MILITARY ENGINEER SERVICES EASTERN COMMAND AGE (I) ZAKHAMA

REPAIR/REPLACEMENT OF CORRODED GI PIPE LINE AND OTHER ALLIED WORKS AT ZONE (B' AT CHAKBAMA MILITARY STATION UNDER AGE (I) ZAKHAMA INDEX

Ser No	Description	Page No
1	Contents Sheet	01
2.	Forwarding letter including Instructions to tenderers	02 to 05
3.	Notice of tender IAFW-2162 including Appx 'A' to Notice of Tender and amendments thereto.	06 to 10
4.	Item rate tender and contract for works required, IAFW-1779A (Revised 1955) including BOQ.	11 to 20
5.	General condition of the contracts (IAFW-2249) (1989 Print) including errata/amendments to General Condition of contract (IAFW-2249 – 1989 prints)	21 to 68
6.	Schedule of minimum wages	69
7.	Special Conditions	70 to 75
8.	Particular Specifications including list of Makes/Manufacturers	76 to 81
9.	Errata/amendments to tender documents	
10.	Relevant correspondences	
11.	Acceptance letter	

Encls : (Drawings Nil Sheets)	Total Pages ————————————————————————————————————		
SIGNATURE OF CONTRACTOR Dated	AGE (I) ZAKHAMA ACCEPTING OFFICER		

IN LIEU OF IAFW-1779A (REVISED 1955)

(To be read in conjunction with General Conditions of contracts IAFW-2249 (1989 print)

MILITARY ENGINEER SERVICES

	AGE (I) Zakhama C/o 792 FPO PIN-900792 C/O 99 APO
3315 /10/ E8	15 Oct 2024
M/S	

REPAIR/REPLACEMENT OF CORRODED GI PIPE LINE AND OTHER ALLIED WORKS AT ZONE 'B' AT CHAKBAMA MILITARY STATION UNDER AGE (I) ZAKHAMA

Dear Sir,

- 1. Tender documents in respect of above work are uploaded on the site www.defproc.gov.in. The tender is on single stage two cover e-tending system The content of Cover I & Cover II are specified in NOTICE OF TENDER.
- 2. Bids will be received online by ACCEPTING OFFICER upto the date and time mentioned in the NOTICE INVITING TENDER (NIT)/ www.defproc.gov.in. 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 tenderes/ bidders or their authorised representatives, who have uploaded their quotation bid and who wish to be present at the time of opening the bids.
- 4. Your attention is also drawn to instruction on filling and submission of tender attached herewith. You may forward your points on tender documents and / or depute your technical representative for discussion on tender /drawings and to clarify doubts, if any, on or before bid submission start date. You are requested not to write piece meal points and forward your points duly consolidated before 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** alongwith EARNEST MONEY DEPOSIT (EMD) and tender fee on e-procument portal and submit the physical documents in the office of **AGE (I) Zakhama** within time limit specified in **NIT**. Inadequacy/ deficiency of documents shall make the bid liable for rejection resulting in disqualification for opening of finance bid.
- 6. (a) Contractor having not executed standing security bond and standing security deposit in any MES formation shall upload scanned copy EARNEST MONEY DEPOSIT (EMD) mentioned in Notice of Tender and shall ensure receipt of hard copy of EMD in the office of tender issuing authority before date & time fixed for this purpose. In case of failure to abide by any of these two requirements, the finance bid will not be opened.
- (b) The lowest contractor would be required to deposit **PERFORMANCE SECURITY** with 28 days of receipt of letter of acceptance as per condition of 19 of IAFW-2249.
- 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 **AGE (I) Zakhama** before date & time fixed for this purpose.

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

11. PERFORMANCE SECURITY DEPOSIT

After acceptance of the Tender, the contractor will be required to lodge with the Accepting Officer PERFORMANCE SECURITY DEPOSIT @ 5% of contract amount. The amount is required to be lodged within 28 (Twenty eight) days of the receipt by the contractor of notification of acceptance of tender/bid, failing which action as stipulated in Condition 19 of GCC shall be taken.

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

	Yours faithfully,
SIGNATURE OF CONTRACTOR	AGE (I) ZAKHAMA ACCEPTING OFFICER

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER

1. **EARNEST MONEY DEPOSIT (EMD)**

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

- (a) Deposit at Call Receipt from a Scheduled Bank in favour of AGE (I) Zakhama.
- (b) Receipted Treasury Challan, the amount being credited to the Revenue Deposit of AGE (I) Zakhama.

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 **AGE (I) Zakhama.**

NOTES: Earnest Money Deposit (EMD) in the form of Cheque/Bank Guarantee etc will not be accepted. NON-SUBMISSION OF EARNEST MONEY DEPOSIT (EMD) (scanned copy 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:

The bidder whose bid is finally accepted shall submit <u>PERFORMANCE SECURITY</u> as per condition 19 of IAFW-2249 within the stipulated period failing which action as per provisions given in condition 19 shall be taken. The rate of Performance Security amount shall be read 5% as stated Condition 19.1 of IAFW-2249 subject to no outstanding recoveries against the contractor and the contractor does not intend to abandon the work after entertaining the relief. A certificate to this effect shall be kept on record.

