

**TENDER FOR PROVN OF INDEPENDENT 160KVA TRANSFORMER FOR POWER
SUPPLY AT NFS NODE LOC AT UNDER GE KALUCHAK**
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	Drawings :- ____ sheets	Total
	Pages :	

Signature of Contractor
Dated : _____

DCWE(C)
for Accepting Officer

REGISTERED

Headquarter
Commander Works Engr
Jammu, Pin – 900172
C/O 56 APO

82024/39/ 03 /E8

Sep 2024

M/s _____

**TENDER FOR CA NO. CWE/JP-39/2024-25: PROVN OF INDEPENDENT 160KVA
TRANSFORMER FOR POWER SUPPLY AT NFS NODE LOC AT UNDER GE
KALUCHAK**

Dear Sir(s),

1. Tender documents in respect of above work are uploaded on the site www.defproc.gov.in. The tender is **single stage two cover e-tendering system**. The contents of Cover I & II are specified in NOTICE OF TENDER.
2. Bid will be received online by ACCEPTING OFFICER upto the date and time 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 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 the bid submission start date. You are requested not to write piece meal points and forward your points duly consolidated before the bid submission start date.
5. Unenlisted 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 BID SECURITY DECLARATION and tender fee on e-procurement portal and submit the physical documents in the office of HQ **CWE JAMMU** 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) Contractors having not executed standing security bond and standing security deposit in any MES formation shall upload scanned copy of BID SECURITY DECLARATION as per format mentioned in Notice of Tender and shall ensure receipt of hard copy of BID SECURITY DECLARATION 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.

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 **HQ CWE JAMMU** before date & time fixed for this purpose.

8. The contractors 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 from 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 the 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, SPECIFICATION LAID DOWN IN THE TENDER DOCUMENTS OR ANY NEW CONDITION, WHATSOEVER, IS LIABLE TO BE REJECTED.

Yours faithfully,

Signature of Contractor
Dated:_____

DCWE (C)
For Accepting officer

Enclose: One set of Tender Documents

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 Appendix 'A' to 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 GE (See Appendix 'A' to Notice of Tender).
- (b) Receipted Treasury challan, the amount being credited to the revenue deposit of GE (See Appendix 'A' to Notice of Tender)

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 concerned GE.

***Note:** Earnest Money in the form of Cheque/Bank Guarantee etc., will not be accepted. NON-SUBMISSION OF EARNEST MONEY DEPOSIT (EMD) (scanned copy along with 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. PERFORMANCE SECURITY

2.1 Within 28 days of receipt of the Letter of Acceptance, the successful contractor shall deliver to the Accepting Officer a Performance Security in any of the forms given below for an amount equivalent to 5 % of the contract sum.

(a) A Bank Guarantee in the prescribed form.

(b) Government Securities, FDR or any other Government Instruments stipulated by the Accepting Officer.

2.2 If the performance security is provided by the successful Contractor in the form of a Bank Guarantee, it shall be issued by Nationalized/Scheduled Indian Bank but its confirmation shall be done only from the Head Office of the Bank.

2.3 Failure of the successful contractor to comply with the requirements of sub-clause 2.1 shall constitute sufficient grounds for cancellation of the award of work and forfeiture of the Earnest Money. In case of MES enlisted contractor, amount equal to the Earnest Money stipulated in the Notice inviting Tender, shall be notified to the tenderer for depositing the amount through MRO. Issue of tender to such tenderers shall remain suspended till the aforesaid amount equal to the Earnest Money is deposited in Government Treasury.

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER

2.4 All compensation or other sums of money payable by the contractor to the Government under the terms of this contract or under any other contract with Government may be deducted from, or paid by the sale of a sufficient part of the Performance Security or from the interest arising there from or from any sums which may be due or become due to the contractor by the Government on any account whatsoever and in the event of his Performance Security being reduced by reason of any such deduction, or sale as aforesaid, the contractor shall within ten days thereafter make good in cash or securities, endorsed as aforesaid, any sum or sums which may have been deducted from or realized by the sale of his Performance Security or any part thereof. Government shall not be responsible for any loss of securities or any depreciation in the value of securities while in their charge nor for loss of interest thereon.

2.5 In the event of contract being cancelled, under Condition 52, 53 & 54 of General Conditions of Contract, the Performance Security shall be forfeited in full and shall be credited into Consolidated Fund of India

3. DEFECT LIABILITY PERIOD

Defect liability period for purpose of condition 46 of IAFW-2249 shall be twenty-four calendar months after the works have been handed over to Government.

4. GENERAL INSTRUCTIONS FOR COMPLIANCE

4.1 The bid received only in the electronic form will be considered. All bids shall be submitted on “www.defproc.gov.in” portal. Documents should be scanned and forwarded in “pdf” form and “xls” form as indicated.

4.2 Bids shall be uploaded on “www.defproc.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.

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

4.4 Drawings, if issued in physical form, must be returned duly initialled by the tenderers/bidder in separate envelope indicating his name and address.

4.5 The tender shall be signed, dated and witnessed at all places provided for in the documents after acceptance. All corrections shall be initialled. 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.

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER

4.6 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 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 "pdf" 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 Partners(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 of the Company, as the case may be, in all matters pertaining to the contract including the Arbitration Clause.

4.7 Even in case of Firms or Companies which have already given Power of Attorney to and 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, should 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.

4.8 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.

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

4.10 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).

4.11 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.

4.12 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.

4.13 In case the tender/bidder has to revise/modify the rates quoted in the BOQ (excel sheet) he can do so only in the BOQ, through "www.defproc.gov.in" website only before the bid closing time and date.

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER**5. REVOCATION/REVISION OF OFFER UPWARD/OFFERING VOLUNTARY REDUCTION, AFTER CLOSING OF BID SUBMISSION DATE & TIME**

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 noticed 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 by the tenderer/bidder on the freak high rates referred for review shall not be treated as voluntary reduction.

6. CPM (Critical Path Method)

- 6.1 The project planning for work covered in the scope of tender is based on CPM.
- 6.2 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.
- 6.3 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.
- 6.4 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.

7. Refund of Performance Security Deposit : The Performance Security Deposit mentioned in Para 3 above may be refunded to the contractor after the expiration of sixty days beyond the defects liability period (vide Condition 46 of IAFW-2249)) (Note that the defect liability period for the subject work is Two Years after the works have been handed over to the govt.) by the GE provided always that the contractor shall first have been paid the final bill and have rendered No-Demand Certificate (IAFW-451).

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

Signature of Contractor
Dated: _____

DCWE (C)
For Accepting Officer

IAFW-2162 (REVISED 1960)
MILITARY ENGINEER SERVICES
NOTICE OF TENDER

1. A e-tender is invited for (See appendix 'A').
2. The work is estimated to cost (See Appendix 'A'). This estimate however is not guarantee and it is merely given as rough guide and if the work costs more or less tenderers will have no claim to that amount.
3. The work is to be completed within (See Appendix 'A') months, which will be on or about (See Appendix 'A')
4. The scanned copy of application for the tender document(s), DD/banker cheque and other relevant documents should be uploaded on MES e-procurement site. But the original application along with DD/Banker cheque as cost of tender must be submitted to CWE Jammu so as reach this office on or before the date & time mentioned in NIT failing which the application may be rejected and tenderer will not be allowed to participate in second state (Price bid).
5. Normally Contractors whose names are on the MES approved list for the area in which the work lies, and within whose financial category the estimated amount would fall, may tender/ bid but in case of term contracts, Contractors of category 'E' to 'SS' may tender/ bid. Contractors whose names are borne on the MES approved list of any MES formation and who have deposited 'Standing Security' and have executed 'Standing Security Bond', may also tender/ bid without depositing Earnest Money along with the tender / bid and if the tender / bid submitted by such a tenderer / bidder is accepted, the contractor will be required to lodge **within 28 days of receipt of the letter of Acceptance, the successful contractor shall deliver to the Accepting Officer a Performance Security in any of the forms given before for an amount equivalent to 5% of the contract sum.** Not more than one tender/ bid shall be submitted/uploaded by one contractor or one firm of contractors. Under no circumstances will a father and his son(s) or other close relations who have business dealing with one another be allowed to tender/bid for the same contractor as separate competitors. A breach of this conditions will render the tenders/bids of both the parties liable for rejections.
6. The CWE Jammu will be the Accepting Officer referred to as such for the purpose of this contract.
7. Tender forms and conditions of contracts and other necessary document can be downloaded on and after (See Appendix 'A') to approved contractors. The appropriate standing security for this work shall be deposited by the contractors enlisted for (See Appendix 'A').
In the case of a contractor who has not executed the standing security bond the tenderer shall upload scanned copy of paid Earnest Money amounting to (See Appendix 'A') in the form of deposit-call receipt issued in favour of Garrison Engineer by a schedule bank or a receipted treasury Challan the amount being credited to the revenue deposit of the GE (see Appendix 'A').

NOTICE OF TENDER (CONTD...)

8. Copies of the drawings and other documents pertaining to the work signed for the purpose of notification by the Accepting Officer or his accredited representative and sample of material and stores to be supplied by the contractor will be opened for inspection by the tenderers at the following offices during working hours (See Appendix 'A')
9. The tenderer are advised to inspect/visit and examine the site and its surroundings by making prior appointment with the Garrison Engineer in sufficient times and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials tools & plants, water, electricity, access facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. The online submission of tender/Price bid by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of the conditions and rates at which materials, tools and plants etc will be issued to him, local conditions and other factors having a bearing on the execution of the work.
10. The accepting authority on behalf of the President of India does not bind himself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all of the tenders received without the assignment of any reason. All tenders, in which any of the prescribed conditions is not fulfilled or any condition including that of conditional rebate /rebate is put forth by the tenderer, shall be summarily rejected
11. The tender shall be based on (See Appendix 'A').
12. Under no circumstances will father and his sons/or other close relations, who have business dealing with one another be allowed to tender for the same contract as separate competition. Breach of this condition will render the tenders of both parties liable to rejection.
13. The Price Bids will be opened online by the opening officer / officers at the specified date & time (See Appendix 'A') and the result will be displayed on the www.defproc.gov.in, which can be seen by all the bidders who participated in the tenders.
14. Any tender which proposes any alternations to any of the conditions laid down or which propose any other conditions of any description whatsoever/is liable to be rejected.
15. The Accepting Officer does not bind himself to accept the lowest tender of any tenderer or to give the reasons for not doing so.
16. This letter shall form part of the tender documents.

Signature of Contractor
DATED: _____

DCWE(C)
For Accepting Officer

Appendix 'A' NOTICE INVITING E-TENDER
(MILITARY ENGINEER SERVICES)

1	Name of Work	PROVN OF INDEPENDENT 160KVA TRANSFORMER FOR POWER SUPPLY AT NFS NODE LOC AT UNDER GE KALUCHAK		
2	Estimated Cost	Rs. 14.65 lakhs (At Par Market)		
3	Period of completion	120 days		
4	Cost of Tender documents	Rs. 500/- in the form of DD/Bankers cheque from any Scheduled Bank in favour of GE Kaluchak and payable at Kaluchak (Note : In case of retendering, the contractor who had quoted in the previous call is not required to submit the cost of tender.).		
5	Website / Portal address	www.defproc.gov.in		
6	Type of contract	The tender shall be based on (IAFW-1779A) and General Conditions of Contracts (IAFW-2249) with Schedule 'A' (list of items of work). The contractor is required to quote their rates against items of Schedule of works (BOQ).		
7	Information & Details (CRITICAL DATES) :-			
	Tender Publishing Date and Time		24 Sep 2024	1700 hrs
	Starting Date of Tender Documents Downloading		24 Sep 2024	1700 hrs
	Seeking Clarifications Start Date		24 Sep 2024	1700 hrs
	Seeking Clarifications End Date		26 Sep 2024	1800 hrs
	Starting Date and Time of Bid Submission (Cover-1 & 2)		08 Oct 2024	1700 hrs
	Closing Date and Time of Bid Submission (Cover-1 & 2)		15 Oct 2024	1800 hrs
	Date and Time of Opening of Technical Bid (Cover-I)		17 Oct 2024	1000 hrs
	Date and Time of Opening of Priced Bid (Cover-2) of only eligible qualified Bidders		To be intimated later on after evaluating the technical bid	
8.	Eligibility Criteria			
	(A) For MES enlisted contractors	Contractor shall he enlisted with MES in Class “E” and above and category “b(ii)” subject to satisfactory remarks wrt performance in respect of works in hand as reflected in Work Load Return (WLR) or any other report circulated by competent engineer authority.		
	(B) For contractors not enlisted with MES	(i) Contractor not enlisted with MES should meet the enlistment criteria of Class “E” & category “b(ii)” contractor with regard to satisfactorily completion of requisite value works with Central/State Government/ Central/ State PSUs/ AWHO/ AFNHB/ CGEWHO / DGMAP, annual turnover, bank solvency, working capital and other requirements given in Para 1.4 & 1.5 of Section 1 of MES Manual of Contracts 2020 as available in all MES formations as well as MES website (www.mes.gov. in). (ii) Not carrying adverse remarks in Work Load Report (WLR) or any other similar report circulated by any competent authority, if already working in MES. (iii) Not suspended/debarred/blacklisted (either permanently or temporarily) from participating in any bid or for business dealings by any Central/State Government Department or any Central/State Government PSU or any Autonomous Body under Central/State Government or any Local Body as on the bid submission end date.		

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APPENDIX 'A' TO NOTICE INVITING e-TENDER (NIT) (CONTD)

9.	Tender issuing and Accepting Officer	Col S Pradeep Military Engineer Services, HQ Commander Works Engineer Jammu, PIN-900172, C/O 56 APO, 0191-2450004, jmu3-mes@nic.in
10	Executing Agency	GE Kaluchak
11	Earnest Money	Rs. 30,000.00 in favour of GE Kaluchak in the form of Deposit at call receipt, FDR not acceptable.

NOTES :-

1. In case after opening of Cover 1, the number of MES enlisted contractors of eligible class as well as eligible un-enlisted contractors, if any, fulfilling the other eligibility criteria given in NIT is less than 7 (Seven), applications in respect of MES contractors of one class or two classes (in case of remote and difficult areas to be decided as per list circulated by CE command/ADG) below the eligible class shall also be considered subject to fulfillment of other eligibility criteria given in the NIT. Therefore MES contractor's one class below (two classes below in case of remote and difficult areas) may also bid for this tender. Such contractors (contractors of one/two classes below the eligible class) shall not be considered in case their present residual work in hand is more than FIVE TIMES their present tendering limit. However in case such contractors fulfill the criteria of upgradation to the stipulated eligible class based on past experience of completed works (individual work experience and/or average annual turnover, as applicable) and financial soundness (solvency/financial soundness and working capital), the ceiling of present residual work will not apply and they will be considered for issue of tender. Such bidders shall upload in their Cover-1 bid details related to residual work in hand like details of works in hand showing names of work, names of Accepting Officers, Contract amounts, dates of commencement and completion (stipulated) and progress as on bid submission date. Such contractors, if claim to fulfill the criteria of upgradation shall also upload the requisite information/documents in support of upgradation. These details shall be verified by the Tender Issuing Authority from concerned formations in case bids of such contractors are considered for evaluation.

2. In case after opening of Cover 1, the number of MES enlisted contractors of eligible class as well as un-enlisted contractors, if any, fulfilling the other eligibility criteria given in NIT, are 7 (Seven) or more, applications of only those one class below the eligible class bidders shall be considered, who have previously completed similar works satisfactorily and are meeting the criteria of upgradation in respect of past experience of completed works (individual work experience and/or average annual turnover as applicable) and financial soundness (solvency/financial soundness and working capital) as per details given in Manual on Contracts. Therefore such contractors shall upload the requisite information/documents in the Cover-I.

3. Un-enlisted contractor shall be considered provided he meets the criteria. Foreign firms shall not be eligible for this tender. However Indian Firms having foreign national / Indian nationals staying abroad / Indian national having taken foreign citizenship, as director(s) shall be considered subject to security clearance from the concerned authorities.

4. Contractors enlisted with MES will upload following documents in Cover 1 for checking eligibility :-

- Application for tender on Firm's letterhead.
- Enlistment letter issued by the Registering Authority duly renewed for the cycle period in vogue.
- Scanned copy of DD /Bankers Cheque towards cost of tender and EMD instrument in case SSD bond is not signed at the time of registration.
- Any other document required as described in this Appendix.

5. Contractors not enlisted with MES will be required to upload following documents in Cover 1 for checking eligibility:-

- Application for tender on Firm's letterhead.
- Scanned copy of DD/ Bankers cheque towards cost of tender and Earnest Money Deposit (EMD) instrument.

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APPENDIX 'A' TO NOTICE INVITING e-TENDER (NIT) (CONTD)

(c) Copy of Police Verification Report/Police Clearance Certificate/ Character Certificate from the Police Authority of the area where the registered office of the firm is located/notarized copy of valid passport of Proprietor/each Partner/each Director.

