiles shall be of homogenous body, first quality, Moh hardness not less than 7 (Marbonite, granite finish) conforming to relevant IS. Tiles shall be laid over **15 mm thick screed in cement mortar (1:6)** as per manufacturer's instructions. The shade and the size shall be as approved by GE. Joints shall be pointed flush using polymer based cementitious tiling joint filler to match the shade of the tile.

16.3.2 VITRIFIED TILE SKIRTING:

Provide vitrified tile skirting as described in sche'A'. The shade shall be as approved by the GE. Screed for laying the tiles **shall be 10 mm thick in cement mortar (1:3)** . Tiles shall be laid as per pattern described by GE. Joints shall be pointed flush using polymer based cementitious tiling joint filler to match the shade of the tile

16.5 CHEQUERED CEMENT CONCRETE TILES:

16.5.1 Chequered cement concrete tiles be all as mentioned in Sch 'A'. The size, colour and pattern of the tile **shall be all as approve by GE**. The tiles shall be bedded, jointed and pointed with coloured cement to match the colour of tiles.

16.6 PRESSED INTER LOCKING TILES:

16.6.1 Pressed interlocking tiles be all as mentioned in Sch 'A'. The size, colour and pattern of the tile **shall be all as approve by GE**. The tiles shall be bedded, jointed and pointed with coloured cement to match the colour of tiles. Tiles shall be laid over sand cushioning and edges of pavement shall be protected by plain cement concrete (1:2:4) type B1(20mm graded stone aggregate) finished even and smooth without using extra cement.

17 PLASTERING, SCREEDING AND POINTING:**17.1 GENERAL**

17.2 Surfaces to be plastered shall be prepared and well watered as specified in MES Schedule. Curing or plaster shall be properly done by means of stirrup pumps or similar devices. The contractor shall take every precaution right from the commencement of plaster work to prevent any craziness that may appear on the surface of plaster and shall be responsible to make good any portion of plaster work which in the opinion of the GE requires removal and redoing.

17.3 SAND: Sand for all plaster and pointing work shall be fine sand and shall conform to or be superior in quality to the sample kept in the office of the GE. The grading of sand shall generally conform to IS-383 as specified for various purposes.

(PARTICULAR SPECIFICATIONS (CONTD...))**18. CEMENT BASED PAINT**

18.1 Apply two coats of water proofing cement based paint over one coat of primer as per manufacturer's instruction all as specified in clauses of MES Schedule Part I. The tint of the paint shall be as directed by the GE. The paint shall be of first quality and shall conform to relevant IS. Silicon based water repellent compound need not be used separately while preparing of cement based paint, in case, the same has been added by the manufacturer while manufacturing of cement based paint shall be as per manufacturer's literature. Primer shall be of the same manufacturer/make of cement base paint as approved by GE.

19. GLAZING

19.1 Glazing to windows/ventilators shall be with sheet glass plain, ordinary quality except for windows / ventilator of toilet bath and WC. For windows of toilet, baths and WC's glazing shall be pinhead type. Glass shall be free from defects viz., bubbles, waviness etc., and shall be homogeneous thickness and conforming to IS.

19.2 Glazing of wooden / steel windows and ventilators shall be 3mm thick sheet glass for panes of area upto 0.5 Sqm and 4mm thick beyond 0.5 Sqm area of pane.

19.3 Glazing of aluminum windows/ventilators and doors shall be 5.50mm thick sheet glass.

20. PAINTING

20.1 Paints and primer shall be procured from one of the manufacturer's listed in List of Manufacturers' in particular specifications.

20.2 Redoxide zinc chromate primer for steel surfaces shall conforming to IS-104.

20.3 Synthetic enamel paint for both wooden and steel surface shall conform to IS-2932.

20.4 GENERAL

20.4.1 All painting as far as possible shall be carried out in dry weather and neatly cut at edges. Other surfaces shall be protected and cleaned off as necessary.