- 3. All contractors enlisted with any formation in MES who have deposited standing security deposit and have executed standing security bond fulfilling the eligibility criteria can participate in tendering without depositing EMD.
- 4. EMD submitted by all un-successful bidder shall be released immediately after acceptance of lowest bid. EMD of lowest bidder (in case in applicable) shall only be released after recipt of performance security.

5. GENERAL INSTRUCTIONS FOR COMPLIANCE

- 5.1 The bids received only in the electronic form will be considered. All bids shall be submitted on 'defproc.gov.in' portal. Documents should be scanned and forwarded in 'pdf' form, 'jpg' form and 'xls' form as indicated.
- 5.2 Bids shall be uploaded on '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.
- 5.3 Bid should be DIGITALLY signed using valid DSC. All pages of tender documents, corrections/ alterations shall be signed/ initialed by the lowest bidder after acceptance.
- 5.4 Drawings, if issued in physical form, must be returned duly initialed by the tenderer/ bidder in separate envelope indicating this name and address.
- 5.5 The tender shall be signed, dated and witnessed at all places provided for in the documents after acceptance. All corrections shall be initialed. The Contractor shall initial every page of tender and shall sign all drawing forming part of the tender. Any tender/ bid, which proposes alterations to any of the conditions whatsoever, is liable to be rejected.
- 5.6 In the technical bid, a scanned copy of Power of Attorney in favour of the person uploading the bid using his/ her DSC shall be uploaded. In case the digital signatory himself is the sole proprietor, scanned copy of an affidavit on stamp paper of appropriate value to this effect stating that he has authority to bind the firm in all matters pertaining to contract including the Arbitration Clause, shall be attached in 'pdf' form. In case of partnership concern or a limited company, digital signatory of the bid/ tender shall ensure that he is competent to bind the contractor (through partnership deed, general power of attorney or Memorandum and Articles of Association of the Company) in all the matters pertaining to the contracts with Union of India including arbitration clause. A scanned copy of the documents confirming of such authority shall be attached with the tender/ bid in '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 Partner(s) or in accordance with constitution of the company in case of company, stating that he has authority to bind such other person of the firm or the Company, as the case may be, in all matters pertaining to the contract including the Arbitration Clause.

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (Contd...)

- 5.7 Even in case of Firms or Companies which have already given Power of Attorney to an individual authorizing him to sign tender in pursuance of which bids area 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.
- 5.8 Hard copies of all above documents should be sent by the contractor to the Tender issuing authority well in advance to be received before the date & time fixed for the same.
- 5.9 Bid (Cover 1 & 2) shall be uploaded online well in time.
- 5.10 The contractor shall employ Indian Nationals after verifying their antecedents end loyalty. Attention is also drawn to special condition 3 referred hereinafter and also conditions 24 & 25 of IAFW-2249 (General Conditions of Contracts).
- 5.11 Tenderers/ bidders who uploaded their priced tenders/ bids and are desirous of being present at eh time of opening of the tenders/ bids, may do so at the appointed time.
- 5.12 The tenderers/ bidder shall quote his rate on the BOQ file only. No alteration to the format will be accepted, else the bid will be disqualified and summarily rejected.
- 5.13 In case the tenderer/ bidder have to revise / modify the rates quoted in the BOQ (excel sheet) he can do so only in the BOQ, through defproc.gov.in site only before the bid closing time and date.

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

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

7. CPM (Critical Path Method)

- 7.1 The project planning for work covered in the scope of tender is based on CPM.
- 7.2 The tenderer/ bidder is expected to be fully conversant with the CPM technique and employ technical staff who can use the technique in sufficient details. Sufficient books and other literature on the subject are widely available in the market which the tenderer/ bidder may make use of.
- 7.3 The tenderer's/bidder's attention is drawn to special condition of the tender regarding preparation of the detailed network analysis and time schedules as 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 insufficiency and will affect his class of enlistment and future prospects for receiving tenders for the works.
- 7.4 Department may issue amendments/ errata in form of CORRIGENDUM to tender/ revised BOQ to the tender documents. The tenderer/ bidder is requested to read the tender documents in conjunction with all the errata/ amendments/ corrigendum, if any, issued by the department.
- 8. These instructions shall form part of the contract documents.