(d) All documents required for enlistment in MES for the class mentioned in Para 8(b) above as per Para 1.5 of Section I of MES Manual on Contracts 2020.

(e) Details of works being executed in MES, if any.

(f) Any other document required as described in this Appendix.

6. Tenders not accompanied by scanned copies of requisite DD/Bankers Cheque towards cost of tender and earnest money (as applicable) in Cover 1 shall not be considered for validation of 'T' bid and their Financial Bids will not be opened.

7. Contractors should ensure that their original physical DDs and Earnest Money Deposit (EMD) instruments (as applicable) reach the office of Accepting Officer within *days of bid submission end date (*The number of days to be mentioned shall be as decided by the Accepting Officers, but it shall not be less than 5 days) failing which following action shall be taken.

(a) In case of tenders from an enlisted contractor of MES, where scanned copies of requisite DD/ Bankers Cheque towards cost of tender have been uploaded in Cover 1 but physical copies are not received within the stipulated period, their financial bids (Cover 2) will be opened. However non-submission of physical copies of cost of tender shall be considered as willful negligence of the tenderer with ulterior motives and such tenderer shall be banned from bidding for a period of six months commencing from the date of opening of Financial Bid (Cover 2).

(b) In case of tenders from unenlisted contractor, where scanned copies of requisite DD/Bankers Cheque towards cost of tender have been uploaded in Cover 1 but physical copies are not received within the stipulated period, their financial bids (Cover 2) will not be opened. Name of such contractors along with complete address shall be circulated for not opening of their bids for a period of six months commencing from the date of opening of Financial bid (Cover 2).

(c) In case of tenders from enlisted and unenlisted contractors, where scanned copies of instruments for Earnest Money Deposit (as applicable) have been uploaded in Cover 1 but the same are not received in physical form within stipulated period, such tenders shall not qualify for opening of financial bid (Cover 2).

8. Contractor will not be allowed to execute the work by subletting or through power of attorney to a third party/another firm on his behalf. However, a contractor can execute the work through power of attorney to sons/daughters/ spouse of Proprietor/Partner/Director and firm's own employees, director, project manager provided they are not having a separate enlisted firm in MES in their name as Proprietor/Partner/Director.

9. After opening of Cover 1 and during its technical evaluation, in case any deficiency is noticed in the documents required to be uploaded by the tenderers as per NIT, a communication in the form of e-mail/SMS/Speed Post etc shall be sent to the contractor to rectify the deficiency within a period of seven days from date of communication failing which their financial bid (Cover 2) shall not be opened and contractor shall not have any claim on the same.

10. Invitation for e-tender does not constitute any guarantee for validation of Technical bid and subsequent opening of financial bid of any applicant/bidder merely by virtue of enclosing DD. Accepting Officer reserves the right to reject the Technical bid and not to open the financial bid of any applicant/bidder. "Technical bid validation shall be decided by the Accepting Officer based on eligibility of the firm as per criteria given in this Appendix. Tenderer/bidder will be informed regarding non-validation of his Technical bid assigning reasons therefore through tender evaluation report which shall be uploaded on the website. Such tenderer, if desires, may appeal to the next higher Engineer Authority (NHEA) viz **HQ CE Pathankot Zone on e-mail id pathankotengrs@gmail.com** with copy to the Accepting Officer on email **jmu3-mes@nic.in** before the scheduled date of opening of Cover 2. NHEA shall decide the matter within a period of seven working days from the date of receipt of appeal. The decision of the NHEA shall be final and binding. The tenderer/bidder shall not be entitled for any compensation whatsoever for rejection of his bid

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APPENDIX 'A' TO NOTICE INVITING e-TENDER (NIT) (CONTD)

11. In case an unenlisted contractor is already executing works in MES, he shall not be considered eligible for the subject tender if the total value of such works is more than twice the tendering limit of the MES Class of contractor for which it is eligible. For this purpose, details of the works being executed by such a contractor shall be uploaded in the Cover -1 of the bid and shall be checked/verified by the Accepting Officer.
12. In case the BOQ is revised through the corrigendum and the bidder has failed to quote on revised BOQ (ie he has quoted on pre revised BOQ), such bid shall be treated as willful negligence by the bidder and his quotation shall be considered non-bonafide. In such cases the lowest tender shall be determined from amongst the valid/bonafide bids only. Accepting Officer may decide whether to re-tender or consider the lowest bonafide tender for acceptance.
13. Revoking the offer or revising the rates upward or offering voluntary reduction by the lowest tenderer after opening of Cover 2 shall be considered as a willful default. For this default a penalty of an amount equal to Earnest Money shall be levied. In case of an unenlisted tenderer, Earnest Money deposited by him shall be forfeited. In case of MES enlisted tenderer having deposited the Standing Security Bond, an amount equal to the earnest money stipulated in the NIT, shall he notified to the tenderer for depositing through MRO and consideration of such tenderer in tender evaluation for future works shall remain suspended till the aforementioned amount is deposited in the Government Treasury. No other disciplinary/administrative action shall be taken against such tenderers. In such a situation, the next lowest offer shall not be considered for acceptance. Instead, retendering shall be resorted to in a transparent and fair manner and the defaulting tenderer and his related firm if any, shall not be eligible for this tender in second call or subsequent calls.
14. Tender to related firms shall not be issued simultaneously. Firms shall be termed as related if Proprietor/one or more Partners/Directors are common. Decision of Accepting Officer on issue/deny the tender to any one of the related firms shall be final and binding.
15. INTEGRITY PACT (to be included as per value of work).
16. JOINT VENTURE (to be included as per value/type of work)

Signature of Contractor
File No 82024/39/ 02 /E8

For Accepting Officer
Dated Sep 2024

HQ CWE Jammu
Pin – 900172
C/o 56 APO

Contact Details of the Concerned Officer
0191-2450004

IN LIEU OF IAFW-1779-A (REVISED 1955)
TO BE USED IN CONJUNCTION WITH
GENERAL CONDITIONS OF CONTRACTS
IAFW - 2249 (1989 PRINT)
MILITARY ENGINEER SERVICES

REGISTERED

Headquarter
Commander Works Engrs
Jammu, Pin – 900172
C/O 56 APO

82024/39/ 03 /E8

Sep 2024

**ITEM RATE TENDER FOR CA NO. CWE/JP-39/2024-25: PROVN OF INDEPENDENT 160KVA
TRANSFORMER FOR POWER SUPPLY AT NFS NODE LOC AT UNDER GE KALUCHAK**

1. M/S / Shri _____ of _____
is/are hereby authorized to tender for the above works.
2. The complete tender (BOQ) is to be uploaded on the MES portal of www.defproc.gov.in up to the date mentioned in the NIT on the portal. The cover 1 of the bid shall be opened as per the date mentioned in the NIT in office of **Commander Works Engineer, Jammu Pin-900172 C/O 56 APO** in the presence of such tenderer/s who have uploaded their priced tender and who wish to be present.
3. All correspondence must be returned to this office whether or not the tender has been online submitted.
4. All correspondence concerning to this tender shall be addressed as indicated on the top of this letter quoting the reference as given.

**THE PRESIDENT OF INDIA DOES NOT BIND HIMSELF TO ACCEPT THE
LOWESTTENDER OR ANY OTHER TENDER.**

Signature of the Contractor
Dated : _____

Signature of the Officer issuing Tender(Document)
Appointment : DCWE(C)
Dated : ____ **Sep 2024**

SCHEDULE 'A'

NOTES :

1. This contract pertains to carry out following work **PROVN OF INDEPENDENT 160KVA TRANSFORMER FOR POWER SUPPLY AT NFS NODE LOC AT UNDER GE KALUCHAK**
2. The number of units required given under column 3 of BOQ are provisional and inserted as a guide only. These shall however not vary beyond the limits laid down in condition 7 of IAFW-2249 (Genkeral Conditions of the contracts). However payment shall be made for actual quantities of works executed at site.
3. The tenderers are required to work out and quote their prices for each item of works as catered in BOQ in the manner set out in condition 6 (A) (D) of IAFW-2249 and quote their rates per unit under column 05 based on the description of items, Specification, Special Conditions, General Conditions and other conditions of the contract for each item separately and sum of the total amount so arrived at, and carry forward the same to the General Summary at appropriate place provided for.
4. Method of Measurement for all items of BOQ shall be as given in MES standard Schedule of rates unless specifically stated otherwise elsewhere in tender documents for particular item of work.
5. Description of works and items of works given under column 02 of BOQ is in brief. These shall be deemed to be amplified and read in conjunction with special conditions, particular specifications, specification contained in the relevant trade sections of MES standard Schedule (SSR) including preambles and notes therein.
6. All items of BOQ are for materials and labour / supplying and fixing/ supplying and fixing in repair, installation, commissioning, testing, as applicable complete unless specifically described otherwise as "Labour only" and/or "Fixing only" in the description of particular items under column 02.
7. **Period of Completion**
 - a) The entire work under this contract as described in (BOQ) shall be completed within **120 (One hundred Twenty days)** from the date of handing over of site/date of commencement of work as mentioned in WORK ORDER NO. 1, which will be issued by the GE (after submission of Performance Security of adequate value by the contractor).
 - b) The special attention of tenderer is drawn towards the fact that the site/roads where work to be carried out in this contract are already functional. The contractor shall carry out complete work in all respects as described in BOQ and particular specifications, within stipulated time. During the execution of work, the work may be stopped due to some administrative or clinical reason, therefore contractor have to stop the work and have to visit again to carry out balance work. The contractor's quoted rates shall be deemed to include for this contingency. No claim, what so ever shall be entertained on this account at later stage.

SCHEDULE 'A' (Contd....)

8. Contractor's Rate shall be deemed to include for all minor details, processes and operations which may not have been specifically mentioned or given in particular specifications but which are essential for the execution of works and services in a sound and workman like manner so as to be structurally and functionally sound. In case of any difference of opinion between GE and the Contractor as to whether or not certain items of works constitute(s) minor details which is included in the contractor's Rate the decision of the Accepting Officer shall be final conclusive and binding.
9. Unit rate quoted against each item as described in BOQ shall also include the cost of any cutting, leaving, forming, holes/chases etc in walls, as required and making good. No adjustment shall however, be made separately on this account.
10. The Bidder must quote their rate(s) in INR only.
11. The contractor shall take all necessary precautions for the protection of adjoining property (Plant Machinery, Road furniture, Gate etc.) while execution of work thereof as ordered by Garrison Engineer. It shall be the responsibility of the contractor to make good if any damages to existing property is caused during execution of work.
12. This contract does not include the provision of reimbursement/Refund in variation of prices and no escalation shall be paid. However, condition 63 of IAFW-2249 shall be applicable in this contract.
13. **MAKES OF ITEMS**
 - (a) In case Sch 'A' BOQ items indicates makes then same shall be from any one of the makes specified therein at the option of contractor.
 - (b) If Sch 'A' BOQ items do not indicates makes, then makes to be incorporated in the work shall be from those listed as Appendix to Particular Specifications [B/R& E/M]. Selection shall be at the option of contractor from amongst the list. In case manufacturer of the item makes both ISI and non ISI marked items, then ISI marked item shall only be used. Please note that even if any makes are given in Particular Specifications, they shall stand superseded and only the makes given in Appendix [B/R & E/M] shall be applicable for all purposes. However makes of steel windows/ ventilators shall be governed as per relevant Particular Specifications clause of steel windows/ventilators.
 - c) Materials/items for which no make have been specified, shall be ISI marked. contractor will download list of BIS marked manufacturer from BIS site www.bis.org.in and submit name of manufacturer meeting the contract specifications criteria and hand over the report with a request letter to Engineer-in-charge with his signature for approval of makes. The material shall only be procured by Contractor after approval of makes by GE concerned. In case ISI marked material/items are not manufactured then same shall confirm to relevant IS amended upto date.
 - d) For material/item not covered in para (a) to (c) above, the same shall be of best quality available in market and approved by GE.

SCHEDULE 'A' (Contd....)

- (e) Contractor will intimate in writing to GE the name of make of material, brand, model No/Cat Part No, etc, which he intends to procure. GE will approve the same within 10 days of receipt of such request after due verification of documents supplied by contractor with his request letter.
14. Production of purchase vouchers and test certificates of main producers mentioned in particular specifications are mandatory for all consignments of reinforcement steel/ pre painted galvunium sheet supplied by the contractor before making any payment and incorporation of steel in work. In case of structural steel, production of purchase vouchers and test certificates of main producers or secondary producers as mentioned in particular specifications are mandatory before making any payment and incorporation of steel in work.
15. The contractor shall take all necessary precautions for the protection of adjoining property (Plant Machinery, wall, plaster, doors, chowkats, rolling shutter etc.) while execution of work thereof as ordered by Garrison Engineer. It shall be the responsibility of the contractor to make good if any damages to existing property is caused during execution of work.
16. This contract does not include the provision of reimbursement/Refund in variation of prices and no escalation shall be paid. However, condition 63 of IAFW-2249 shall be applicable in this contract
17. **NOT QUOTED (NQ) RATES:-**
If Contractor does not quote his rate against any item or 'NQ' /'0.00' appears in rate/amount column, then it shall be deemed that rate quoted is Rupees Zero i.e. the contractor intends to execute the particular item at no cost basis (free of cost) to the Govt. Items and their quantities for which no rates or prices have been quoted shall be deemed to have been covered by the rates and prices quoted for the other items of bills of quantities. Hence contractors are requested to thoroughly check their quoted rates before submitting bid online. No representation by the contractor on this matter shall be entertained by the department in the matter.
18. **GST & ANY OTHER STATUTORY TAXES ON WORKS CONTRACTS**
- (a). The rate quoted by the tenderer shall be inclusive of all types of taxes, levies including GST, labour welfare tax etc, as prevailing on the last date of submission of tender/bid.
- (b). It should be noted that GST and any other Tax levied by J&K Govt and Central Govt. on Works Contracts as applicable will be recovered from contractor's payment as per the policy orders applicable. Special Condition 28 i.e. **"Re-imbursement / refund on variation in "taxes directly related to Contract value" be referred.**
- (c). However, for the purpose of applicability of rate of Tax, the tax structure as imposed on last date of bid submission shall be applicable. Tenderers are advised to independently ascertain the rate of GST & any other applicable Tax of the state etc., and quoted their rates accordingly. No claim on account of any kind of misunderstanding on this issue shall be entertained at a later date.
- (d). It may be noted that any tender imposing any condition in this regard or on any other account shall be treated as a conditional tender and the same shall be liable to be rejected.

SCHEDULE 'A' (Contd....)

19. The contractor shall organise required tools, plants and transportation etc, at his own level, cost element of organising and functioning of these shall be included in the unit rates quoted by the tenderer and nothing extra shall be payable to the contractor.
20. (a) After acceptance of tender, contractor shall ensure to submit his provident fund account No. to GE within a week's period. Neither any work shall be allowed to be commenced nor shall any payment be released till **EPF code No.** is submitted by the contractor to GE. No claim whatsoever shall be entertained due to delay in commencement of work on this account. In case contractor fails to submit EPF code No. to GE, action for cancellation of contract shall be taken.
- (b) It shall be ensured by contractor and GE that all provisions of EPF are complied with in letter & spirit.

21. **Requirement of T&P , Machinery and Transport :-**

- (a) The minimum requirement of T&P, Machinery and Transport are as under:-
- | | | | |
|--------|--|---|--------|
| (i) | One bag capacity concrete mixer (diesel) | = | 01 No |
| (ii) | Vibrators (needle and plate type) | = | 01 No |
| (iii) | Steel shuttering with spans, props etc (sqm) | = | 50 Sqm |
| (iv) | Cranes | = | 01 No |
| (v) | Steel /Aluminum ladders 1.5m to 13 m | = | 01No |
| (vi) | Earth tester | = | 01No |
| (vii) | HT Meggar 5000 volts | = | 01 No |
| (viii) | Portable drilling machines | = | 01 No |
| (ix) | Chase cutting machines | = | 01 No |

Note: All safety equipment related to HT line i.e. HT 11 KV & 33 KV hand gloves, discharge rods, safety belt, danger notice board, first Aid kit Helmet and all other safety equipment.

- (b) In addition to above the contractor shall also bring the T&P as directed by the Engr-in-Charge that may be essential for the execution of works and services in a sound and workman like manner so as to be structurally and functionally sound.

SCHEDULE 'A' (Contd....)**22. Performance Security**

(i) Within 28 days of receipt of the Letter of Acceptance, the successful contractor shall deliver to the Accepting Officer a **Performance Security for an amount equivalent to 5 %** of the contract sum.

(ii) The performance security shall be in favour of Accepting Officer and shall be in any of the forms mentioned above. **Work Order No 1** shall be placed only after submission of Performance Security of adequate value by the contractor. In case a Fixed deposit receipt of any Bank is furnished by the contractor to the Government as part of the Performance Guarantee and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused due shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the Government to make good the deficit.

23. Defect liability period

For purpose of condition 46 of IAFW-2249 defect liability period shall be twenty four calendar months after the works have been handed over to Government.