20.4.2 All paint shall be of first quality not inferior to that specified in the relevant Indian Standard Specifications and one out of the manufacturers brands/makes listed in 'List of Manufacturers'.

20.4.3 Paint for primer coat under coat and finishing coat shall be from the same manufacturers.

20.4.4 All iron and steel work specified shall be scrapped free from dust, scale etc, with a steel brush and will dusted before painting. Wood and wood based materials shall be prepared as specified in MES Schedule.

20.4.5 Workmanship and application of paints shall be as specified in section 17 of MES Schedule Part-I as applicable for relevant items of painting

21. PLUMBING AND SANITARY FITTINGS.**21.1 GENERAL**

21.1.1 All sanitary appliances shall be of vitreous china (white) first quality and shall conform to IS-2556 for General requirements and the specific requirements as mentioned in relevant clause of MES Schedule. These shall be of an approved make from the list given in 'List of Manufacturers'

21.1.2 All waste pipes and fittings up to floor/Nahani trap from wash hand basin shall be of galvanised steel tubing medium grade conforming to IS 1239 (Part II 1969).

(PARTICULAR SPECIFICATIONS (CONTD...))

21.1.3 The sizes, given hereinafter are approximate sizes. The size of sanitary fittings to be provided shall be the nearest size as per manufacturers catalogue as approved by GE.

21.2 WASH HAND BASIN.

21.2.1 S&F vitreous china wash basin, white flat back size as mentioned in Sch 'A' and all as specified in clause no. 18.32.5 of MES Schedule Part-I

21.4 WATER CLOSET

21.4.1 WATER CLOSET ORISSA PATTERN :- Water closet shall be of size as specified in schedule with integral footrests and P or S trap. The pan shall be set in lime concrete 1:2 at least 15 cms around and finished just below the rim to receive adjoining floor finish.

21.4.2. WATER CLOSET PEDESTAL TYPE (EWC)

21.4.2.1 Water closet shall be of size shall be as indicated in Sch 'A'. Fixing of pan, fixing of seat and cover and fixing of flushing cistern shall be as para 18.87 of MES Schedule SSR part-I.

21.5 MIRROR:- The mirror shall be provided of size as specified in schedule with selected approved sheet glass 5.5 mm thick nominal thickness and shall be conforming to IS with design glass beading. It shall be free from all flaws, specks or bubbles. The glass shall be uniformly silver plated on the back, free from silvering defects. The silvering shall have uniform protective coating of red lead paint. 6mm plywood backing BWR grade and shall be conforming to IS and bonded with phenol formaldehyde synthetic resin adhesive suitable for general purpose.

22. PLUMBING WORK**22.1 GENERAL.**

22.2. PVC (SWR) pipes and fittings shall be of PVC to with stand continuous internal hydraulic pressure of 4 Kgf/Sq.cm conforming to IS-4985, of size as indicated on drawings. Pipes and fittings shall be secured to wall just below all joints with MS clamps embedded in cement concrete blocks 100 x 100 x 100mm (1:2:4) type B1 mix. MS clamps shall be made from 1.6mm thick sheeting of 30mm width. Pipes and fittings shall be jointed with epoxy resin or compound as recommended by manufacturerer. The grating shall be CI,round type, weighing not less than 0.5 Kg each, provided and fixed at the inlet of rain water pipes.

22.3 SHORTER LENGTHS. Except for WC connections, the contractor may use pipe pieces without sockets in shorter lengths (less than one pipe length) if approved by the GE and connect these to pipes fitting with double sockets/collars, including additional joints as specified above without extra cost to the Government.

22.4 GI TUBE AND FITTINGS

22.4.1 GI tube and fittings shall be of mild steel galvanized medium grade conforming to IS-1239 and ISI marked and all as mentioned in clause 18.4 of MES Schedule Part-I

22.4.2 TESTING

22.4.2.1 Testing shall be carried out all as specified in MES schedule. All the equipment required for carrying out the specified tests shall be responsibility of the contractor.