SIGNATURE OF CONTRACTOR DATED:

AGE (I) ZAKHAMA ACCEPTING OFFICER

IN LIEU OF IAFW-1779A (REVISED 1955)

(To be read in conjunction with General Conditions of contracts IAFW-2249 (1989 print)

MILITARY ENGINEER SERVICES

AGE (I) Zakhama C/o 792 FPO PIN-900792 C/O 99 APO

8315 / 10 / E8 15 Oct 2024

REPAIR/REPLACEMENT OF CORRODED GI PIPE LINE AND OTHER ALLIED WORKS AT ZONE 'B' AT CHAKBAMA MILITARY STATION UNDER AGE (I) ZAKHAMA

1. BOQ i		is/are hereby authorized to tender for the above work. The v.in site (single stage two cover system) as shown on website.
2. permit		s tender should be online and no offline correspondence is
THE F	PRESIDENT OF INDIA DOES NOT BIND	O HIMSELF TO ACCEPT THE LOWEST OR ANY TENDER
		SIGNATURE OF OFFICER ISSUING TENDER
		APPOINTMENT : AGE (I) ZAKHAMA
		AGE (I) ZAKHAMA
		Dated: 15 Oct 2024
SIGN	ATURE OF CONTRACTOR	
DATE	D :	

SCHEDULE 'A' (IAFW-1779-A REVISED 1955) (LIST OF WORKS AND PRICES)

NAME OF WORK:

REPAIR/REPLACEMENT OF CORRODED GI PIPE LINE AND OTHER ALLIED
WORKS AT ZONE 'B' AT CHAKBAMA MILITARY STATION UNDER AGE (I)

ZAKHAMA

(A) NOTES (GENERAL) APPLICABLE TO ALL SECTIONS:

- 1. The quantities shown in column 3 are approximate and are inserted as a guide only. However, these shall not be varied beyond the limits laid down in condition 7 of IAFW-2249 General Condition of contracts.
- 2. Tenderer is to quote his unit rates under respective column of BOQ.
- 3. The rates shall be quoted in figure only. Software system will automatically convert the same in words and total will appear automatecally base on the rate inserted by the bidder/tenderer.
- 4. <u>SCHEDULE OF CREDIT</u>: Total amount in Column 7 is not firm but will be treated as the "Contract Sum" referred to in IAFW-2249. Tenderer has to visit the BOQ pages of tender for quoting the rates of each items of the schedules. Total amount of schedule of credit has been catered towards Sch of credit for which details have been made in a separate schedule in the 'PDF' document and tenderer shall study the same before quoting. The amount of schedule of credit shall be deducted from the Total amount of BOQ under Col 7. Contract sum shall be arrived accordingly to arrived lowest tenderer (L-1). Contractors are requested to take note of this while quoting for items contained in BOQ (Cover No 2). No cognizance on account of any variation shall be entertained at a later date.
- 5. Total amount under column 7 is not firm but will be treated as "CONTRACT SUM" or all the purpose as referred to in IAFW-2249.
- 6. <u>UNIT RATE</u>: The tenderer shall calculate his own details and insert unit rates in respective Column of BOQ against each item of Schedule 'A'. It is an express condition of this contract that the rates quoted by the tenderer in the tender for various items shall be deemed to include for the entire and final completion of the items of work in accordance with provision of the tender. Government shall not entertain any claim whatsoever on account of inaccuracies/misunderstanding if any in the aforesaid rates.
- 7. Tenderers shall be deemed to include in his unit rate for each item for the provision of all materials, labour, operations, tools/plants as required and other requirements as detailed in the Particular Specifications irrespective of whether these appear as specific item or mentioned in the description of items in Schedule 'A' or not and the tenderer shall not be paid any extra for the same.
- 8. The under mentioned remarks shall be deemed to have been against each item of BOQ:-
 - (a) Refer list of drawing.
 - (b) Refer note No 09 of Schedule 'A' Notes.
 - (c) Refer notes to Schedule 'A'.
- 9. **PERIOD OF COMPLETION**: Total work under this contract shall be completed within **06 (Six) Months** from the date of handing over of site.
- 10. Unless otherwise specified method of measurement of various items of work shall be as stipulated in MES Standard Schedule of Rates (Part I 2009 and Part II 2020).
- 11. The rates quoted by the tenderer shall be deemed to include any minor details/items of work and/or construction which are obviously and fairly intended and which may not have been included in these documents but which are essential for the execution and entire completion of the work and decision of the accepting officer on this account shall be final, conclusive and binding.
- 12. "TAXES, DUTIES & LEVIES ETC." :-
- 12.1 The Rates quoted by the tenderer shall be inclusive of all type taxes, statutory levies/duties, such as GST, duties, royalties, Octroi, and other levies payable under respective statutes as applicable on the date of receipt of tender. 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' (IAFW-1779-A REVISED 1955) (LIST_OF WORKS AND PRICES)