24. APPROVAL OF SPECIAL (STAR) RATES

(a) In case of deviation, mode of pricing shall be decided by Accepting Officer in terms of Condition 62 of IAFW-2249.

(b) In the event of a deviation order involving fixation of Special (Star) Rate, Draft Rate shall be prepared by GE (within a maximum period of 30 days) while initiating the proposal for deviation seeking approval of Accepting Officer and notified to contractor. While notifying the Draft Rate, it will be clearly stipulated that the same is merely an estimated rate and firm rate shall be fixed based on actual and receipt of supporting documents from contractor such vouchers/literature of product/test certificates etc (as applicable) on completion of the work involving Star Rate. Any objection to the method of fixing Star Rate will be dealt Condition IAFW-2249.

(c) Draft Star Rate shall be made based on market enquiry through telephonic enquiry/ quotations/email/rate lists/internet based sources, material & labour constants available in various civil Engg books and record available in respect of Star Rates approved in the past for similar items of work etc. Contractor may also assist GE's office in preparation of draft Star Rate

(d) The Draft Star Rate shall be purely a draft rate and shall not be used for claiming final payment during execution of work However GE shall allow part payment to the tune of 80% during execution to avoid any financial hardship to contractor .

(e) After completion of the item of work involving Star Rate, contractor shall submit the vouchers/literature of product/test certificates (as applicable, decision of GE being final in case of any disagreement) for finalisation of Star Rate. The Star Rate shall be technically checked by DCWE (C)/ Director (C) depending upon the financial effect & approved by competent authority within a period of one month from submission of the relevant documents by contractor as mentioned above.

SCHEDULE 'A' (Contd....)

(f) The star rate as approved by competent authority after technical check by DCWE (C)/Director (C) depending upon the financial effect shall be referred as "the rate decided by GE" under Para 62(G) of IAFW-2249.

25. Makes of certain item given in Sch 'A' & corresponding item given in approved makes List mentioned in PS both shall supplementary to each other. However in all other case the order of precedence given in condition 6A of IAFW-2249, shall hold good. In case of non-availability of item with the manufactures/makes given in Sch 'A', then it shall be procured all as approved by Accepting Officer.
26. Damage caused to the pipe lines, water lines, cable or any other under ground entity during execution if any, to be born by Contractor.
27. The contractor shall submit updated inventory of various articles such as fittings and fixtures such as wash basin, WC etc. before issuance of completion certificate.
28. The tenderers are requested to note that if any item/items is/are repeating in BOQ and tenderer has quoted different rate for the same item, the minimum rate shall be considered for acceptance & payment purpose.
29. Irrespective of details/procedure given elsewhere the following procedure will be following for submission and approval of samples :-
 - (a) Contractor will submit sample of materials well in advance (minimum one week before intended/expected date of use) with a certificate that "samples submitted are as per specifications given in the contract as per terms and conditions of contract". Wherever required, GE may ask for submission of various test certificates as requested to ascertain the quality of material before approval of samples.
 - (b) Approval of samples by the GE/department does not absolve the responsibility of the contractor to provide material as per specifications given in the contract and hence, if noticed subsequently that material/materials used in the work is not as per specification and notified to the contract even one year after defect liability period, it will be material/items of work which may be required and provide material/item of correct specifications alongwith associated items of work. In case of failure on the part of contract to rectify the defects, department/accepting officer reserves the right to initiate necessary administrative action (including downgrading of class/removal from approved list/blacklisting) as deemed fit.
30. If the situation demands the contractor shall make necessary arrangements for stay of the labour at work site so that progress of the work does not suffer at site. The department shall facilitate necessary permission in the regard. However no extension shall be considered even on this ground. The quoted rates of the bidders shall take into account all such consideration.
31. Contractor shall provide suitable arrangements such as ladder, crane for checking of structural rehabilitation work by inspection officer and executive upto four storey structure, if required and the rates quoted by the contractor shall deemed to be included for this aspect.

SCHEDULE 'A' (Contd....)**32. REQUIREMENT OF ELECTRICAL LICENSE FOR CARRYING OUT ELECTRICAL WORKS**

- (a) The exemption referred in Section 184 of Electrical act, 2003 is not applicable to MES contracts.
- (b) Valid Electrical License issued by concerned State Government / Union Territory shall only be applicable.
- (c) For execution of electrical works / electrical component of works requiring electrical license in accordance with Rule 29 mentioned above, the contractor shall have valid electrical license issued by the concerned State / Union Territory in the name of the Firm or get the work executed through an agency having valid Electrical License.
- (d) Prior to commencement of electrical work / electrical component of works and other works as mentioned in Para (c) above, copy of valid electrical license in the name of the contractor or copy of agreement with agency having valid electrical license alongwith agency's Electrical License shall be submitted by the contractor to the Accepting Officer through GE. In case contractor does not possess valid electrical license and he intends to get such work executed through agency having valid electrical license and with whom he has agreement, prior approval of such agency in all contracts shall be done by competent authority, who shall be concerned CWE (concerned CE Zone / CCE in case there is no CWE). Copy of License shall be kept on record by GE/AGE(I) for future reference.
- (e) GE and concerned AGE / Engineer-in-Charge shall ensure that electrical work / electrical component of works and other works as mentioned in Para (c) above required to be executed in accordance with Rule 29 mentioned above are executed by contractor / agency having valid Electrical License, as applicable. In addition, supervisor for execution of electrical works / electrical component of works employed by the contractor shall possess Supervisor Certificate of Competency issued by concerned State Government / Union Territory and the worker / tradesmen for execution of electrical works / electrical component of works shall hold necessary Permit issued by concerned State Government / Union Territory.
- (f) Reference of Electrical License and details of Supervisors' Certificate of Competency and Permit of tradesmen employed for execution of electrical work / electrical component of works shall be duly incorporated in the Works Diary and relevant site documents respectively for the whole period during which such work is executed.
- (g) Uploading Electrical License or MoU / Agreement with agency having valid Electrical License (in case the bidder does not possess valid electrical license) is not required alongwith T-Bid in Cover - 1 by the bidders for qualifying in bidding process.

33. Irrespective of whatever specified elsewhere or not, all rubbish/debris created through demolition/dismantling etc. shall be removed by the contractor outside MD land without any extra cost to the State. However necessary rates for the same are deemed to be inclusive in the quoted unit rates under respective items of BOQ. Further any approval of civil authority if required shall be obtained by the contractor at his own cost and resources. Tenderers quoted rates are deemed to have taken into consideration all these factors and No additional claim will be entertained by the department later on this account.

34. All precautions as per GOI Notifications due to COVID-19 pandemic shall be taken by contractor during execution of work.

Signature of the Contractor
Dated : _____

DCWE(C)
for Accepting Office

SCHEDULE 'B'
LIST OF MATERIALS ETC TO BE ISSUED TO CONTRACTORS
(SEE CONDITION 10 OF IAFW-2249)

Srl. No.	Description of materials	Rate at which materials etc will be issued to the contractor		Place of issue by Name	Remarks
		Unit	Rate Rs. P.		
1	2	3	4	5	6

-NIL-

Signature of the Contractor
Dated : _____

DCWE(C)
for Accepting Officer

SCHEDULE 'C'**LIST OF TOOLS AND PLANTS(OTHER THAN TRANSPORT)**
WHICH WILL BE ISSUED TO THE CONTRACTOR

(See condition 15,34 and 35 of IAFW-2249 of 1989 Print)

S/ No	Qty	Particulars	Details of MES crew supplied	Hire charges per unit per day	Stand by charges per unit per off day	Place of issue	Remarks
----------	-----	-------------	------------------------------------	--	---	----------------------	---------

_____NIL_____

Signature of the Contractor
Dated : _____

DCWE(C)
for Accepting Officer

SCHEDULE 'D'**TRANSPORT TO BE HIRED TO THE CONTRACTOR
(SEE CONDITION 16 AND 35 OF IAFW-2249)**

S/No	<u>Qty</u>	<u>Particular</u>	Rate per unit of working day	Place of issue (by name)	Remarks
------	------------	-------------------	------------------------------------	--------------------------------	---------

-----NIL-----

Signature of the Contractor
Dated : _____

DCWE(C)
for Accepting Officer

TENDER

1. THE PRESIDENT OF INDIA
Have examined and perused the following documents
(a) Specifications signed by DCWE(C), HQ CWE Jammu
(b) Drawings detailed in the specifications
(c) Schedule 'A', 'B', 'C' and 'D' attached hereto
2. MES Standard Schedule of Rates-2020 Part-II for Rates and for Specification SSR-2009 Part-I with Amendment No 1 & 3. (here-in-after and in IAFW-2249 referred to as the MES Schedule)
3. General Conditions of Contracts IAFW-2249 (1989 Print) together with Amendment No 1 to 48 and Errata 1 to 20.
4. Water Condition 31 of IAFW-2249 (General Conditions of Contracts) :-
Water will not be supplied by the MES and the Contractor shall arrange the same under his own arrangement.
5. Should this tender be accepted:
I/We agree-
(a)* That the sum of Rs.-----Rupees-----
forwarded as earnest money shall either be retained as a part of the Security Deposit or refunded by Govt on the receipt of the appropriate amount of Security Deposit as per condition 22 of IAFW-2249.

(b) I/We agree to execute all the work referred to in the said documents upon the terms and conditions contained or referred to therein and as detailed in General Summary on the subsequent pages and to carryout 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 vide condition 70 of IAFW-2249 to the sole arbitration of a serving officer having degree in Engineering or equivalent or having passed final/direct final examination of subdivision II of Institution of Surveyors (India) recognised by the Govt of India to be appointed by the Chief Engineer Pathankot Zone or in absence the officer officiating as Chief Engineer Pathankot Zone whose decision shall be final, conclusive and binding.

* Delete whichever is not applicable.

GENERAL SUMMARY

Total brought forward from General Summary

For the contract sum of Rs. _____ (Rupees _____
_____)

Signature _____ in the capacity of _____

duly authorized to sign the tender for and on behalf of _____

_____(IN BLOCK LETTER/DATED _____)

POSTAL ADDRESS _____

TELEGRAPHIC ADDRESS _____

TELEPHONE NUMBER _____

Witness _____

Address _____

ACCEPTANCE

_____ alterations have been made in these documents and as evidence that these alterations were made before the execution of the Contract Agreement, they have been initialed by the contractor and Lt Col Satendra, DCWE(C)

The said officer is 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' for Contract Sum of

Rs. _____ (Rupees _____
_____)

on the _____ day of _____ 2024.

(COL S PRADEEP)
APPOINTMENT: COMMANDER, CWE JAMMU
(FOR AND ON BEHALF OF THE PRESIDENT OF INDIA)
ACCEPTING OFFICER

SPECIAL CONDITIONS

1. General

(a) General specifications mentioned anywhere in the contract including those in General Conditions of Contract, viz-IAFW-2249, shall mean the specifications given in the MES Standard Schedule of Rates (Part-I). Particular specifications given here-in-after are in brief and only to particularize, amend and emphasize the specifications given in the MES Standard Schedule of Rates. Specifications, General Rules, preambles and Special Conditions contained in MES Standard Schedule of Rates (Part-I and Part-II) shall, unless specifically described otherwise, be applicable to this contract.

(b) Any work shown on drawings but not described in particular specifications shall, unless specifically described to be excluded from the contract, be deemed to be included in the lumpsum quoted by the contractor for BOQ/Schedule 'A' Part-I. In case of doubt with regard to the manner of detail for executing the work, the decision of Accepting Officer shall be final, binding and conclusive. This shall not be applicable to the items of work pertaining to services for which separate parts of Schedule 'A' setting out the requirements have been given. Should there be item(s) or services as shown on drawings but not included in the relevant parts of Schedule 'A' these shall, unless otherwise described or stated in the contract, constitute an additional work.

(c) All headings and marginal notes to these special conditions or to any other documents of this contract are solely for the purpose of giving a concise indication and not a summary of the contents thereof and they shall never be deemed to supersede the contents of the clause.

(d) The tenderer is advised to point out in writing discrepancy(s), if any, of the tender documents at least 10 days before the due date of receipt of tender. In case discrepancy(s) in contract documents is/are noticed by the contractor during execution of the works, it shall be brought out to the notice of the Accepting Officer of contract and other concerned in writing before commencement of the particular work where discrepancy(s) is/are noticed failing which the contractor shall forfeit his right to claim on account of such discrepancy(s).

(e) Also where there are obvious mistakes in any of the contract provisions, the Accepting Officer shall be the sole deciding authority with regard to the intention of the contract documents and his decision in this respect shall be final, binding and conclusive.

(f) Where the drawings show finishes to wooden members, such finishes shall be applied to wooden members as well as wood based members. However, surfaces covered with laminates shall not be given any finish such as painting, polishing etc.

(g) Where reinforcement details/thickness of RCC members such as slabs, beams, lintels, etc. is not shown on the drawings, the same shall be supplied by the GE on the basis of provisions in IS-456 and the same shall be provided and incorporated in the works by the contractor and no extra payment will be admissible on this account.

(h) Wherever nomenclatures of structural slabs (e.g. S-1, S-2 etc.) is given in the RCC plans, the details of reinforcement for such slabs shall be as given for slabs of the same nomenclature elsewhere, if not given in the same drawings.

(j) Dwarf wall in situations like verandah, passage, etc. even if not shown on , shall be deemed to be included in the scope and shall be provided at no extra cost to the department.

SPECIAL CONDITIONS (CONTD.....)

2. **Conditions of contract and Execution of works:** The various sections/sub divisions of the tender documents shall be deemed to be supplementary/complementary to each other.
3. **Inspection of site by the tenderer**
(a) The tenderer is advised to contact the Garrison Engineer for the purpose of inspection of site (s) and relevant documents other than those sent herewith who will give reasonable facilities for the purpose. The tenderers shall also make themselves familiar with the working conditions, accessibility of site (s), availability of materials and other cogent conditions, which may effect the entire completion of work under this contract.

(b) The tenderers shall be deemed to have inspected the site (s) and made themselves familiar with the working conditions, whether they have actually inspected the site (s) or not.
4. **RESTRICTION FOR ENTRY TO WORK SITE:-**
All work lies in **RESTRICTED AREA**. The restricted for entry to work site and conditions of working in restricted areas shall be as under :-
- (a) The contractor/his agents/representatives/ workmen etc. and his material carts, trucks of other means of transport etc. will be allowed to enter through and leave from such gate or gates and at such times as the GE or authorities in charge of the restricted area may at their sole discretion permit to be used. Contractor's authorised representative is required to be present at the places of entry and exit for the purpose of identifying his carts, trucks, etc to the personal in charge of the restricted area.
- (b) **IDENTITY OF WORKMEN:** Every workmen shall be in possession of an identity card. The identity cards shall be issued after a through investigation of the antecedents of the labourers by the contractor and attested by officer in charge of the units. Contractor shall be responsible for conduct of his regulations of the unit. Contractor shall be responsible for conduct of his workmen, agents or representatives.
- (c) **IDENTITY CARDS OR PASSES:** The contractor, his agents and representatives are required individually to be in possession of an identity card or pass which will be examined by the security staff at the time of entry into or exit from the restricted area at any time or number of times inside restricted area.
- (d) **SEARCH.** Thorough search of all persons and transport shall be carried out at each gate and for as many times gate is used for entry or exit and may also be carried any number of times at the site within the restricted area.
- (e) **WORKING HOURS:** The units controlling restricted area usually work during six days in a week and remain closed on the seventh day. The working hours available to the contractor's labour staff reduced because of the time of entry and exit during working hours. The exact working hours, working days and no working days observed for these restricted area(s) where works are to be carried out shall be deemed to have been ascertained by contractor before submitting his tender. The tenderers attention is invited to the fact that number of working hour for a unit are prescribed in regulations and that they can not be increased by GE or authorities controlling the restricted area. The definition of working days as given under condition 1 (t) of IAFW-2249 does not apply in case where the works are carried out in restricted area.
- (f) **WORKING ON HOLIDAYS:** The contractor shall not carry out any work on gazetted holiday, weekly holiday and other non working day except when he is specially authorized in work to do so by the GE. The GE may at his sole discretion declare any day as holiday or non working day without assigning any reason for such declaration.

SPECIAL CONDITIONS (CONTD.....)**(g) FIRE PRECAUTIONS.**

- (i) The contractor, his agents, representatives, workmen etc. shall strictly observed the orders pertaining to fire precaution prevailing within the restricted area.
- (ii) Motor transport vehicles, if allowed by the authorities to enter the restricted area must be fitted with the serviceable fire extinguisher and spark arrestor.