(PARTICULAR SPECIFICATIONS (CONTD...))**22.5 PVC WATER TANK**

22.5.1 PVC water tank shall be HDPE double layer type ISI Marked and fixed in the location as directed by Engineer-in-Charge. The tank shall be placed on slab over PCC 1:2:4 Type B1 raised platform with a minimum height of 100 mm and of size 15 cm more than external dia of tank. Each tank shall be provided with 25 mm dia ball brass valve.

22.6 BIB TAPS AND STOP VALVES

22.6.1 They shall be screw down type and shall conform to IS-8931 and ISI marked as given in Sch 'A'. Spindles, glands, crutches etc. shall be of extruded brass.

22.7. GUN METAL GATE VALVES

22.7.1 Gate valves shall be class-I and shall conform to IS-778 and shall be ISI marked

23. PAID VOUCHERS:

23.1 The voucher /invoice shall be from the manufacturers and / or from their authorized agents for full quantity of materials as applicable as a prerequisite before submitting claims for payment for advances on account of work done and / or materials collections in accordance with condition 64 of general condition of contracts IAFW-2249.

23.2 The Engineer-in-Charge shall also verify the original paid vouchers and make necessary endorsement on the paid vouchers. One Xerox copy of the verified paid vouchers shall be kept on record and entered in the measurement book duly signed by the contractor and Engineer-in-Charge.

23.3 Along with paid voucher contractor shall produce the catalogue/pamphlet of the company/manufacturer.

24. VISIT:

24.1 Contractor shall visit to the site / building to ascertain the condition of building & existing provision and quote the rates accordingly.

SIGNATURE OF THE CONTRACTOR

OFFICER

Offg.AGE (CONTRACTS)
FOR ACCEPTING

(PARTICULAR SPECIFICATIONS (CONTD...))**25. LIST OF APPROVED MANUFACTURERS****(List of Materials and their Approved Manufacturers)**

SL NO	NAME OF THE MATERIAL	NAME OF THE MANUFACTURER
1	CEMENT	Clause No 6.2 refer in Particular Specification
2	STEEL	Clause No 12.2 refer in Particular Specification
3	AGGREGATES	Available quarry as approved by GE or Location approved by State Govt. / authority and as approved by GE
4	GI PIPES AND FITTINGS	JINDAL / TATA / ZENITH / OSWAL
5	LIME 1 ST QUALITY	SURYACEM (PAPER BAG)/LOVELY
6	PLUMBING / SANITARY FITTINGS INCL EWC SEAT COVERS (1 ST QUALITY)	PARRY- WARE(SUPER FINE) / HINDWARE / CERA / HR JOHNSON/ KHODIAR POTTERY WORKS (KHEDIAR)
7	BUILDERS HARDWARE	JAYANT / JOYTI / CROWN/ AJANTHA/ ECIE/ ARGENT/CLASSIC
8	HDPE TANK	SINTEX / ROTEX / CEAT / PLASTO
9	HDPE TANK LID / COVER	PLASTO / POLYCON
10	PVC LOW LEVEL FLUSHING CISTERN	SEABIRD/PARRYWARE/HINDWARE/MODIGUARD / JOHNSON PEDDERS /COMMANDER/CHAMPION
11	PVC (SWR) PIPES & FITTINGS	SUPREME / PRINCE / FINOLEX
12	GLASS / MIRROR	MODI GUARD / SAINTGOBAIN/SWASTIK
13	PRELAMINATED PARTICLE BOARD / PLYWOOD / PARTICLE BOARD	NOVAPAN / ANCHOR / BHUTAN BOARD / SWASTIC / KITPLY /GREEN PLY/ARCHID PLY
14	SYNTHETIC ENAMEL PAINT	ASIAN PAINTS (APCOLITE BRAND) JENSON AND NICHOLSON (BOROLAC POLYTHURANE ENAMEL BRAND) GOODLASS NEROLAC PAINTS (NEROLAC BRAND) BERGER PAINTS (LUXOL HIGH GLOSS BRAND) SHALIMAR PAINTS (SUPER LAC BRAND)
15	PVC DOOR FRAMES & SHUTTERS	RAJSHRI / ACQUA / SINTEX
16	PTMT FITTINGS	PRAYAG / POLYTUF /PEARL

(PARTICULAR SPECIFICATIONS (CONTD...))