- 12.2. No increase/decrease in any taxes/duties, statutory or otherwise after submission of tender and during the execution of the works shall be adjusted except as provided in special condition relevant clause herein after.
- 12.3 Cost of Testing including Transportation of Materials or Equipments or Items, provision of all facilities for Testing in accordance with Specifications and/or shall be borne by the Contractor unless otherwise mentioned.
- 13 SAFETY MEASURES, PRECAUTIONS, RISKS ETC.
- 13.1 The work shall be carried out with utmost care to ensure that no damage to Existing/Adjoining work is done failing which the damage, if any done shall be rectified by the Contractor to match with the existing/Adjoining Work to the entire satisfaction of Engineer-in-Charge under Contractor's own arrangement and at his own expenses.
- 13.2 Suitable Tools, Plants, Equipments, Machanism, etc, as considered necessary shall be adopted during execution of the work. The Contractor shall take all Precautions, Safety Measures etc, to avoid any Damage, Miss-happening, Accident, etc to the Workmen engaged by him to carryout the work. The UNIT RATES quoted by Contractor shall be deemed to have included the Element of adopting Safety Measures, Precautions and also the Risks etc involved in work and nothing EXTRA shall be admissible on this account.

14. METHOD OF MEASUREMENT.

- 14.1 The method of Measurement to be adopted in the Contract shall be as laid down in MES STANDARD SCHEDULE OF RATES PART-I & II. IS 1200 and other relevant BIS standard. The General Rules, Special Conditions, Preambles and other provisions in MES STANDARD SCHEDULE OF RATES PART-I & II and relevant BIS standard shall be deemed to apply to the work under this Contract unless otherwise mentioned in the Tender documents. However, where the UNITS of work given in Column 4 against Items of Schedule 'A' are at variance with that mentioned against respective items in MES STANDARD SCHEDULE OF RATES, the Measurements of work against such items of Schedule 'A' shall be done as per the Units given in Schedule 'A'.
- 15. Unless otherwise specifically mentioned, unit rate of Each item of work is inclusive of all 'Material &Labour' or 'Supply & Fixing' or 'Supply & Laying' including Tools and Plants. Installing, Commissioning and Testing complete as required for entire Completion of works.
- 16. The tenderer's quotation shall include all statutory levies/duties, construction labour welfare tax, including GST on works contract as applicable. It may be noted that conditional tender regarding GST/CESSES ON WORKS CONTRACTS and or any other account will not be considered and shall be liable to be REJECTED.
- 17. Works under this contract lies in 'RESTRICTED' Area.

Signature of Contractor	AGE (I) ZAKHAMA
Dated:	ACCEPTING OFFICER

SCHEDULE OF CREDIT

SI No	Desscription of items	Unit	Appox Quantity	Rate of recovery	Amount
1	2	3	4	5	6*
1	Old u/s GI Pipe 80 mm bore	RM	48.00	72.00	3456.00
2	Old u/s GI Pipe 50 mm bore	RM	500.00	40.00	20000.00
3	Old u/s GI Pipe 40 mm bore	RM	310.00	35.00	10850.00
4	Old u/s GI Pipe 25 mm bore	RM	330.00	25.00	8250.00
5	Old u/s GI Pipe 20 mm bore	RM	190.00	20.00	3800.00
6	Old U/s gate valve any type 50 mm bore	Each	15.00	180.00	2700.00
7	Old U/s gate valve any type 40 mm bore	RM	25.00	140.00	3500.00
8	Old U/s gate valve any type 25 mm bore	RM	35.00	80.00	2800.00
9	Old U/s gate valve any type 20 mm bore	Each	25.00	10.00	250.00
10	Old U/s MS Sheetof size 40x40x6mm	Each	1.00	2500.00	2500.00
	TOTAL OF SCHEDULE OF CREDIT CARRIED OVER TO SUMMARY ON SERIAL PAGE NO : 18 58,106.00				58,106.00

NOTES:

- The rates under col 5 are fixed by the department, irrespective of quality of old materials obtained from demolition / dismantling/ taking down. No further claim in this respect shall be entertained from the contractor.
- 2. The quantities under col 4 are approximate and shall be measured as per actual quantities from site of work.
- 3. The materials under this schedule are contractor's property. Other materials if any obtained from demolition / dismantling / taking down shall be deposited in MES store yard or disposed off as directed by Engineer- In- Charge. The materials under this schedule shall be removed from site being contractor's property through proper gate pass after approval of the Engineer- In- Charge.

SIGNATURE OF CONTRACTOR	AGE (I) ZAKHAMA
DATED:	ACCEPTING OFFICER

SUMMARY

1	Total amount of Schedule 'A' worked out by the contractor and brought forwarded from serial page No. 16	Rs
2.	Lump sum price worked out by the MES for Credit" as listed in Schedule of Credit on serial Page No. 17	Rs. 58,106.00 (Minus)
	CONTRACT SUM	Rs.