- (h) **FEMALE SEARCHER:** If the contractor desires to employ female labour on works to be carried out in side the area of factory, depot, part etc. and a female searcher is not borne on the authorised strength of factory, depot, park etc. at the time of permission of tender, he shall be deemed to have allowed in his tender for pay and allowances etc. for a female searcher (class IV servant) calculated for the period female labourers employed by him inside the are, if more than one, contractor employ female labourer during any month and female searcher(s) has/have to be employed in addition to the authorised strength of the factory, depot, park etc. the salary and allowances paid to the additional female searcher (s) shall be distributed on equitable bases between the contractors employing female labour taking into consideration the values and period of completion of their contracts. The GE's decision in respect of the amount recoverable on this account from any contractor shall be final and binding.

5. Security of Classified Documents: -

Contractor's special attention is drawn to condition 2A & 3 of General Conditions of Contract (IAFW-2249). The contractor shall not communicate any classified information regarding the works either to sub-contractors or others without prior approval of the Engineer-in-Charge. The contractor shall also not make copies of the design/drawings and other documents furnished to him in respect of the work and he shall return all documents on completion of the work or earlier termination of contract. The contractor shall along with final bill attach a receipt from the Engineer-in-Charge in respect of his having returned the classified documents as per condition 3 of General Conditions of Contracts IAFW-2249).

6. Official secret Act.

The contractor shall be bound by the Indian Official Secret Act, 1823 particularly section 5 thereof, all as per condition 2A of IAFW-2249.

7. Employment of personnel

(a) Contractor shall employ only Indian Nationals as his representatives, servants and workmen after verifying their antecedents and loyalty. He shall ensure that person of doubtful antecedent and nationality is in no way, associated with the work. If for the reasons of technical collaboration or other considerations the employment of foreign national(s) is unavoidable, the contractor shall furnish full particulars to this effect to the Accepting Officer at the time of submission of the tender. As a proof that the contractor has employed only Indian Nationals, he shall render, a certificate to GE within one month from the date of acceptance of tender to this effect.

(b) Verification of antecedents of Contractor's representatives/personnel/Labour deployed at site in connection with execution of work under the Contract, as per security requirement of User Unit/Installation shall be the responsibility of the Contractor and all expenses in connection with verification of antecedents by Police Authority/Security Agency shall be borne by the Contractor.

(c) The GE shall have full powers and without giving any reason to order the contractor immediately to cease to employ in connection with this contract, any agent, servant or

SPECIAL CONDITIONS (CONTD.....)

employee whose continued employment is, in his opinion, undesirable. The contractor shall not be allowed any compensation on this account.

- (c) The contractor's attention is also drawn to condition 25 of IAFW-2249 in this connection.

8. Availability of Land for storage of materials, temporary work-shops and offices etc.

(a) Refer condition 24 of IAFW-2249. The contractor shall be permitted to store his materials including erecting temporary sheds there on at the area of land marked on site plan and he shall pay a licence fee of Rs. 1.00 per year or part thereof in respect of each and every separate area of land allotted to him. Completion certificate will not be issued to the contractor by the Garrison Engineer till the temporary storage shed and office are removed and site cleared in terms of condition 49 of IAFW-2249.

9. Damage to existing structures.

Any damage to the existing structures, existing road, etc. during the execution of work shall be made good by the contractor at his own expense. Rectification, replacement, making good and touching up etc. shall be carried out to conform to the materials and workmanship originally provided and to the satisfaction of the Engineer-in-Charge. In case of any dispute on this account, the decision of the GE shall be final, binding and conclusive.

10. Quarries and Royalties

Quarries are not available on land, which is in the charge of MES authorities. Condition 14 of IAFW-2249 shall thus be treated as not applicable.

11. Approaches.

The Contractor shall make arrangements for and provide at his own cost all temporary approaches, if required to the site(s) after obtaining approval in writing from the GE to the layout of such approaches.

12. Location of buildings and works.

There may be some changes in location/siting of buildings shown in site (layout) plan(s) to suit local conditions and/or departmental requirement. The contractor shall have no claim whatsoever to such change in the location/ siting of works.

13. Action where no specifications exist.

(a) In case of any class of works for which there is no such specifications in the tender documents including SSR, such work shall be carried out in accordance with Indian standard specification and where Indian Standard Specifications do not cover the same, the work should be carried out as per Standard Engineering practice subject to the approval of the GE.

(b) No claim whatsoever will be tenable for any misunderstanding or for not having ascertained requisite information/knowledge to muster the resources required in satisfactory completion of the entire work to requirement as per contract agreement.

SPECIAL CONDITIONS (CONTD.....)**14. Method of Measurement:**

Measurement of measurable work executed under this contract shall be taken in accordance with the rules of measurements as laid down in SSR pertaining to various items of work as applicable unless otherwise indicated in the respective parts of Schedule 'A'. In case the method of measurement of particular item of work is not given in SSR, a reference will be made to the relevant provision in the latest edition of IS-1200.

15. Critical Path Method / Net work Analysis and the time schedule

(a) The time and progress chart, to be prepared as per condition-11 of IAFW-2249 (General conditions of contracts), shall consist of detailed network analysis and time schedule. The critical path network will be drawn jointly by the GE and the contractor soon after the acceptance of tender.

(b) (i) The time scheduling of the activities will be done by the contractor so as to finish the work within the stipulated time. The contractor is advised to use the facility of computerisation available with any organisation, which affords such facility in doing the same. On completion of time schedule, a firm calendar date schedule will be prepared and submitted by the contractor to GE, who will approve it after due scrutiny.

(ii) The schedule will be submitted in four copies within two weeks from the date of handing over site. In case the contractor fails to submit the CPM net work diagram, the net work prepared by the GE will be binding on him and he will be bound to employ resources of men and materials in the manner directed by the GE.

(c) During currency of the work the contractor is expected to adhere to the time schedule and this adherence will be the part of contractor's performance under the contract. During the execution of the work, the contractor is expected to participate in the reviews and updating of the network undertaken by the GE. These reviews may be undertaken at the discretion of the GE either as a periodic appraisal measure or when the quantum of work ordered on the contractor is substantially changed through deviation order(s) / or amendments. Any revision of the schedule as a result of the review will be submitted by the contractor to the GE within a week, who will approve it after due scrutiny. The contractor will adhere to the revised schedule thereafter.

(d) In case of contractor not agreeing to the revised schedule, the same will be referred to the Accepting Officer whose decision will be final, conclusive and binding. GE's approval to the revised schedule resulting in completing date beyond the stipulated date of completion shall not automatically amount to a grant of extension of time. Extension of time shall be considered and decided by the appropriate authority in terms of Condition 11 of IAFW-2249 and separately regulated.

(e) Contractor is expected to mobilise and employ sufficient resources to achieve the detailed schedule within the broad framework of the accepted methods of working and safety.

(f) No additional payment will be made to the contractor for any multiple shift work or other incentive methods contemplated by him in his work schedule even though the time schedule is approved by the department.

16. Coordination with other Agencies.

The contractor shall permit free access and afford normal facilities and usual convenience to other agencies or departmental workmen to carryout connected works or services under separate arrangements. The contractor will not be allowed any extra payment on this account.

SPECIAL CONDITIONS (CONTD.....)**17. Security against loss or damage.**

(a) **Contractor's plants/equipments at site:** The contractor shall furnish to the Engineer-in-Charge, every morning a distribution return of his plants/equipments on the site of the work, stating the following particulars:

- (i) Particulars of plants/equipments, its make, manufacture No., Model No, if any, Registration No, if any, capacity, year of manufacture and year of purchase etc.
- (ii) Total No (quantity) on site of work.
- (iii) Location and indication of No (quantity) at each location of the site of work.
- (iv) Purchase value on the date of purchase: For the purpose of this condition, plant/equipment shall include vehicles i.e. trucks and lorries but neither the workmen's tools nor any manually operated tools/equipment. The Engineer-in-Charge shall record the particulars supplied by the contractor in works diary and send the return to the GE for record in his office.

(b) **Loss on Account of Enemy Action.** If as a result of enemy action the contractor suffers any loss or damage, the Govt shall reimburse to the contractor such loss or damage to the extent and in the manner here-in-after provided:

- (i) The loss suffered by him on account of any damage or destruction of his plant/equipment (as defined in special condition above), materials or any part or parts thereof, the amount of loss assessed by Accepting Officer of the contract on this account shall be final, binding and conclusive.
- (ii) The compensation paid by him under any law for the time being in force, to any workmen employed by him for any injury caused to workmen or workmen's legal successor for loss of the workman's life.
- (iii) Payment of compensation for loss or damage to any work or part of work carried out. The amount of compensation shall be determined in accordance with condition 48 of General Condition of Contract (IAFW-2249).
- (iv) No reimbursement shall be made nor shall any compensation be payable under the above provision unless the contractor had taken Air Defence precautions ordered by the GE/or concerned, or in the absence of such order, reasonable precautions taken by the contractor.
- (v) No reimbursement shall be made nor shall any compensation be payable for any plants / equipments or materials not lying on site at the time of enemy action.

18. WATER: - (Refer condition 31 of IAFW-2249)

- (a) Water will not be supplied by MES.
- (b) Contractor shall make arrangement of water at his own cost.
- (c) Where the contractor arranges water from his own resources and at his cost of water for mixing concrete and plaster etc., the water shall be clean and free from injurious quantities of acid, alcohol silt, oil, injurious salts, organic matter or other impurities all as specified in IS-456 and shall also be subject to the prior written approval of the Engineer-in-Charge.

19. VALIDITY OF TENDER:

Tender shall remain open for acceptance for a period of 60 days from the last date of bid submitted end date.

SPECIAL CONDITIONS (CONTD.....)**20. SAMPLES OF MATERIALS / ARTICLES:**

(a) Material/articles provided by the contractor for incorporation in the work shall comply with the requirements of the Indian Standard and shall have ISI certification marking. However, if the material is not marked with ISI certification, the material/article shall be conforming to IS. Some of the items which are marked with ISI certification are as under:

- (i) Articles of builders hardware e.g. sliding/locking/tower bolts, butt/spring hinges, hasp and staple, rim/mortice lock handles
- (ii) Polythene connections and PVC pipes
- (iii) GI tubing, CI pipes, GI/cast iron fittings
- (iv) Sanitary fittings, e.g. Chinaware, stop/bib cocks/pillar cock, float valves
- (v) Chemicals for Anti termite treatment for wood and soil
- (vi) Electrical switches, sockets, MCBs etc., conductors, insulators and cables
- (vii) Cable jointing kit, transformer, Steel tubular electric poles, LT panel and voltmeter
- (viii) Where makes of materials/article are mentioned in the particular specifications, the contractor shall provide the materials/articles of any one of the makes mentioned in CA irrespective of whether their product is having ISI certification or not.

(b) In case of materials / articles for which Indian Standards are not finalised/issued and therefore not included in the MES Schedule, contractor shall produce the samples and get them approved by the GE in writing before incorporation in the works.

(c) The contractor is advised to inspect the samples of local building materials, e.g. bricks, stone aggregate, sand etc. and other materials maintained by the CWE/GE before submitting his tender. The contractor will be deemed to have inspected these samples and have full knowledge thereof, whether he inspects them or not. The materials to be provided by the contractor shall conform to or superior to the samples.

(d) The selection and use of sources for materials shall subject to the compliance of these specifications in conjunction with the MES Schedule and relevant Indian Standard Specifications.

21. PROPRIETARY MATERIAL /ARTICLES:

(a) The proprietary items such as Anti termite chemicals, bitumen, tar, tar felt, water-proofing compound, paint etc., when brought to site shall be inspected and approved by the Engineer-in-Charge.

(b) The quantity of proprietary articles brought to site shall be recorded in measurement book (IAFW-2261) and signed by the contractor and the Engineer in Charge as a check to ensure that the required quantity has been brought to site for incorporation in the works.

(c) The proprietary materials shall be stored as directed. Those already recorded in the Measurement Book shall be marked suitably for identification.

(d) The Contractor, shall on demand, produce to the GE original receipt vouchers /invoices in respect of the supplies to ensure that the contractor has actually brought the articles of required quality and quantity from the authorised agent/manufacturer/supplier and also to find out the rates thereof.

(e) Bitumen shall be purchased directly from manufacturers only. These vouchers/invoices shall be defaced by the GE/Engineer-in-Charge, indicating reference to the contract number, under dated signature, and CTC thereof shall be kept on record so as to avoid their being used again.

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(f) The chemical required for Anti termite treatment shall be purchased from manufacturers/authorised dealers only and contractor shall produce the cash voucher etc. to prove the genuineness of the same. GE will also ensure that proper quality/quantity of chemicals are brought and incorporated in the work.

(g) Under no circumstances payment on account (RAR) shall be made to the contractor as material lying at site for incorporation in the work, unless the contractor produces original purchase vouchers/invoices for the following items of materials as applicable: -

- (i) Paint/Distemper/Cement base paint.
- (ii) G.I tubing and fittings
- (iii) Cables and cable jointing kit
- (iv) Steel tubular electric poles
- (v) ACSR conductors
- (vi) All types of insulators
- (vii) Transformers
- (viii) All types of light fittings
- (ix) Cement
- (x) MCCB/MCB
- (xi) Transformer

22. WATCH/LIGHTING

The contractor shall at his own cost take all possible precautions to ensure safety of life and property by providing necessary fencing, barrier, light, watchman, etc. during the progress of the work and as directed by the Engineer-in-Charge.

23. MAKING GOOD

The contractor shall leave or form holes in concrete (Plain), brick work, stone masonry and in any other situation as required for the work or as directed by the Engineer-in-Charge and make good all the holes in the same mortar and mix as specified for that portion of work.

24. CLEANING DOWN.

Refer condition 49 of IAFW-2249. The contractor shall clean all floors, remove cement, lime or paint drops, clean joinery, glass panes, etc. touch up all painters work and carry out all other necessary items of work in connection therewith and leave the whole premises clean and tidy to the entire satisfaction of Engineer-in-Charge before handing over the items of the works. No extra payment shall be admissible to the contractor for this operation.

25. PRICING OF DEVIATION.

The principle enunciated in the condition 62 of IAFW-2249 shall apply to various sections/ parts of Schedule 'A' of this contract. The contractor's percentage applicable for pricing deviation as per Condition 62 of IAFW-2249 shall be contractor's percentage for the respective sections / parts of Schedule 'A'.

26. Minimum Wages Payable

(a) Refer condition 58 of IAFW-2249 General Conditions of Contracts. Govt. of India, Min of Defence (Department of labour and employment) vide notification dated 20 May 2009 have fixed the minimum rates of wages as updated from time to time

SPECIAL CONDITIONS (CONTD.....)

for various categories of employees under the minimum wages Act 1948. The contractor shall not pay wages lower than minimum wages including allowance as fixed under the said notification as updated till the date of receipt of tender. Wherein any area the minimum rates of wages fixed by the State Government for employees in employment in the construction or maintenance of road or in building operation, in stone breaking or stone crushing in the maintenance of buildings, and in construction and maintenance of runways, in relation to which the State Government is the appropriate Government, the rates of wages fixed by State Government as updated time to time shall in respect of these areas deemed to be minimum rates of wages payable under this contract.

(b) Contractors' attention is also drawn, amongst other things, the 'explanations' to the Schedule of minimum wages referred to above.

(c) The fair wages referred to in Condition 58 of IAFW-2249 will deemed to be the same as the minimum wages referred to above.

(d) The contractor shall have no claim whatsoever, if on account of local factor and or regulations, he is required to pay the wages in excess of minimum wages as described above during the execution of work.

27. 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 GST, Labour welfare cess/tax etc), duties, Royalties & other levies payable under the respective statutes. No reimbursement/refund for variation in 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.
- (b)
 - (i) The taxes which are levied Government at certain percentage rates of contract sum/amount shall be termed as "taxes directly related to contract value" such as GST, 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 of receipt of tenders (last date of bid submission). 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 (last date of bid submission) 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 contractors 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 thereto which

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he may be in a position to supply. The contractors shall also submit the other documentary proof/information 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 authorised representative of Government, and shall further, at the request of the GE furnish, verified in such a manner as the GE may require, any documents so kept and such other information 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.

28. WORK ON HOLIDAYS

The contractor shall not carry out any work on Gazetted holidays, weekly holidays and other non working days except when it is specially any day as a holiday or non working day without assigning any reason for such declaration. Authorised in writing to do so by GE. The GE may at his sole discretion declare any day as holiday or non working day without assigning any reason for such declaration.