17	WIRE CLOTH	M/S MULTIWELD WIRE CO PVT LTD MUMBAI M/S LAXMI WIRE NETTING AJMER M/S WIRE NETTING CORPORATION DELHI CHAMPION M/S JAINSONS STEEL DELHI
18	FALSE CEILING	EVEREST CEILING GRID SYSTEM/ RAMCO CHARMINAR / AMSTRONG
19	NON-ASBESTOS CEILING BOARDS	LAKE & HILL / OCEANIC / CASCADE / ELECTRA / VISHAKA
20	LAMINATED SHEET	HYLAM,FORMICA,SUNGLOSS
21	ALUMINIUM SECTIONS	JINDAL / INDAL / HINDALCO
22	PRESSED STEEL WINDOWS / VENTILATORS AND DOORS (IS 1038 – 1983)	AGEW / SENHARVIC / GODREJ / RAYMUS / BIHAR BOBBIN / MULTI-WYN / SHIVMULAR / GANESH ROLLING SHUTTERS SECUNDERABAD / MADHU INDUSTRIES BANGALORE / SURABHI METALS (INDIA) PVT LTD JODHPUR / SUPREME STEEL NAGPUR / METRO INDUSTRIES KATNI ROAD JABALPUR
23	PCC / PLAIN OR CHEQUERED/ TERRAZO/ INTERLOCKING TILES	M/S NITCO TILES PVT LTD MUMBAI INDIA TILE AND MARBLES CHENNAI MECCANO FLOORING PVT LTD CHENNAI BHARAT TILE AND ENGINEERING CO BANGALORE/ULTRA/CLASSIC/ M/S MEHTAB TILES/INDOOR (MP) / DECO TILES
24	BALL BRASS VALVES	LEADER/PEACOCK/ZOLOTO
25	BIB TAPS / STOP COCKS AND PILLAR COCK SHOWER ROSE AND OTHER FITTINGS ETC	PRAYAG / GEM / ANCHOR / SEICO
26	GLAZED / CERAMIC/NON SKID TILES / GLAZED EARTHEN TILES/ VITRIFIED TILES	HR JOHNSON (INDIA)/ SOMANY/KAJARIA/NITCO/ ORIENT BELL/ NAVEEN /ASIAN GRANITO INDIA LTD/ AGL
27	WATER PROOFING COMPOUND	CICO/AQUAPROOF / AQUAFLEX / SCOTT NO 1/PIDILITE/FOSROC
28	GUN METAL GATE / GLOBE VALVE	LEADER/GEM/ZOLOTO/NETA
29	TOWEL RAIL / CURTAIN ROD	CROWN / JINDAL / ESS
30	PLASTIC WC SEAT & COVER	COMMANDER / SUPREME / PARRYWARE / CERA
31	SWIMMING POOL TILES	HR JOHNSON OR EQUIVALENT MAKE AS APPROVED

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LIST OF MANUFACTURERS (CONTD...)

NOTE: The make's of products given in above list are expected to confirm IS specifications/ bear ISI mark. In case, they do not confirm to IS, they automatically deemed to be deleted from this list. The Tenderers therefore, shall make market enquiry about the same and no claim whatsoever on this account shall be entertained. In such cases, the make shall be as approved by the Garrison Engineer. The makes if given in Schedule 'A' shall take precedence over this list of makes.

If make of any item not indicated/ specified in Sch 'A' as well as in the above 'List of Makes and their approved Manufacturers' list shall be ISI approved or IS marked Confirming to relevant IS Code and as approved by Engr-in-charge.

SIGNATURE OF THE CONTRACTOR

**Offg. AGE (CONTRACTS)
FOR ACCEPTING OFFICER**