(Rupees	Only)
SIGNATURE OF CONTRACTOR	AGE (I) ZAKHAMA

ACCEPTING OFFICER

DATED : _____

SCHEDULE 'B' ISSUE OF MATERIALS TO CONTRACTOR (SEE CONDITION 10 OF IAFW-2249)

SI No	Particulars			Place of issue (by name)	Remarks
		Unit	Rate		
1	2	3	4	5	6

NIL

SIGNATURE OF CONTRACTOR	JE(QS&C)
DATED :	ACCEPTING OFFICER

SCHEDULE 'C'

HIRED TO THE CONTRACTOR (SEE CONDITION 15, 34 & 35 OF IAFW-2249)

Ser No	Contractor	Particulars	Details MES crew supplied	Hire charges per unit per working day	Stand by charges per unit per off day	Place of issue by name
1	2	3	4	5	6	7

	NIL	
SIGNATURE OF CONTRACTOR DATED:		AGE (I) ZAKHAMA ACCEPTING OFFICER

SCHEDULE 'D'

Ser No	Quantity	Particular	Rate per unit working day	Place of issue by name	Remarks
1	2	3	4	5	6

NIL

SIGNATURE OF CONTRACTOR DATED:	AGE (I) ZAKHAMA ACCEPTING OFFICER

TENDER

THE PRESIDENT OF INDIA

Having examined and perused the following documents:-

- Specifications signed by JE (QS&C).
- 2. Drawings detailed in the list of drawings.
- 3. Schedule 'A', 'B', 'C' & 'D' attached hereto.
- 4. MES Standard Schedule of Rates (Part-I Specifications) -2009 with amendment Nos 1 to 3 and MES Standard Schedule of Rates (Part-II Rates) 2020 with amendment Nos 1 to 122.(here-in-after and in General Conditions of Contract (IAFW-2249) referred to as the, MES Schedule) as applicable to the above said schedule.
- 5. General Conditions of Contracts (IAFW-2249) (1989 Print) together with Amendment Nos.1 to 49, Errata 1 to 20 and Correction slip 1 to 9.
- 6. WATER: Refer conditions 31 of IAFW-2249, General Conditions of contracts. Water will be supplied by MES and recovery shall be made at the rate of **Rs. 3.75 per 1000 rupees worth of work done.**
- 7. Should this tender be accepted, I/WE AGREE:-

*(a)	That the sum of Rs	(Rupees_		
		only) forwarded as	Earnest	Money shall
either	be retained by the Government on accou	nt of as security deposi	t or shall l	be repaid by
the G	overnment on receipt of the full amount of	f Security Deposit within	the time	specified all
as pe	r condition 22 of IAFW-2249.			•

(b) To execute all the works referred to in the said document upon the terms and conditions contained or referred to therein at the item rates contained in the aforesaid Schedule 'A' or all such other rates as may be fixed under the provisions of Conditions 62 of IAFW-2249 and to carry out such deviations as may be ordered vide Condition 7 of IAFW-2249 upto a maximum of **20%** (Twenty percent) and further agree to refer all disputes as required by 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 Sub Division II of institutation of Surveyors (India) recognized by the Government of India to be appointed by the CHIEF ENGINEER SHILLONG ZONE, SPEAD EAGLE FALLS, SHILLONG-11 or in his absence the officer officiating as CHIEF ENGINEER if specifically delegated in writing by CHIEF ENGINEER whose decision shall be final, conclusive and binding.

*to be deleted where not applicable.

Contd.....

TENDER (CONTD)

Signature	in the capacity of _	
duly authorized to sign the tender for and on be	half of	
	(IN BLOCK CAPITAL	<i>.</i>)
Signature of Witness	Postal Address	
And name		
& Address		
	Telephone No	
Email ID:		
Signature of Witness	Postal Address	
And name		
& Address		
	Telephone No	
Email ID:		
	PTANCE	
alteration (s) have be	een made in this documents and as	evidence that these
alteration (s) were made before the execution of th	e Contract Agreement, they have b	peen initialed by the
Contractor and		
The said officer is hereby authorized to sign and in contract.	nitial on my behalf the documents	forming part of this
The above tender is accepted by me on	day of	on behalf
of the President of India at the item rates contained in	the Schedule 'A'.	
Dated thisday of		
	Signature	
	Appointment: AGE(I) Zakham (for and on behalf of the President Control	

GENERAL CONDITIONS OF CONTRACTS (IAFW -2249) (1989 PRINT) FOR ITEM RATE CONTRACTS (IAFW-2159) & MEASUREMENT CONTRACTS (IAFW -1779 AND 1779- A)

- 1. A Copy of the GENERAL CONDITIONS OF CONTRACTS (IAFW-2249) (1989 PRINT) with Errata 1 to 20 and amendment Nos 1 to 49 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 disputes by Arbitration containing 33 pages (**SERIAL PAGE NO 21 to 53**) with errata 1 to 20 and amendment Nos. 1 to 49 (**SERIAL PAGE NO 54 to 68**) form part of these tender documents.
- 3. It is also agreed by me/us that in case of any discrepancies in the interpretation of the contents between English and Hindi version, English will take precedence over Hindi version.