29. Condition 64 of IAFW-2249 Advances on Account (Applicable to contract of value of Rs 50 Lakhs and above)

The contractor may be paid advance on account to the full value of the under mentioned materials only brought on to the site, on his furnishing guarantee Bond(s) from a scheduled bank for the amount of the retention money which should otherwise be recoverable from him under the contract:

- (a) Steel brought by the contractor under his own arrangements
- (b) Cement
- (c) Factory made panelled door shutters
- (d) Factory made steel windows
- (e) Iron mongery
- (f) Sanitary fittings
- (g) Electrical fittings/fixtures/equipments

30. Qualified tradesman: (applicable for works costing rupees one crore or more)

In compliance with the Condition 26 of IAFW-2249 (General Conditions of Contracts) the contractor shall employ skilled/semi skilled tradesman who are qualified and possessing certificate in particular trade from Industrial Training Institute (ITI) /National Institute of Construction Management and Research (NICMAR)/similar reputed and recognized institutes by State /Central Government, to execute the works of their respective trade. The number of such qualified tradesman shall not be less than 25% of total skilled/semi skilled tradesman required in each trade. The contractor shall submit the list of such tradesman along with requisite certificates to Garrison Engineer for verification and approval. Notwithstanding the approval of such tradesman by GE, if the tradesman are found to have inadequate skill to execute the work of their trades, leading to un-satisfactory workmanship, the contractor shall remove such tradesman within a week after written notice to this effect by the GE and shall engage other qualified tradesman after prior approval of GE. GE's decision whether a particular tradesman possesses requisite qualification, skill and expertise commensurate with nature of work, shall be final and binding. No compensation

SPECIAL CONDITIONS (CONTD.....)

whatsoever on this account shall be admissible.

31. Testing of Materials:-

(a) 'A' level tests for works costing Rs.100 lakhs and above: The contractor shall set up site laboratory for testing of materials (except Sch 'B' materials) for 'A' level tests as listed in Annexure-I hereto. The contractor shall arrange all equipments/machines for the tests specified in Annexure-I as 'A' level tests at his own cost with prior approval of GE. This cost shall be included in the lumpsum costs quoted by the contractor. The contractor shall employ a competent technical representative as approved by the append GE for the purpose of testing and all such test shall be carried out in the presence of Engr-in-Charge. The successful test results thereof shall be recorded and signed jointly by the contractor and the Engr-in-Charge. The charges for these tests i.e. 'A' level tests carried out in site laboratory of the contractor shall not be recovered. However, in case a test which was specified to be carried out in site laboratory and which could not be carried out in site laboratory due to some reason, such test will be carried out in command lab any other approved lab and the recovery shall be made at the rates given in Annexure-I for tests carried out in command lab or otherwise at the actual rates in case the tests are carried out in other labs. Testing charges will be deducted from the RARs irrespective of the test results for such tests.

(b) 'A' level tests for works costing up to rs.100 lakhs : The contractor may set up site laboratory at his option for works costing up to Rs.100 lakhs. The other stipulations will be same as specified in preceding para (a). However, in case the contractor has not set up the site laboratory and tests are carried out in command lab or any other Govt. laboratory approved/set up by GE, the recovery shall be made at rates given in Annexure-I for tests carried out in Command Test Lab or otherwise as per actual rates in case the tests are carried out in other labs Govt Lab/ NABL certified Lab. Testing charges will be deducted from the RARs irrespective of the test results for such tests.

(c) 'B' & 'C' level tests : For tests of 'B' & 'C' level as indicated in Annexure-I, charges for the same shall be borne by the contractor at the rates indicated in Annexure-I, only, if the test results disclose that materials are not in conformity with provisions of the contract. However, if the test results disclose that materials are in conformity with the provisions of the contract, no recovery shall be effected from the contractor.

(d) The recoveries on account of testing charges wherever applicable shall be effected from the running account payments due to the contractor payable after completion of the respective test or whenever the test is due whichever is earlier.

(e) This clause supersedes all other stipulations, if any, with regard to testing of materials, specified elsewhere in the tender documents.

32. CONSTRUCTION LABOUR WELFARE TAX: Consequent upon promulgation of ordinance by the president of India, the contractor is liable to pay element for construction labour welfare tax. The rates quoted by the contractor shall be inclusive of this tax. Rate of labour welfare tax shall be 1% of the gross value of work done.

33. Electric Supply

(a) In case the contractor desires to be electricity from MES he shall be charged for electric energy consumed at the following rates.

- (i) At Rs 13.67 per unit for the light.
- (ii) At Rs 13.67 per unit for power.

SPECIAL CONDITIONS (CONTD.....)

(b)Electric supply required for the work shall be made available by the MES at the point (s) marked on the layout plan. The main switches and energy meter to register the electric energy supplied shall be provided and main switches and energy meter to register the electric energy supplied shall be provide and installed by MES. The contractor shall proved all necessary cable, fittings from the main switches in order to ensure a proper and suitable supply of electricity for the execution of work. The contractor shall also provide necessary earthing keeping in view the safety requirement. The MES does not guarantee for continuity of supply and no compensation whatsoever shall be allowed for supply becoming intermittent for breakdown in the system.

The actual position of supply point (s) for electric energy will be ascertained by the contractor from the GE before submitting his tender irrespective or whether he actually inspected or not, he shall be deemed to have inspected and seen the supply points in consultation with GE entertained on this account.

Signature of the Contractor

Dated : _____

DCWE(C)
for Accepting Officer

SPECIAL CONDITIONS (CONTD.....)**ANNEXURE – I**

Sr No	Material	Tests	Method of testing	Frequency of tests			Level of test	Rate (Rs)	Remarks
1	2	3	4	5			6	7	8
1.	Bricks	i) Compressive Strength	IS 3495 (Part-II)	As per (IS-5454) As given under			'A'	330	Checks for visual and dimensional characteristics shall also be carried out as per IS-5454.
		ii) Water Absorption	-do-	Lot size	Sample size	Permissible No. of defecti-ve bricks	'A'	330	
		iii) Efflorescence	-do- (Part-I)	1001 to 10000	5	0	'A'	330	
				10001 to 35000	10	0			
				35001 to 50000	15	1			
2	Coarse Aggregate	i) Sieve Analysis	IS : 2386 (Part-I)	One test for every 15 Cum of aggregates or part there of brought to site			'A'	660	Legend: 'A' -Site Lab.
		ii) Flakiness Index	-do-	-do-			'A'	250	B-Zonal Lab/Command Lab
		iii) Estimation of deleterious materials	IS : 2386 (Part-I)	One test for every 100 Cum of aggregates or part there of			'A'	600	'C' Approved test house/Engg College
		iv) Organic impurities	-do-	One test per source of supply			'B'	275	
		v) Moisture content	-do- (Part-II)	Regularly as required			'A'	330	
		vi) Specific Gravity	IS : 2386 (Part-II)	One test for each source of supply			'B'	330	

SPECIAL CONDITIONS (CONTD.....)

Sr No	Material	Tests	Method of testing	Frequency of tests	Level of test	Rate (Rs)	Remarks
1	2	3	4	5	6	7	8
3.	Fine Aggregate	i) Sieve analysis	IS : 2386 (Part-I)	One test for every 15 Cum of FA or part when brought to site.	'A'	660	
		ii) Test for clay silt and impurities.	-do- (Part-II)	-do-	'A'	500	
		iii) Specific gravity	-do- (Part-II)	One for each source of supply	'B'	330	
		iv) Moisture content	-do- Part-II	Regularly as required subject to 2 tests/day when being used	'A'	330	
		v) Test for organic impurities	-do- (Part-II)	One test for each source of supply.	'B'	275	
4	Cement	i) Setting time	IS : 4031-63 affirmed 1980	Once for each consignment or as and when required.	'B'	275	
		ii) Soundness	-do-	-do-	'B'	550	
		iii) Compressive strength	-do-	-do-	'B'	550	
		iv) Fineness	-do-	-do-	'B'	275	

SPECIAL CONDITIONS (CONTD.....)

Sr No	Material	Tests	Method of testing	Frequency of tests	Level of test	Rate (Rs)	Remarks
1	2	3	4	5	6	7	8
5	PCC solid blocks for walling	i) Compressive strength	IS : 2185	12 Blocks out of 18	'A'	900	Samples : 18 Blocks from consignment of every 1000 blocks or part there of. These blocks to be checked for dimensions and weight.
		ii) Water absorption	-do-	3 blocks out of 18	'B'	330	
		iii) Density	-do-	3 Blocks out of 18	'B'	330	

Signature of the Contractor
Dated : _____

DCWE(C)
for Accepting Officer

PARTICULAR SPECIFICATIONS**1. GENERAL**

- 1.1 Work under this contract shall be carried out in accordance with schedule 'A'/ BOQ, particular specifications, drawings and general specifications and other provisions in MES schedule 2009 Part I for specifications and 2020 Part II for rates read in conjunction with each other.
- 1.2 Term "General specifications" referred to here-in-after as well as referred to in IAFW-2249 (General conditions of contract) shall mean the specifications contained in the MES schedule 2009 Part I.
- 1.3 General rules, specifications, special conditions and all preambles in the MES schedule shall be deemed to be applicable to the work under this contract, unless specifically stated otherwise in these documents in which case the provisions in these documents shall take precedence over the aforesaid provisions in the MES schedule. The term "as specified" wherever appears in the tender documents and drawings, relates to relevant particular specifications and in its absence general specifications. All reference to MES Schedule/SSR in these specifications relate to part I of MES Schedule 2009, unless otherwise mentioned. Reference to only some paragraphs of MES Schedule have been made in these particular specifications but other paragraphs and provisions as applicable are also to be followed for all parts of Schedule 'A', provisional lumpsum and prime cost sum provided in general summary if any even though not particularly mentioned here-in-after.

2. EXCAVATION AND EARTH WORK**2.1 -----BLANK-----****2.2 Excavation**

- (a) Soft/loose soil, hard/dense soil mixed with boulders as defined or soft or disintegrated rock and mud shall be classified as any type of soil.
- (b) Unit rates for buildings in Schedule 'A' Part-I shall include for excavation and earth work in any type of soil as aforesaid. However in the event of deviations involving excavation and earth work, the rate shall be the average of soft/loose and hard/dense soil.
- (c) The measurement of excavation shall be as explained in MES Schedule (Part-II) with the exception that separate quantities of soft/loose soil, hard/dense soil and mud shall not be worked out, but these materials shall be grouped together as any type of soil as aforesaid.
- (d) If hard rock is met at site, contractor shall immediately notify the fact to the GE in writing, who will after due verification, regularize the change through a proper deviation order.

PARTICULAR SPECIFICATIONS (Contd...)

2.2.1 -----**BLANK**-----.

2.3.1 Filling IN Trenches/under floors:- The approved earth obtained from excavation in foundations shall be used for filling in trenches, under floors and any other situation as specified after removing big stones, grass roots and vegetables moulds and other organic matter. Earth mixed with small stones/pebbles (If approved by GE) is permitted for use in filling under floors and foundations. The filling around pipes, after the pipes are laid and tested, shall however be made with earth free from pebbles/stones. Any additional earth required for the purpose of filling shall be arranged by the contractor at no extra cost to the department. For pricing deviation, the cost of earth shall be priced at the applicable rate of rough excavation in soft/loose and removal to a distance exc 0.5 KM but not exc 1.5 KM subject to contractor's percentage for Sch 'A' Part-I as given in Sch 'A' Notes.

2.3.2 Filling under floors/sides of trenches shall be in layers not exceeding 250 mm thick, and each layer shall be watered and well rammed.

2.3.3 Surplus spoil shall be removed and spread at places as directed by the Engineer-in-Charge, to a distance not exceeding 50 metres, and levelled, as directed by the Engineer-in-Charge.

2.4 Trenches for Foundations and Pipes.

2.4.1 The excavation shall be restricted to dimensions shown on the drawings. Excavation made, if any, in excess of required depth/width shall be made good by the contractor with cement concrete mix (1:5:10) without any extra cost to the Govt.

2.4.2 The beds of the trenches, if in soft or made up earth, shall be watered and well rammed and any depressions thus formed shall be filled with approved earth as required to the level and slope as directed by Engineer-in-Charge.

2.5 Dressing Around Buildings. After construction and before handing over any building, the area around the building above shall be dressed without extra cost to the Govt. Spoil obtained from surface dressing shall be removed to a distance not exceeding 50 metres, spread and leveled as directed by Engineer-in-Charge.

2.6 HARD CORE

Hard core shall be of hard broken stone or boulders broken to gauge not exceeding 63mm. The contractor, however has the option to use hard broken burnt brick hard core of the aforesaid gauge without any price adjustment. The material of hard core shall be well graded for providing dense and compact sub grade. Hard core shall be deposited, spread and leveled in layers not exceeding 15cm thick and watered and well rammed to true surface and compacted with sufficient fine material. The thickness of hard core specified or indicated in the drawing is the thickness after consolidation. Where thickness has not been mentioned it shall be 150mm consolidated, however only one type of hard core either of stone or bricks should be used in location of a building or part therefore.

PARTICULAR SPECIFICATIONS (Contd...)**3. CONCRETE WORK****3.1 General**

3.1.1 Where there is discrepancy between the number of reinforcement bars as marked on the drawings and the number of bars as worked from the C/C spacing shown on the drawings, the later shall prevail. The number of reinforcement bars in the RCC slab etc. shall be worked out considering the span between C/C of supports.

3.1.2 Where ever nomenclatures of RCC slabs (e.g. S-1, S-2 etc.) is given in the RCC plans, the details of reinforcement for such slabs shall be as given for slabs of the same nomenclature elsewhere, if not given in the same drawings.

3.2 Cement

3.2.1 Contractor shall make his own arrangements to procure cement as specified here-in-after. The cost of cement, its transportation, storage, testing charges, its accounting and preservation etc. till consumed in work shall be borne by the contractor.

3.2.2 Type of Cement.

Type of cement to be used in this contract, unless otherwise specifically mentioned, shall be Ordinary Portland Cement (OPC) Grade 43 conforming to IS-269-2015. Different type of cement, if so required, as per contract provisions, shall also be arranged by contractor at no extra cost to Govt. Portland Pozzolana cement (PPC) (as per IS-1489-1991) can however be used in lieu of Ordinary Portland Cement without any price adjustment, subject to fulfilling certain criteria enumerated herein under in succeeding paras.

3.2.3 Procurement

Cement shall be procured by the contractor (both OPC & PPC) directly from any of the producers listed below or as approved by E-in-C's Branch even after date of receipt of tender:-

(A) Cement Manufacturers for MES on PAN India level

Sl No.	Company Name & Brand	Address	Type of Cement
1.	The Associated Cement Companies Ltd Brand: "ACC"	414-421, Splendor Fourum (4 th Floor), 3, District Centre, Jasola, New Delhi-110044 Ph: 011-46583600	All
2.	M/s Ultra Tech Cement Ltd Brand: "ULTRATECH"	'B' Wing, 2nd floor , Mahakali Caves Road, Andheri (East), Mumbai-400093, Ph 022-66917800	All

PARTICULAR SPECIFICATIONS (Contd...)

3.	The India Cement	Dhun Building, 827, Anna Salai, Channai-600002	All
4.	M/s Dalmia Cement (Bharat) Ltd Brand: "DALMIA CEMENT"	Dalmiapuram, Distt- Truchirappalli, Tamil Nadu-621651	All
5.	Century Cements Brand: "CENTURY"	Industry House, 159 Church Gate, Reclamation, Mumbai-400020 Ph: 022-22023936	All
6.	Saurashtra Cement Brand: "SAURASHTRA"	Gala No A-1, Ground Floor, Udhyog Sadan No 3 MIDC, Central Road, Andherei (East), Mumbai-400093	All
7.	The Ramco Cements Ltd. (Formerly Madrass Cement) Brand : RAMCO	Auras Corporate Centre, 98-A, Dr Radhkrishnan Salai, Mylapore, Chennai-600004 Ph 044-28478666	All
8.	Mangalam Cement Ltd Brand: "MANGALAM"	PO Aditya Nagar, Morak, Distt- Kota, Rajsthan-326520 Ph: 9351468076	All
9.	Birla Corporation Ltd Brand: "BIRLA"	Birla Building (3 rd & 4 th Floor) 9/1, RN Mukherjee Road, Kolkata-700001 Ph: 033-30573700	All
10.	Orient Cement Brand: "ORIENT"	5-9-22/57/D, 2 nd and 3 rd Floor, GP Birla Centre, Adarsh Nagar, Hyderabad-500063 Ph: 04423688600	All
11.	Nuvoco Vistas Corporation Ltd (Formerly Lafarge Cement) Brand: "NUVOCO"	Equinox Business Park, Tower-3, East Wing, 4 th Floor LBS Marg, Kurla (West), Kurla Mumbai-400070 (Maharashtra)	All
12.	Shree Cement Brand: "SHREE"	Bangur Nagar, Beawar, Distt- Ajmer, Rajasthan-305901 Ph: 01462-228101-06	All

PARTICULAR SPECIFICATIONS (Contd...)

13.	J K Cement Brand: “JK”	Kamla Tower Kanpur-208001 (Uttar Pradesh)	All
14.	J K Lakshmi Cement Ltd Brand: “J K LAKSHMI”	Jaykapuram, Distt-Sirohi, rajasthan Ph: 02971-244409/10	All
15.	Jaypee Rewa Cement Brand: “JAYPEE”	Jaypee Nagar PO - Jaypee Nagar, Rewa-486450 (MP)	All
16.	Ambuja a Cement Brand: “AMBUJA”	Kodinar, PO-Ambujanagar, Taluka-Kodinagar, Distt- Junagarh, Gujrat-362715	All
17.	M/s Shree Guru Kripa Cement (Pvt) Ltd Brand: “SARTAJ”	4/4 Trikuta Nagar, Jammu Ph: 0191-2472043	(a) OPC-43 (b) PPC
18.	M/s Parasakti Cements Ltd Brand: “PRASHAKTI cement”	123/3RT, Plot #8-3-214/21, Srinivasa Nagar Colony (West) Hyderabad-500038 Tel: 040-44119100/200 Fax: 040-28363958, 28365047562	(a) OPC-43 (b) PPC
19.	M/s My Home Industries Ltd Brand: “MAHA SHAKTI” for PSC “MAHA” for OPC 43 Gr “MAHA SHAKTI” for PPC	9 th Floor, Block-3, My Home Hub, Madhpur, Hyderabad-500081 Ph 0124-4503700, Fax: 040-66929797/98	(a) OPC-43 (b) PPC (c) PSC
20.	M/s Chettinad Cement Corporation Ltd Brand: “CHETTINAD Cement”	4 th Floor , Rani Seethai Hall Building, 603, Anna Salai Hall, Chennai-600006 Tel No: 044-42951800 Fax No: 044-28291558 Email- info@chettinadcement.com Website- www.chettinadcement.com	(a) OPC-43 (b) PPC
21.	M/s Sanghi Industries Ltd Brand: “SANGHI”	10 th floor, Katariya Arcade, Off S G Highway, PO-Makaarba, Distt-Ahmedabad Pin-380051 Mo 09825803690, Tel 07926838000 Fax :079-26838111 Website www.sanghicement.com	(a) OPC-53 (b) PPC

PARTICULAR SPECIFICATIONS (Contd...)

22.	M/s Wonder Cement Ltd Brand : WONDER Cement	17, Old Fatehpura Seva Mandir Road, Udaipur-313004 Rajasthan (India) Tele : +91-294-33991133 Fax : +91-294-3006333 Email : corp.office@wondercement.com	(a) OPC-43 (b) OPC-53 (c) PPC
23.	M/s Kesoram Industries Ltd Brand: “Birla Shakti”	Cement Division, Office No 613 to 616 White House , Block - III , VI Floor , 6 - 3 - 1192 / 1 / 1 Kundanbagh , Begumpet , Hyderabad - 500016 , Telengana Tele : + 91 - 40 - 4334 - 4555 Fax : + 91 - 40 - 4334 – 4534 Email: corp.office@wondercement.com	(a) OPC-43 (b) OPC-53 (c) PPC
24.	M/s JSW Cement Ltd. A.P Brand: “JSW PSC” (Portland Slag Cement)	JSW Centre Opp MIMRDA Ground Bandra Kurla Complex , Bandra (East) Mumbai – 400051 Tele + 91 - 22 - 4286 – 5047 Fax : + 91 - 22 - 2650 - 2001 Website : www.jswcement.in	(a) PSC

(B) Approved Cement Manufacturers for MES on Regional level

Sl No.	Company Name & Brand	Address	Type of Cement
1.	Shiva Industries, Kathua (only for J&K Region)	6, Industrial Extn Area Kathua-184102, (J&K)	(a) OPC
2.	Star Cement Meghalaya (only for CE Shillong Zone & CE (AF) Shillong area)	Lumshnong, PO- Khaliehriat, Dist-Jantia Hills, Meghalaya	(a) OPC (b) PPC
3.	M/s Meghalaya Cements Ltd Brand: “TOP CEM” (only for Eastern Region)	Lohia House, MG Road, Factory Bazar, Guwahati- 781001	(a) OPC (b) PPC

3.2.4 In case the total estimated requirements of cement is less than 1200 bags, Contractor can procure cement from the authorised distributors/ dealers of the approved firms, but the contractor will have to submit test certificates of the batch issued by the main producers.

PARTICULAR SPECIFICATIONS (Contd...)**3.2.5 Requirements for using Portland Pozzolana Cement.**

- (a) PPC meets the strength criteria of 43 Grade OPC as laid down in IS-269-2015.
- (b) The minimum period before stripping form work given in clause 11.3.1 of IS-456-2000 is to be suitably modified and as approved for the period by GE. The contractor shall not claim extra on this account.
- (c) Mixing of OPC & PPC shall not be allowed in a work. However with the strict control of the ground executives, different buildings can have different type of cement.
- (d) Following requirements shall be ensured at the time of procurement and certificate to this effect shall be obtained from manufacturer for each batch.
 - (i) The quantity of Fly Ash is strictly as per IS-1489 (Part-I)-1991.
 - (ii) Fly ash is interground with clinker not mixed with clinker.
 - (iii) Dry fly ash is transported in closed containers and stored in silos only. Only pneumatic pumping should be used.
 - (iv) The fly ash is received from thermal power plants using high temperature combustion above 10000 C should be used.
 - (v) The fly ash contents in PPC shall not exceed 35% to ensure consistency.
- (e) In cold climatic regions where temperature goes below 150 C and important structures like overhead reservoirs, underground sumps and buildings with spans 10 m or more, only OPC shall be used. However for other structures during working seasons in cold climatic regions, where OPC is not available use of PPC may be permitted provided it shall be ensured that while using PPC, atmospheric temperature should be more than 150 C.

3.2.5.1 Contractor shall produce purchase vouchers, test certificate and other valid documentary proof to the entire satisfaction of GE for entire quantity of each consignment to prove that cement has been purchased from the main producer as in para 3.2.2.1 above. The contractor shall also obtain date of manufacturing of cement from manufacturers/suppliers for every lot of cement separately and will submit complete documents in support of purchase of cement to Engineer-in-charge/ GE for verification.

3.2.6 Testing of Cement.

3.2.6.1 The manufacturer is to carry out inspection and testing of cement in accordance with the relevant BIS provisions. The Contractor shall submit the Manufacturer's Test certificate in original alongwith the Test Sheets giving the result of each physical test as applicable and the chemical composition of the cement or authenticated copy thereof, duly signed by the manufacturer or his authorized representative with each consignment. The Engineer-in-Charge shall record these details in the Cement Acceptance Register (Performa as per Annexure 'A') after due verification and forward a certified true copy of test sheet to GE for his records.

Cement brought to site of work shall remain the property of Govt. Contractor shall in no case, remove any bag of cement unless permitted in writing by GE. In addition to manufacturers test certificate, GE shall also take random samples of cement drawn from various lots of each consignment as specified in IS Codes and get them tested from any

PARTICULAR SPECIFICATIONS (Contd...)

one of the Govt. approved laboratories at his discretion or from National Test house SEMT wing CME, Regional Research Laboratory or Zonal/Command Laboratory, all as per relevant IS (Method of sampling hydraulic cement), (Method of physical test for hydraulic cement) and (Method of chemical analysis of hydraulic cement). Irrespective of results, cost of materials for such samples, cost of requisite handling & conveyance and cost of testing etc. shall be borne by the contractor. Cement from each consignment shall be allowed to be incorporated in the work only after the GE is satisfied with the quality of cement brought by contractor.

3.2.6.3 Cost of testing undertaken as per provision in clause 3.2.3.2 above shall also be borne by the contractor. It shall be ensured that tested and untested cement is segregated and stored separately with distinct identification. Cement of different brands shall be stacked separately.

3.2.6.4 If the test results on samples of a particular consignment are not within acceptable limits, the matter shall be referred to the Accepting Officer, whose decision regarding acceptability of such cement with price adjustment or removal from the site shall be final and binding. No claim whatsoever shall be entertained on this account.

3.2.6.5 Storage/Consumption of Cement

Cement in bags shall be stored in proper leak proof/damp proof storage godown, over at least a 20cm high platform at least 20 cms away from floor and walls in such manner so as to prevent deterioration due to moisture or intrusion of foreign matter, all as specified in clause 4.3.1 of SSR Part-I. It shall be ensured that stacking of cement shall not be more than 10 bags high. It shall be ensured that tested and untested cement is segregated and stored separately with distinct identification.

The entire quantity of cement brought at site shall also be suitably recorded in the MB indicating quantity and purchase voucher (s) before incorporating in the works. Entries in the MB shall be signed by the Engineer-in-charge and the contractor.

(i) For the purpose of keeping a record of cement procured and consumed in works, the contractor shall maintain a properly bound register in the form approved by the Engineer-in-Charge showing all procurements, quantity used in the work and balance in hand, at the end of each day and such other information as may be required to control the consumption of cement. Pages of the register shall be numbered and initialed by Engineer-in-Charge. This register shall be signed daily by the contractor or his representative in token of correctness of the entries made. In token to check, it shall be signed by MES representative also as follows:-

- (a) Daily by JE (Civil) or JE (E/M) in charge of works.
- (b) Twice in a week by the Engineer-in-Charge.

(ii) The register shall remain at site of work, in the safe custody of the contractor and on demand shall be produced for verification of Inspecting Officer. On completion of the work, the register shall be returned to MES.

PARTICULAR SPECIFICATIONS (Contd...)

(iii) The cement godown shall be provided with two locks on each door. The key of one lock on each door shall remain with the Engineer-in-Charge or his authorized representative and that of the other lock with the contractor's authorized agent at site of work so that cement is removed from the godown according to daily requirements and with the knowledge of both the parties.

(iv) Foregoing provisions shall not, however absolve the contractor of his responsibility of incorporating required quantity of cement in various items of works as per contract provisions.

Cement shall be used in order of which it is received but not later than two months from the date of manufacturing. It shall be ensured that only one type/make of cement is used in any structural member

Documentation

The contractor shall submit original purchase vouchers from the manufacturer for the total quantity of cement supplied under each consignment to be incorporated in the work. All consignment received at the work site shall be inspected by the GE alongwith the relevant documents before acceptance. The original vouchers and the test certificates shall be defaced by the Engineer-in-Charge and kept on record in the office of the GE duly authenticated and with cross reference to the control number recorded in the Cement Acceptance Register. The Cement Acceptance Register will be signed by the JE (Civil) or JE (E/M), Engineer-in-Charge, GE and the contractor. The Accepting Officer may order a board of Officers for random check of cement and verification of connected documents. The entire quantity of cement shall be suitably recorded in the Measurement book also for record purposes before incorporation in the work, as "Not to be abstracted" indicating the voucher number with dates, quantity, date of manufacture/expiry date etc. It shall form the basis to allow advance on account through RARs. While allowing advance on account quantities of cement so entered in MB shall be reduced by 2.50%.

Schedule of supply

The Contractor shall ensure that procurement action is taken immediately after acceptance of the contract so as to adhere to schedule of activities as per CPM Net Work.

3.3 Aggregates

Aggregates for concrete work shall conform to specifications all as specified in clauses 4.4.1 to 4.4.7.3 of MES Schedule Part-I.

3.3.1 Fine aggregate (sand)

Grading for fine aggregate shall be within the limits of grading zone I to III as given in clause 4.4.7.2 of MES Schedule Part-I. However for all concrete and masonry work, fine sand within limits of grading I & II shall be provided and for all other balance work including plastering/screeding etc. where it shall be provided within limits of grading –III.

PARTICULAR SPECIFICATIONS (Contd...)**3.3.2 Coarse aggregate**

Unless specified otherwise in these particular specifications, coarse aggregate for all concrete work in all situations shall be graded crushed stone aggregate of approved quality. Contractor may, however, use graded shingle aggregate of approved quality in lean concrete under foundation, sub base of floor without any price adjustment. Two types of aggregate shall not be mixed.

Grading of coarse aggregate

Graded aggregate of nominal sizes given hereunder, shall be used, unless specified otherwise in the specifications hereinafter :-

(a) Reinforced cement concrete.

- (i) For elements of depth/thickness more than and incl 100mm : 20mm.
(ii) For elements of depth/thickness less than 100mm : 12.5mm.

Note : However, in no case the nominal size of aggregate shall be greater than one fourth the minimum size of the member and further it should conform to the requirement given in Clause 5.3 of IS-456-2000.

(b) Plain Cement Concrete

- (i) Under 30 mm thickness : 12.5 mm
(ii) 30 to 80mm thickness : 20 mm
(iii) Exceeding 80mm thickness : 40 mm
(iv) Lean concrete and concrete sub base of floors. : 40 mm

Water

Water shall conform to the requirement stipulated in IS-456-2000.

Mix of concrete

Unless otherwise specified in drgs and else where in these particular specifications, the mix of cement concrete in various situations shall be as under. However the grade of concrete shall not be less than what is given below:-

Sl No	<u>Situation</u>	<u>Type of Concrete</u>
(a)	Lean concrete under foundation of walls, plinth toe beam and in gaps between plinth columns footing.	PCC (1:5:10)(by Volume)
(b)	Lean concrete under column footing.	PCC(1:4:8)(by Volume)
(c)	PCC in plinth protection and channel/drain, PCC cills, PCC block for holder bats and holdfasts or lugs for doors, windows and ventilators and plugging for scaffolding holes.	PCC(1:3:6)(by Volume)
(d)	PCC in bed blocks/plates, Kerbs, benching splash stones and coping and PCC in any other situation not covered above.	PCC(1:2:4) (by Volume)

PARTICULAR SPECIFICATIONS (Contd...)

(e)	All RCC works for buildings/structures.	M-25 (Design mix) for building work and M-30 (Design mix) for water retaining structures as per IS-456 of 2000
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Note :- PCC/RCC for other than building works/structures work (Schedule 'A' Part-I) shall be as specified in relevant item of Schedule 'A' parts or as specified in particular specifications here in after or as shown on drawing shall be followed.

4. **BLANK**5. **EXTERNAL ELECTRIFICATION**5.1. **GENERAL**

(a) All works shall strictly comply with the provisions in the Indian Electricity Act and rules framed there under (amended up to date) as applicable to this work. The work shall also comply with the provisions contained in the latest edition of the relevant ISS/BSS issued upto the date of receipt of the tender.

(b) All works shall be carried out to the entire satisfaction of the Engineer-in-Charge and in such a fashion and manner as may be directed by the Engineer-in-Charge.

(c) All works shall conform to the best method of modern Engineering practice and shall be executed by the fully/qualified Electrician/ Lineman/Wireman etc. The evidence of their qualifications shall be produced by the Contractor on demand by GE.

5.2. **SCOPE OF WORK**

Scope of work under this contract caters for External Electrification works as per details described in Schedule 'A' and in the particular specifications and shown on drawings.

5.3. **LAYOUT**

(a) The tentative layout is shown in the site layout plan. The layout of overhead lines/underground cables and position of equipments is tentative. The electric lines and cables shall be laid by route as actually directed by the Engineer-in-Charge. The contractor shall measure on the ground the actual length alongwith the said route to work out the exact requirements of electric lines and cables before placing orders for procurement offered by him can be suitably placed in the space marked for the purpose.

5.4. **SAMPLES AND MATERIALS**

(a) All materials incorporated in the work shall bear ISI certification mark with relevant BIS. Samples of materials for which no IS specification is issued and which are to be supplied by the contractor shall be approved by GE before incorporation in the work.

(b) Materials offered for incorporation shall be new and no reconditioned/used equipment materials and will be accepted in the work.

PARTICULAR SPECIFICATIONS (Contd...)

(c) Manufacturers Test certificate alongwith purchase voucher and for all equipment/ cables shall be submitted by the contractor. Type test report shall also be submitted by the contractor of items asked for by the GE.

5.5. EQUIPMENTS

All equipments, applied accessories and materials to be incorporated in this work shall be of the make(s) specifically mentioned in Appendix 'C' or where the make(s) are not specifically mentioned then the same shall confirm to latest IS having BIS certification and of make as approved by GE.

5.6. EXCAVATION AND EARTH WORK

(a) Excavation for laying of under ground cables, poles struts and fixing of stays etc shall be restricted to dimensions shown in the drawings and as directed by the Engineer-in-Charge. The minimum depth and the width of the trenches shall be as laid down in para 19.74, 19.74.1 and 19.76 of MES Schedule 2009 (Part I). In the case of excavation for poles, struts and stay, excavation in excess of the required depth shall be made good by the contractor in cement concrete (1:4:8) type D-2 without any extra cost to the Government.

(b) The trenches for cable shall be excavated to levels gradients as directed by Engineer-in-Charge.

(c) All excavation earth shall be deposited at least one meter clear of the edge of the trenches. When roads have to be crossed, trench upto half the width of the road shall be dug a time and proper notices, signboards and lights shall be displayed and watchman posted to prevent accidents.

(d) Refilling of earth in trenches shall be done in 25cm thick layers with excavated soil approved by Engineer-in-Charge in manner as to ensure the greatest compactness and solidity. Each layer shall be well watered and rammed. Surplus spoil removed as provided in Schedule 'A'.

5.7 UNDERGROUND HT CABLES XLPE

5.7.1 Cross- linked polyethylene (XLPE) insulated , PVC sheathed HT Cable 11000 volts (Earthed) grade steel strip armoured with stranded aluminium **earthed** conductor shall conform to IS-7098 (Part-II). The cable shall be manufactured by using either Sio-plass Technology or Dry Curing with Nitrogen Gas technology. Laying of the cables shall be carried out as described in clause 19.74 to 19.76, 19.88 to 19.92 of the MES Schedule Part-I. Testing of the under ground cable during and after laying shall be done as per relevant IS Code and as mentioned in MES Schedule Part-I.