<u>Note</u>:- Copy of Errata Nos. 1 to 20 & Amendment Nos. 1 to 49 to General conditions of contract IAFW-2249 may be seen/obtained in/from any MES office and it shall be deemed that all these Errata/Amendments have been read and understood by the tenderer/bidder.

SIGNATURE OF CONTRACTOR	AGE (I) ZAKHAMA
DATED :	ACCEPTING OFFICER

Note: In case the tenderer is not in possession of any of the documents referred above he should obtain a copy from the office of the AGE(I) Zakhama, P.O: Jakhama, Dist: Kohima, Nagaland - 797005 before submission of his tender.

SCHEDULE OF MINIMUM WAGES / FAIR WAGES

1. It is hereby agreed that the "Schedule of Minimum wages" as published by Govt of India / State Govt / Govt local authorities which is highest and which specifies minimum rates of wages of various categories of work as applicable on the last due date of receipt of this tender shall form part of these tender documents.

- 2. The minimum rates of wages shall consist of all inclusive rates and include also the wages for weekly day of rest.
- 3. My / our signature here-under amount to my / our having signed the aforesaid document forming part of this tender.

SIGNATURE OF CONTRACTOR	AGE (I) ZAKHAMA
DATED :	ACCEPTING OFFICER

SPECIAL CONDITION

1. **GENERAL**

1.1 The following Special Conditions shall be read in conjunction with General Conditions of Contract IAFW-2249 (1989 Print) including amendments and Errata thereto and IAFW-2159 (Revised 1947/IAFW-1779 (Revised 1955) including all amendments and errata thereto. Any provision in these special conditions, if at variance the provision in the above mentioned documents shall take precedence there over.

2. **INSPECTIONS OF SITE**

Refer Paras 12 & 18 of Notice of Tender IAFW-2162 and Condition 4 of IAFW-2249. The tenderer shall be deemed to have satisfied himself before submitting his tender as to the nature of the ground and sub soil (so far as it is practicable), the climate conditions, the form and nature of the site nature of work and the manner of access to the site, the accommodation he may require, in general he shall be deemed to have himself obtained all necessary information on inspection of site as to risk, contingencies and other circumstances which may influence or affect his tender. No extra payments consequent to any mistake and mis-understanding or otherwise on this account will be allowed.

3. AVAILABILITY OF LAND FOR STORAGE OF MATERIALS ACCOMMODATION FOR LABOUR ETC.

Delete the following in Para 1 of Condition 24 of IAFW-2249 General Conditions of Contracts.

"In the event of the areas of land...... allotted to him".

And the following shall be read in conjunction with Condition 24 of IAFW-2249.

"The contractor shall be permitted to store his materials including erecting temporary sheds thereof, temporary workshops and the like at the area of land marked for the purposed, on the site plan/shown by the GE free of rent, if it is on Class A-1 land. For other types of land he shall be charged license fee of Rs.1/- per year or part of year for each and every separate area of land allotted to him". No land shall be allotted to the contractor for construction of huts for accommodation of labour.

4. **CONDITIONS OF WORKING**

- 4.1 The work lies in **RESTRICTED** area. However, the contractor, his agents, employees, work people and vehicle may pass through the unit lines in which case the Engineer-in-Charge shall at his discretion have the right to issue passes to the contractor, his agents, servant works people and vehicles and to control their admission to the site of work, or any part thereof. The contractor shall on demand by the Engineer-in-Charge submit a list of personnel, etc, concerned and shall satisfy the Engineer-in-Charge as to the bonafides of such people. Passes shall be returned at any time on demand by the Engineer-in-Charge and in any cases on completion of work.
- 4.2 The contractor and his agents, employees and work people shall observe all the rules promulgated from time to time by the authority controlling the area in which the work is to be executed viz prohibition of smoking, lighting and fire precautions, search of persons on entry and exit, keeping on specified routes, restricted hours of working etc. Any persons found violation the security rules laid down by the authority, shall be immediately exposed from the area without assigning any reasons whatsoever and the contractor shall have no claim on this account.
- 4.3. No payment shall be admissible for any man-hours lost on this account.

SPECIAL CONDITION (CONTD....)

5. CONTRACTOR'S REPRESENTATIVES AND WORKMEN

Refer Condition 25 of IAFW-2249. The contractor shall employ only Indian Nationals as his representatives, servants and workmen and verify their antecedents and loyalty before employing them for the works. He shall ensure that no person of doubtful antecedents and nationality is, in any way, associated with works. If for reasons of technical collaboration, or other consideration, the employment of any foreign national is unavoidable, the contractor shall furnish full particulars to this effect to the Accepting Officer at the time of submission of his tender.

6. SECURITY OF CLASSIFIED DOCUMENTS

6.1 Contractor's special attention is drawn to Condition 2-A and 3 of IAFW-2249 (General Conditions of Contracts). The contractor shall not communicate any classified information regarding the work either to sub contractors or others without the 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 shall return all documents on completion of the works or earlier on determination of the contract. The contractor shall also alongwith the final bill attach a receipt of his having returned the classified documents as per Condition 3 of IAFW-2249 (General Conditions of Contracts).

7. MINIMUM WAGES PAYABLE

- 7.1 Refer Condition 58 of IAFW-2249. The contractor shall not pay wages lower than minimum wages for labour as fixed by the Government of India/State Government/Union Territory whichever is higher.
- 7.2 The fair wage referred to in Condition 58 of IAFW-2249 will be deemed to be the same as the minimum wages payable as referred to above.
- 7.3 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.

8. CO-OPERATION WITH OTHER AGENCIES AT SITE OF WORK

8.1. The contractor shall permit free access and generally afford facilities and usual convenience to other agencies or departmental workmen to carry out work if any, under separate arrangements. The contractor shall not be allowed any extra payment on this account.

9. **QUARRIES**

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

10. WATER

10.1 Refer condition 31 of IAFW-2249. Water will be supplied by MES at the points marked on site plan @ Rs 3.75 per every Rs 1,000.00 worth of work done. As the water supply by MES is likely to be intermittent, the contractor shall make his own arrangements for storing the water required for the works, labour and workman etc at his own expense.

SPECIAL CONDITION (CONTD....)

The contractor if he so desires, will be allowed to augment the department's water supply by boring wells at his own cost at site(s) approved by the AGE(I). On completion of the work, the contractor shall remove pipe etc installed and make good the site as directed by Engineer-in-Charge without any extra cost to Government. No rebate shall be given for augmentation of water by the contractor and charges for water shall be recovered at the rate mentioned above. The contractor shall, however, ensure that water drawn from such sources is clean and free from all impurities and is suitable for mixing concrete, mortar, washing aggregate and curing of concrete as specified in IS-456.

11. SUPPLY OF ELECTRICITY

- 11.1 In case the contractor desires to buy electricity from MES he shall be charged for the electric energy consumed at Rs. **19.23** per unit.
- 11.2. Electric supply required for the work shall be made available by MES (at the point marked on the layout plan). The main switch and KWH meter's to register the electric energy supplied shall be provided and installed by MES. Contractor shall provide all necessary cables, fittings etc, from the main switch in order to ensure a proper and suitable supply of electricity for the execution of works. All contractor's installation shall conform, to and be strictly in accordance with Indian Electricity Act and Rules, Moreover the layout of cables etc, as proposed by him shall be as per plan approved by the Engineer-in-Charge. Any risk either for materials or personnel will be the contractor's responsibility
- 11.3 MES do not guarantee continuity of supply and no compensation, whatsoever, shall be allowed for supply becoming intermittent or for break down in the system.

12. **SAMPLES OF MATERIALS**

- 12.1 Refer Condition 10 of IAFW-2249.
- The tenderer is advised to inspect samples of the materials, which are displayed in the office of the AGE(I), before submitting his tender. The tenderer shall be deemed to have inspected the samples and satisfied himself as to the nature and quality of materials, he is required to incorporate in the work. Irrespective of whether he has actually inspected them or not. The materials to be incorporated in the work by the contractor shall conform to, or shall be superior in quality to the sample displayed and shall comply with the specification given here-in-after.
- 12.3 The contractor shall not procure materials unless the samples are first got approved by the Asst Garrison Engineer.
- The materials other than those as mentioned in Para 12.2 before to be provided by the contractor for incorporation in the work shall comply with the requirement of the Indian Standard Specifications of the year of publication as specified in MES Schedule Part-I. The contractor may however, at his own discretion provide and incorporate in the works such materials complying with the requirements of any corresponding subsequently amended or revised addition of Indian Standard without any price adjustment.
- 12.5 The following materials shall however have ISI certification marking:-
 - (a) Cement (b) Reinforcement/ Structural steel
 - (c) All types Water Supply Fitting /Fixtures &/ Sanitary Fittings
 - (d) All type of ceramic /non skid /vitrified Granite/ chequered tiles /Marble / Kota stone
 - (e) Distemper/cement base /Acrylic emulsion paint/ Synthetic enameled paint & primer
 - (f) All type light fittings (g) LT/ HT XLPE Cable
 - (h) All other non-perishable materials as decided by AGE(I).

(i)

SPECIAL CONDITION (CONTD....)