5.7.2 Acceptance Test of HT XLPE Cable : Before accepting the lot of cable for incorporation in the work, it shall be tested in accordance with Clause 18.2.1 of IS -7098 (Part-II) to ensure quality of the cable supplied.

PARTICULAR SPECIFICATIONS (Contd...)**5.7A. UNDERGROUND LT CABLES XLPE**

5.7A.1 LT cables shall be cross linked polyethylene (XLPE) insulated PVC sheathed GI strip armoured with stranded aluminium conductors suitable for working voltage up to and including 1100 volts and shall bear ISI certification mark with IS-7098 (Part-I).

5.8 CABLE TERMINATION AND CABLE JOINTS KIT

(a) Cable Termination & Cable Joint Boxes: Cable boxes for straight through and termination joints shall be in form of 'Kits' with jointing instructions and literature/test certificate. The kit shall also carry the name of manufacturer, date of manufacture and expiry date on the kit also the type of cable for which suitable.

(b) Cable Termination Accessories : All the cable termination accessories such as cable sockets, compression joint sleeves, conducting jellies, cable glands, reducing bushes and check nuts etc shall be best quality available or as directed

5.9 LAYING AND JOINTING OF UNDER GROUND CABLES

(a) The cables shall be laid and jointed strictly as specified in the MES Schedule-2009 (Part-I) and in accordance with instructions furnished by the cable manufacturers and the latest IS specification and as specified hereinafter.

(b) Sand cushioning to UG cable shall be carried out as specified in BOQ and all as described in clause 19.75 of MES Schedule.

(c) The Brick/precast PCC covering to the cables shall be as described in BOQ.

(d) After the layer of precast cable cover is laid the remaining trench will be filled with excavated earth all as specified in item of Schedule 'A'.

(e) The cables shall be snaked at all joints and junction boxes. Snaking shall be as directed by the Engineer-in-Charge. Extra length on account of snaking will also be measured under respective items of Schedule 'A'. The quantity payable under Schedule 'A' items shall be the length of cable laid including the length in snaking and no price adjustment shall be made for variation in quantities of connected (allied) items like sand cushion, sand cover and precast cable protection cover.

(f) Where the cables run vertically, they shall be firmly fixed with flat iron clamps as directed by the Engineer-in-Charge at one meter centre to centre along the supports.

(g) FACTORY MADE PRECAST CONCRETE CABLE COVERS

(i) The HV & LV precast PCC cable covers provided for mechanical protection of UG cables shall be conforming to IS 5820 of 1970.

(ii) The testing of precast PCC cable covers shall be carried out as specified in IS-5820 of 1970 and test report shall be submitted to Engr-in-Charge.

5.10. EARTHING

(a) Each item of equipment such as LT switch board and other electrical equipment shall be connected to two sets of earth connection.

(b) The contractor shall obtain approval of Engineer-in-Charge to the earthing before commencement and it shall be executed in the presence of his representative.

PARTICULAR SPECIFICATIONS (Contd...)

Excavation shall be passed by Engineer-in-Charge before filling the charcoal dust filling and back filling of earth shall be done in 25cm layers well watered and rammed.

(c) The earthing shall generally conform to IS-3043.

(d) The earth resistance of the whole system shall not in any case exceed 5 Ohm and for chemical earthing it shall be restricted to 1 ohm.

(e) The earthing shall be carried out to the specification given in Schedule 'A'.

5.11 EARTH WIRE

(a) Earth wire shall be 4mm galvanised iron and shall be strung on poles with clamps or eye body hooks. GI earth wire shall be paid by weight either calculated from table or actual. Should these differ, the lesser only shall be paid. No extra allowance for sag and jointing shall be made while computing the weight of GI wire.

(b) Earthing to metal supported with and accessories shall be done by 2.5mm dia wire, connected to main continuous earth wire running on poles. Nothing extra shall be paid on this account.

5.12. PIPES

(a) GI pipe for cable protection and earth wire shall be light grade and shall bear ISI certification mark with IS-1239.

(b) Ends of pipes shall be properly sealed with wooden bush and bitumen compound after drawing the cable through pipes.

(c) Where cables are to be fixed alongwith poles these shall be drawn through pipes. The pipes shall be fixed to poles by providing proper clamps and same shall be paid under appropriate item of Sch 'A'.

5.13 VOLTMETER, AMPERE METER

These shall be provided of the shape and size as described in Sch 'A' and directed by GE. Ampere Meters and Volt meters shall conform to specifications of IS-722 Volt Meter and Ampere Meters shall be ISI Marked.

5.14 SELECTOR SWITCH

Selector switch shall be provided as per Sch 'A'. Selector switch shall be conforming to specifications of IS-6875 and ISI marked.

5.15 INDICATING LAMPS

Indicating lambs shall be provided of size and shape as described in Sch. 'A'. Indicating lambs shall be LED type. The contractor shall procure indicating lamps either directly from the above manufacturer or their authorised distributor/ dealer.

5.16 TUBULAR STEEL POLES SWAGED

5.16.1 Steel tubular swaged poles and struts shall comply with the requirements of IS: 2713-1980(Part I to III). Steel tubular swaged poles shall be seamless, well finished, clean and free from harmful defects. The poles shall be straight, smooth, cylindrical and the end of the pole shall be cut square. The base plate shall be of cast iron and base plate, finial

PARTICULAR SPECIFICATIONS (Contd...)

taper plug, screws and bolts shall conform to the dimensions given in Appendix 'C' of IS: 2713-1980(Part I to III).The poles shall be painted with two coats of black bituminous paint in all internal surfaces with base plate and taper plug and external surfaces up to the portion embedded in concrete with base plate. The remaining external surfaces shall be treated with two coats of aluminium paint over a coat of red-oxide primer after necessary preparation to surfaces all as specified in the MES Schedule Part-I.

- 5.16.2 The pole shall be provided of the size and class as indicated in Sch 'A' and all as specified in clause 19.3 of the MES Schedule Part-I. Foundation and erection of pole shall be carried out all as described in clause 19.52 of the MES Schedule Part-I.

5.17. **STAY WIRE**

- 5.17.1 Stay wire shall be provided all as specified in Schedule 'A'. Stay wire shall be grade 4 quality with minimum tensile strength of 700/N/Sqmm and conforming to IS-2141-1979 specifications for galvanised stay strand

5.18. **DANGER NOTICE PLATE**

- 27.14.1 Danger notice plate shall be provided as directed by the Engineer-in-Charge. Danger notice plate shall be of size 200mm x 150mm and shall comply with IS:2551-1982 all as specified in Para 19.18 of MES Schedule Part-I.

5.19 **INSULATORS AND INSULATORS FITTINGS**

- 5.19.1 These shall be of size and shape as per respective item of Sch'A' and as specified in clause 19.6 of SSR Part-I.

5.20. **STEEL CROSS ARMS**

- 5.20.1 Steel cross arms shall be of angle or channel sections as indicated. They shall be in one piece, sound, free from defects. Steel cross arms shall be given a coat of primer and 2 coats of painting as indicated or as directed. The length of the cross arms shall be suitable indicated to accommodate the number of insulators on them giving sufficient spacing between the insulators. A minimum distance of 8cms for low and medium voltage lines and 10 cm for higher voltage lines shall be left from the centre of the extreme insulator pin hole to the end of the cross arm. The cross arm shall be complete with pole clamp made of MS Flat of size not less than 50 mmx6mm with necessary nuts, bolts and washer The pin holes on the cross arm shall be on required basis. Length of cross arm for carrying guard wire shall be such that the guard wire shall always run not less than 30cms beyond the outermost bare conductor of the configuration.

5.21. **ACSR CONDUCTOR**

- 5.21.1 ACSR conductor shall be provided of the size indicated in BOQ or as directed by the Engineer-in-Charge. It shall be provided all as specified in clause 19.56 of the MES Schedule Part-I.

PARTICULAR SPECIFICATIONS (Contd...)**5.22 ANTI-CLIMBING DEVICE**

- 5.22.1 Anti-climbing device shall be fabricated out of mild steel all as described in Schedule 'A' and as specified in Para 19.72.1 on page 19-18 of SSR 1991 Part-I. Painting to steel surfaces shall be done with two coats of synthetic enamel paint over a coat of primer. Anti-climbing device shall be of approved quality and shall be fixed on poles as directed by Engineer-in-Charge.

5.23. TESTING

(a) The contractor shall carry out the following tests at site. The results shall be recorded and signed both by the GE and contractor with dates.

(i) Under Ground Cables:-

(aa) Insulation, continuity and earth resistance tests.

(ab) Earth test.

(b) Any equipment, materials etc found unsatisfactory/not complying with the specification shall be rectified/replaced by the contractor at his own cost.

(c) Not with standing the tests carried out at the time of the commissioning of equipment/installation, the contractor shall be responsible for rectifying the defects, replacing equipment, during the maintenance period as laid down in condition 46 of IAFW-2249 (General Conditions of contracts).

5.24 EXPULSION TYPE LIGHTNING ARRESTERS

- 5.24.1 Expulsion type lightning arresters shall comply with IS :3070 (Part 2)-1989, Specification for lightning arrester for alternating current systems Part II Expulsion type lightning arresters.

NOTE: The expulsion type lightning arresters are used for surge protection and insulation coordination of distribution and transmission systems having low short circuit currents and are suitable for operation under the following normal service conditions of ambient air temperature :

(a) Maximum ambient air temperature 45 °C

(b) Maximum daily average ambient air temperature 360 C and

(c) Maximum yearly average ambient air temperature 300 C.

- 5.24.2 Expulsion Type lightning arresters shall be of the following class as indicated :-

(a) Thirty kilo-amperes discharge capacity distribution class

(b) Sixty five kilo-amperes discharge capacity distribution class and

(c) Sixty five kilo-amperes transmission class.

5.25 GANG OPERATED AIR BREAK SWITCHES

- 5.25.1 Gang operated air break switches shall be of 3.3 KV, 6.6 KV, 11 KV and 33 KV, rated upto 400 amps as indicated. They shall be three pole type, 3 insulators per phase, triple pole rocking, out-door type, gang operated, suitable for both horizontal and vertical mounting with the following components :

(a) Channel bases for mounting post insulators.

PARTICULAR SPECIFICATIONS (Contd...)

- (b) Operating mechanism complete with 5/6 m long operating pipe phase coupling shaft, operating handle with padlock arrangements but without padlocks.
- (c) Easy replacement type MS arcing horns with make first and break after features.
- (d) Multi-built type contacts will be provided to grip incoming and outgoing ACSR conductors.
- (e) None-ferrous parts shall be electroplated and ferrous parts hot dip galvanised. These shall be installed as directed by the Engineer-in-Charge.

5.26

SERVICE FUSES

5.26.1

Service fuses shall conform to IS-2086-1993 and HRC cartridge fuse links upto 650 V shall conform to IS 13703 (Part 1 to 4) 1993 and shall be suitable size for entry to ends of lines jointed to them. They shall be fixed at the pole end of the service line except when otherwise directed.

5.27

LT SWITCH BOARD PANEL

5.27.1

LT Panel shall be of CRCA sheet construction (minimum 2 mm thick) fixed on masonry platform of suitable size 60cm above GL and 30 cm below GL. The design of LT panel shall ensure that weights of components are adequately supported without any distortion/deformation. Ample space for housing the cable and connections for the purpose of installation and maintenance of cable, shall be provided at the back/front with two doors alongwith locking arrangements.

5.27.2

The bus bar shall be of high conductivity aluminum alloy grade EGIE and of adequate cross section to ensure that the temperature rise is within the permissible limits. The bus bar shall be insulated with PVC sleeves, supported at uniform intervals with non hygroscopic insulated supports to withstand short circuit faults and enclosed in a separate chamber. High tensile bolts and spring washer shall be provided at all bus bar joints. Connections from main bus bar to functional circuit shall be provided with appropriate size aluminum strips and so arranged as to withstand without any damage or deformation the thermal and dynamic stresses due to short circuit. Neutral bus bar shall be half the size of phase bus bar. LT panel should be factory made. The drawings of LT panel will be got approved from GE before manufacturing /assembly.

5.28

VACUUM CIRCUIT BREAKER

5.28.1

Refer Para 19.99 of SSR part-I of 2009.

5.28.2

DRAWINGS:

The following drawings/Docs shall be furnished (3 copies) at the time of approval:

- (a) Principal Dimensional details of 11 KV Switch Gear.
- (b) General arrangement drawing with foundation plan.

PARTICULAR SPECIFICATIONS (Contd...)

- (c) Schematic wiring diagram of VCBs including Protection and Metering Circuit.
- (d) Operation and maintenance instruction manual; and
- (e) Type test certificates for VCBs, CTs, PTs.

The approved drgs set shall be re-submitted alongwith operation manual at the time of installation of VCB set at site.

5.28.3 TESTS AT FACTORY :

The Transformer/Cable (HT/LT) shall be tested at Factory in accordance with the standards specified and shall be conducted in the presence of Department's representative detailed by Accepting Officer. These tests shall include the following:

- (a) Operation and continuity tests.
- (b) Mill volt drops tests of circuit breaker contacts.
- (c) Design and Visual Checks.
- (d) Visual, Resistance and Insulation Tests.
- (e) Power frequency high voltages withstand test.
- (f) Voltage Test on Control and Auxiliary Circuits.

5.28.4 TESTS AT SITE:

Tests at site in the presence of Electrical Inspector shall be carried out before completion and commissioning:-

- (a) Routine Test certificates for CBs, CTs, PTs and meters & relays shall be done and test report submitted.
- (b) Secondary injection tests should be conducted on all over current / earth fault relays.
- (c) Current setting and operating time setting for various Relays.
- (d) IR Vales and successful operation of all VCBs
- (e) Other Tests if any as applicable to relevant IS clauses.

5.29 Precommissioning Test :

Pre-commissioning tests for electric equipments/ machinery installed under this contract shall be carried out by SEI/ Electric Inspector in presence of Contractor before issuance satisfactory completion certificate of work by the GE. The record of such tests will be maintained by the GE duly signed by all concerned and a copy thereof shall be forwarded to Accepting Officer for record purpose. The contractor shall supply all necessary apparatus, instruments or equipments required for all the tests to be carried out. The quoted amount of respective items in BOQ shall be deemed to include for the above provision.

5.30 TESTING AND TEST CERTIFICATES:-

It should be ensured that equipments at sub paras (a) to (e) below are **Type tested** as per relevant IS/ IEC standards and approved by CPRI or similar approved Govt organisation. Contractor shall submit copies of type test certificates and equipment drawings with connection circuit diagrams indicating all sizes, types, models etc complete from the manufacturer for approval of the accepting Officer for the following items before confirming firm order of plant or equipment to the manufacturer.

PARTICULAR SPECIFICATIONS (Contd...)

- | | | |
|--|---|----------------------|
| (a) GI Tubing | (b) LT/HT Cables | (c) Earthing plates. |
| (d) Oil level indicating glass | (e) cork sheet gasket | |
| (f) Silica Gel breather assembly | (g) Numerical over current/earth fault protection | |
| (h)Transformer Oil | (j) Cable jointing Kit. | (k) Transformer |
| (m) Voltage/Ampere/Power factor/ digital meter | | (n) Air break switch |
| (p) ACSR Conductor | (q) Lightning arresters | |
| (r)Disc/Pin type insulators | (s) Off Load Changer | (t)Relays |
| (u) Battery | (v) Gasket set | |

5.30.1 Manufacturer's test certificates as per relevant IS/ IEC standards for above equipments at para 29.28 above and their sub equipments along with all relevant documents will be submitted by the manufacturer along with equipment before dispatch and shall be submitted by the contractor on arrival of plants at site for approval of Garrison engineer before payment.

5.30.2 **RECORD OF TESTINGS:-**All plants and equipments received should be tested for their insulation values and GE should ensure that the values are within the specified limits before and after installation of equipments at site. Three copies of test results with dates of testing duly signed by GE and contractor and all manufacturer's test certificates should be kept in records.

5.31 **BLANK**

5.32 **TRANSFORMERS**

The Transformer shall be all as described in Schedule 'A'. The temperature rise shall not exceed 50 C by resistance of winding method and 40 C measured by thermometer in oil after continuous run on full load. The contractor shall also provide first oil filling of transformer and the oil shall conform to IS-335 The make of transformer shall be as specified in Schedule 'A'

/Appendix 'C'. The transformer should be fitted with mounting as follow:-

- (a) Oil conservator with filling hole and cap including drain plug.
- (b) HT Off load tap changing gear with tapping switches indicator, handle and locking device.
- (c) In addition to (b) above cover of the transformer be provided with air release plug to enable the trapped air inside to be released if any.
- (d) Rating and terminals marking plates.
- (e) Lifting lugs.
- (f) Two earthing terminals for body earthing and one additional for neutral.
- (g) Drain valve with plug.
- (h) Thermometer pocket including thermometer.
- (j) Four flat rollers.
- (k) Explosion vent
- (l) Silica gel dehydrating breather with silica gel.
- (m) Top and bottom filter valve for oil and plug.
- (n) Any other fittings required and recommended by the manufacturer.
- (o) Oil level gauge indication maximum and minimum oil level.
- (p) Cooling radiator.

5.32.1 **TESTING:-** The contractor shall produce manufacturer's test certificate to GE in respect of routing test enumerated in relevant IS. Before bringing transformer site for installation, the transformer shall be factory tested by representative of accepting officer. After

PARTICULAR SPECIFICATIONS (Contd...)

satisfactory factory inspection only transformers shall be brought to site for installation and before commissioning as per clause 19.97.8 of MES Schedule Part I by a representative by the Accepting Officer in presence of Engr-In-Charge and contractor. The contractor shall at his own expense provide all facilities for testing including equipment.

- 5.32.2 **Platform for Transformer:-** Platform for transformer of size as mentioned in Sch 'A' shall be provided all as shown in drawing CEPZ/C-TD/002/13 sheets 4/5 and as specified in Schedule 'A' with following specification:-

(a)	Excavation and Earth Work	In any type of soil including filling in and well ramming in layers not exceeding 25cm including watering and disposing surplus soil to distance not exceeding 50 meter all as directed by Engineer-In-Charge.
(b)	PCC in foundation	PCC (1:5:10) type E-2 (using 40mm graded crushed stone aggregates)
(c)	PCC in other situations	PCC (1:2:4) type B-1 (using 20mm graded crushed stone aggregates)
(d)	PCC in floor	100mm thick PCC (1:2:4) (using 20mm graded crushed stone aggregates) finished fair using extra cement.
(e)	Masonry Work in platform and steps	Brick masonry in cement mortar (1:4)
(f)	Steel and iron work for steel gate	All steel and iron work shall be of Fe-410-Q grade.
(g)	Expanded metal	XPM wherever shown in drawing shall be of weight not less than 4Kg/Sqm.
(h)	Plastering	All surfaces of walls shall be plastered with 12mm thick in cement mortar (1:4)
(j)	Finishes	(i) All plastered surfaces shall be finished with Two coats of cement base paint (ii) All steel surfaces shall be painted with two coats of synthetic enamel paint (black) over a coat of primer.
(k)	For workmanship of different trades, refer specifications here-in-before, MES schedule and all as directed by Engineer-In-Charge.	

5.33 **Excavation**

- (a) Excavation in trenches for cable sand laying of cables in trenches shall be carried out all as specified in clause 19.74 to 19.76 of SSR Part-I.
- (b) Measurement of excavation shall be as per authorised width as given in section 3, clause 3.2.3 para (a), (b) and (c) on pages 17 & 18 of MES Schedule (Part-II).
- (c) Please refer clauses on excavation hereinbefore.

5.33.1 **Sand cushioning**

Sand cushioning to UG cable shall be carried out as specified in Sch 'A' and all as described in clause 19.75 of MES Schedule.

PARTICULAR SPECIFICATIONS (Contd...)**5.33.2 Cable protection**

Brick cover as specified in relevant item of Sch 'A' shall be used in cable protection, all as specified in relevant clauses of SSR Part-I.

5.33.3 Protection of existing work

(a) All pipes, water mains, cables etc., met within the course of excavation shall be carefully protected and supported without extra cost to the Government.

(b) The rates quoted by the contractor for various items of relevant parts of Schedule 'A' shall be deemed to include for all the contingencies referred above. No claim whatsoever will be entertained by the department on this account.

5.33.4 Cable laying and record

The following essential data shall be furnished by the contractor as cable record of all the buried cable installation:-

- (a) Size, type and make of cable.
- (b) Location of cable in relation to bench marks or any other permanent structure.
- (c) Cross-section showing where cables are laid in pipes or trenches giving their sizes, type and depth.
- (d) Position and type of all joints.
- (e) Position and depth of all pipes, ducts to which it met and obstructions to the cable run.
- (f) Record of accurate lengths from joints to joint and phase sequence between joints to joints to each cable run.
- (g) The contractor shall provide LT cable metal tags indicating sizes, each run joints, length of cable between sub lead centers, so that at any spot each cable can be identified easily.
- (h) While laying LT cable under the roads, paths etc, exact depth at which the cables are to be laid shall be as per SSR and as directed by the Engineer-in-Charge.
- (j) Cable shall not be bent to small radius while laying in trenches/ducts. The minimum safe bending radius shall be taken as 12 D, where 'D' indicates dia of cable.
- (k) Before laying the cable, the trenches shall be provided with a layer of sand to the thickness as directed by Engineer-in-Charge, for the purpose of cushioning. Cable ends with exposed ends shall be provided with cable sockets. Sand cushioning for protection of underground cable in trenches shall be done as described in clause 19.75 of MES Schedule.
- (l) All jointing of cables in joint boxes, etc., shall be done strictly as per manufacturer's instructions. The joints shall conform the relevant IS. Each jointing will be inspected and passed by Engineer-in-Charge. Random checks shall be exercised by GE/AGE (I) also and the findings recorded. The PVC cable shall be terminated through a gland, made of suitable sizes. Before making joints in cables near the proposed building sufficient loops shall be provided for further maintenance.

5.33.5 Testing of underground cables

During and after laying of cables testing shall be done as specified in clause 19.93 to 19.96 of SSR Part-I. The testing shall be carried out by the contractor in presence of Engineer-in-Charge; recorded and signed by both. For cable laying, jointing

PARTICULAR SPECIFICATIONS (Contd...)

and testing, the relevant clause in pages 19.19 to 19.23 of SSR Part-I (2009) shall also be kept in view. The rates quoted by the contractor for relevant items of Schedule 'A' shall be deemed to include for the testing.

5.34 **Dismantling/Demolition**

5.34.1 Dismantling/demolition wherever specified in BOQ shall be carried out carefully to avoid any damage to nearby/connected structure items. In case, any damage occurs during process to newly/connected structure & other items due to negligence of the contractor, the same shall be made good by the contractor to match with existing specifications at his own expense.

5.34.2 For dismantling/demolition refer clauses 21.1 to 21.9 of MES Standard Schedule of rates 2009 (Part-I specification).

5.34.3 **PURCHASE VOUCHERS** : Original purchase vouchers for the following materials shall be provided by the contractor before claiming any payment against them:-

- | | | |
|--|---|----------------------|
| (a) GI Tubing | (b) LT/HT Cables | (c) Earthing plates. |
| (d) Oil level indicating glass | (e) cork sheet gasket | |
| (f) Silica Gel breather assembly | (g) Numerical over current/earth fault protection | |
| (h)Transformer Oil | (j) Cable jointing Kit. | (k) Transformer |
| (m) Voltage/Ampere/Power factor/ digital meter | | (n) Air break switch |
| (p) ACSR Conductor | (q) Lightning arresters | |
| (r)Disc/Pin type insulators | (s) Off Load Changer | (t)Relays |
| (u) Battery | (v) Gasket set | |

Signature of the Contractor
Dated : _____

DCWE(C)
for Accepting Officer

PARTICULAR SPECIFICATIONS (Contd...)**Appendix 'B'****CEMENT SUPPLY & ACCEPTANCE REGISTER**

1. CA No & Name of Work:
2. Control No*.
3. Name of Manufacturer/Brand Name/Gde 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/Engg college)
7. Details of physical & chemical properties :-

17. Details of physical & chemical properties:																		
	Physical Requirements (As per IS-4031)								Chemical Requirements (As per IS 4032)									
	Specific surface area (M ² /Kg)	Soundness by LeChatellar	Soundness by Auto Clave	Initial setting Time(Minutes)	Final Setting Time (Minutes)	Compressive Strengths (Mpa)			Temp during testing °C	Standard	Lime Saturation Factor (Ratio)	Alumina iron Ratio (Ratio)	Insoluble Residue (%)	Magnesium (%)	Sulphuric Anhydride (%)	Loss on ignition(%)	Alkalies(%)	Chlorides (%)
						03 Days	07 Days	28 Days										
As per relevant IS																		
As per Manufacturer's test certificate																		
As per random test certificate																		

Remarks with signaturesAccepted/RejectedContractor

Junior Engineer(Civil/E&M)
Garrison Engineer

Engineer-in-ChargeRemarks of BOO/Inspecting Officer/CWE

PARTICULAR SPECIFICATIONS (Contd...)**LIST OF MAKES/MANUFACTURERS/PRODUCERS****APPENDIX 'C'****1. Synthetic Enamel Paint:-**

- | | | |
|----------------------------|---------------------------------|------------------------|
| a) Luxol Hi Gloss [Berger] | b) Borolac [Jenson & Nicholson] | |
| c) Nerolac [Nerolac] | d) Apcolite [Asian] | e) Superlac [Shalimar] |
| f) Dulux Gloss (Ici Paint) | | |

2. GI Pipes/ MS Pipes(ISI Marked):-

- | | | |
|------------------|----------|--------|
| a) Jindal | b) TATA | c) BST |
| d) Prakash Tubes | e) Oswal | |

3. TRANSFORMERS**a) UPTO AND INCLUDING 500 KVA CAPACITY**

- | | | |
|---------------------|--------------------------------------|-------------------------------------|
| i) Crompton Greaves | ii) Andrew Yule | iii) Schneider |
| iv) Bharat Bijlee | v) Kotsons | vi) Alstom |
| vii) ITE Gurugram | viii) Jay Bee Industries
Bathinda | ix) Jay Bee Industries
Panchkula |

4. Cable Joint (Epoxy/ Heat Shrinkable/ Cold Shrinkable):-

- | | | |
|------------|----------|-------|
| a) M Seal | b) Birla | c) 3M |
| d) Raychem | | |

5. MCCB:-

- | | | |
|--------------|-------------|---------------|
| a) Hager | b) Siemens | c) L&T |
| d) Schneider | e) Legrand | f) Indo Asian |
| g) Havells | h) Standard | |

6. Change Over Switches, Switch Fuse :-

- | | | |
|--------------|---------------|------------|
| a) Siemens | b) ABB | c) L&T |
| d) Schneider | e) Indo Asian | f) Havells |
| g) Standard | | |

7. Steel Tubular Swaged Poles:-

- | | |
|---|---|
| a) National Tubing Co Kanpur | b) Bharat Conduits & Steel works,
Kanpur |
| c) C&S Electric | d) M/S Advance tubes, Jammu |
| e) M/S Aar Gee Industries Jammu | f) M/S Electro Steel(India), Damtal |
| g) M/S Basantar Foundary & Fabrication, Samba | |

8. Air Break switch Gang operated (GOD):-

- | | | |
|-----------|---------------|----------|
| a) Pactil | b) BHEL | c) Oblum |
| d) ABB | e) Indo Asian | |

9. Lightening Arrestors:-

- | | | |
|---------------------|--------------|----------|
| a) Crompton Greaves | b) BHEL | c) Oblum |
| d) Pactil | e) Schnieder | |

PARTICULAR SPECIFICATIONS (Contd...)**10. Overhead Conductors (ACSR Conductor):-**

- | | | |
|----------|--------|-------------|
| a) Alind | b) ICC | c) Jaipuria |
| d) NICCO | | |

11. Insulators/Danger Notice Plate/Stay Assembly:-

- | | | |
|-------------------------|-------------|-----------------------|
| a) Hitkari | b) Jaishree | c) CJI |
| d) Rashtriya Electrical | e) Jaipuria | f) Southern Insulator |

12. Single Phasing Preventor/Starters/Contactors/Thermal Over load relay

- | | | |
|--------------|-----------------|--------|
| a) L & T | b) Siemens | c) ABB |
| d) Schneider | e) C&S Electric | |
| g) AE | | |

13. Ammeter/Voltmeter/Frequency Meter (Analog Type)

- | | | |
|--------------|------------|-----------------|
| a) AE | b) Secure | c) L&T (RISHAB) |
| d) Schneider | e) Legrand | f) Hager |

14. Ammeter/Voltmeter/Frequency Meter (Electronic/Digital Type)

- | | | |
|-----------|------------|-----------------|
| a) Secure | b) Ducati | c) L&T (RISHAB) |
| d) Raas | e) Concord | f) C&S Electric |
| g) Mecor | | |

15. Relays

- | | | |
|--------------|--------|------------|
| a) L & T | b) ABB | c) Siemens |
| d) Schnieder | | |

16. LT Capacitor Banks

- | | | |
|-----------|---------|--------------|
| a) L&T | b) ABB | c) Siemens |
| d) Alstom | e) BHEL | f) Schnieder |

17. Indicating lamp (LED Type)

- | | | |
|-----------------|--------------|------------|
| a) L & T | b) Schneider | c) Siemens |
| d) C&S Electric | | |

18. LEAD ACID BATTERY

- | | | |
|----------|-------------|----------|
| a) Exide | b) Standard | c) AMRON |
|----------|-------------|----------|

19. LT Cables, 1100 Volts, XLPE:-

- | | | |
|---------------------------|--|------------|
| a) KEI Industries Pvt Ltd | b) Finolex | c) RPG |
| d) Universal Cables | e) M/S Vishwa Power & Infrastructure Pvt Ltd | f) Havells |
| g) SCI Cables | | |

20. XLPE HT Cable:-

- | | | |
|---------------------------|--|------------|
| a) Asian Cables | b) Universal Cables | c) Finolex |
| d) KEI Industries Pvt Ltd | e) M/S Vishwa Power & Infrastructure Pvt Ltd | f) Havells |

PARTICULAR SPECIFICATIONS (Contd...)**21. HT Cable Joint, Heat Shrinkable/ Cold Shrinkable/ Push On type :-**

- | | | |
|------------|--|-------|
| a) M-Seal | b) Birla | c) 3M |
| d) Raychem | e) M/S Vishwa Power & Infrastructure Pvt Ltd | |

22. Voltage Stabilizer upto 25 KVA:-

- | | | |
|------------|----------|----------------|
| a) AE | b) APLAB | c) Andrew Yule |
| d) V-Guard | e) IECO | |

23. Voltage Stabilizer above 25 KVA (Servo controlled) :-

- | | | |
|------------|----------|----------------|
| a) AE | b) APLAB | c) Andrew Yule |
| d) V-Guard | e) IECO | |

24. LT Panels/ APFC Panels/ AC Control Panels/ Pump House Panels

- | | | |
|----------------------------|------------|---------------|
| a) Siemens | b) L&T | c) ABB |
| d) SCHNIEDER | e) Legrand | f) INDO ASIAN |
| g) M/s Shalabh (India) Ltd | h) HPL | j) DVEPL |

25. HT Aerial Bunched Cable(ABC) XLPE Cable

- | | | |
|---------------------------|--------------|------------------|
| a) Havells | b) Paramount | c) Diamond cable |
| d) KEI Industries Pvt Ltd | | |

26. Transformer oil

- | | | |
|-------------------------|--------------|--------------|
| a) Savita | b) Power oil | c) Powerlink |
| d) M&I Material (Midel) | | |

27. All other materials

Make and sample shall be as approved by GE

Notes :

1. Contractor will supply the material only after obtaining the written approval from GE regarding use of specific make of items and will supply the material at appropriate time as and when required by the GE.

2. To ensure genuineness of material, the contractor will place order only on manufacture or authorised dealer only and the Engineer-in-Charge will receive the material after verifying the delivery challan of the supplier and after satisfying the genuineness of material.

Signature of the Contractor
Dated : _____

DCWE(C)
for Accepting Officer

GENERAL CONDITIONS OF CONTRACTS (IAFW-2249 1989 PRINT)
FOR LUMP SUM CONTRACTS (IAFW-2159)/MEASUREMENT CONTRACTS
(IAFW 1779 & 1779A)

1. A copy of the General Conditions of Contracts (IAFW-2249 1989 Print) with errata and amendments has been supplied to 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.

2. It is hereby further agreed and declared by me/us that the GENERAL CONDITIONS OF CONTRACTS (IAFW-2249-1989 PRINT) including condition 70 thereof pertaining to settlement of disputes by arbitration containing 33 pages with errata 1 to 20 from Srl Page No. 73 to 105 and amendment No 1 to 48 containing 28 pages from Srl Page No. 106 to 133 form part of these tender documents.

Signature of Contractor

DCWE(C)

Dated : _____

for Accepting Officer

SCHEDULE OF MINIMUM FARE WAGES

1. It is hereby agreed that schedule of minimum fare wages (SMFW) as published vide Government of India Notification dated 10 Mar 1992 (Revised upto date) comprising 10 pages, form part of this tender documents.
2. My/Our signature hereunder amounts to my/our having read and understood the provision contained therein and I/We agree that I / We shall abide by the same and that aforesaid documents form part of this tender.

NOTE: *“Schedule of Minimum Fare Wages” referred to above is available for reference in any MES Office under this HQ.*

Signature of Contractor

Dated : _____

DCWE(C)

for Accepting Officer