13. RECORD OF MATERIALS

- 13.1 The quantity of materials such as paints, water proofing compound, chemicals, for antitermite treatment and the like, as directed by the Engineer-in-Charge (the quantity of which cannot be checked after incorporation in the works) shall be recorded in measurement books 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 work.
- 13.2. Materials brought to site shall be stored as directed by the Engineer-in-Charge and those already recorded in Measurement Book shall be suitably marked for identification.
- 13.3. The contractor shall, produce to the AGE(I), original receipted vouchers/invoices in respect of the supplies of
 - (i) All items for which payment is claimed in RAR as "material lying at site"
 - (ii) Cement (iii) Reinforcement/ Structural steel (iv) Steel Windows/Ventilators (v) PVC Door frame and shutter (vi) ATT (vii) All types Water Supply Fitting /Fixtures &/ Sanitary Fittings (viii) All type pipe & valve /Taps (viii) All type of ceramic /non skid /vitrified Granite/ chequered tiles /Marble / Kota stone (ix) APP membrane & primer (x) Distemper/cement base /Acrylic emulsion paint/ Synthetic enameled paint & primer (xi)Pre-laminated Particle Board/Plywood (xii) CGI Sheets (xiii) All type light fittings (xiv) LT/ HT XLPE Cable (xv) PVC cable/wire for 1100 volt, All electrical fittings/ fixtures(Internal & External) equipment, (xvi) ACB/MCCB/ MCB/DB (xvii) All other non-perishable materials as decided by AGE(I).

Vouchers/invoices so produced and verified shall be stamped by Engineer-in-Charge indicating contract number. The contractor shall ensure that the materials are brought to site, in original sealed containers/packing, bearing manufacturers marking except in the case of the requirement of materials being less than smallest packing.

14. ACCEPTABLE QUALITY OF WORK AND FINISHES.

14.1 The determine the acceptable standard of workmanship one quarter (to be decided by AGE) shall be completed by the contractor well in advance as directed by AGE(I) under close supervision of the Engineer-in-Charge and shall be got approved from AGE(I). The workmanship of various trades and finishes of this quarter shall serve as guiding sample for work in the remaining quarter/buildings.

15. RECORD OF CONSUMPTION OF CEMENT

- The contractor shall maintain a pucca bound register with serially numbered pages with all pages initialed by Engineer-in-Charge against numbering, showing quantities of cement received, used in work and balance at the end of each day. The form of record shall be as approved by Engineer-in-Charge. The register shall be signed daily by representative(s) of MES and the contractor in token of verification of its correctness and will be checked by Engineer-in-Charge, at least once a week and on the days cement is issued to the contractor.
- 15.2. The register shall be kept at site in the safe custody of the contractor's epresentative during the progress of the work and shall on demand be produced for verification to the inspecting officer(s).
- On completion of the work the contractor shall deposit the cement register with the Engineer-in-Charge for record.
- 15.4 The aforesaid provision will however not absolve the contractor from returning the over drawn cement, if any, detected during the course of examination of the final bill/work.

16. **VALIDITY OF TENDER**

16.1 The tender shall remain open for acceptance for a period of 60 (Sixty) days from the due date of its submission.

SPECIAL CONDITION (CONTD....)

17. TIME & PROGRESS CHART

- 17.1 The time and progress chart to be prepared as per Condition 11 of IAFW-2249 (General Conditions of Contracts), shall consists of detailed net work analysis and a time Schedule. The critical path network will be drawn jointly by the GE and contractor soon after acceptance of the tender. The time scheduling of the activities will be done by the contractor so as to finish the within the stipulated time. The contractors are advised to use the facility of computerisation available with any organisation who 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 the GE who will approve it after due scrutiny.
- 17.2 The schedule will be submitted in four copies within two weeks from the date of handing over the site. In case the contractor fails to submit the CMP network diagram, the network prepared by the AGE(I) shall be binding on him.
- During the currency of the work the contractor is expected to adhere to the time 17.3 schedule and this adherence will be part of the 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 AGE(I). These reviews may be undertaken at the discretion of the AGE(I), either as a periodic measure or when the quantum of work ordered on the contractor is substantially changed through deviation orders or otherwise. Any revision of the time schedule as a result of the review will be submitted by the contractor to the AGE(I) within a week for his approval after due scrutiny. The contractor shall adhere to the revised time schedule thereafter. In case of contractor disagreeing to the revised schedule, the same will be referred to the Accepting Officer, whose decision shall be final, conclusive and binding, AGE(I)'s approval to the revised schedule resulting in a completion 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 mentioned in Condition 11 of IAFW-2249 (General Conditions of Contracts) and separately regulated.
- 17.4 The contractor is expected to mobilize and employ sufficient recourses to achieve the detailed schedule within the broad frame work of the accepted methods of working and safety. No additional payment will be made to the contractor for any multiple shift work or other intensive methods contemplated by him in his work schedule, even through th time schedule is approved by the department.

18. REFUND OF PERFORMANCE SECURITY DEPOSIT

18.1 Refer Condition 19 & 68 of IAFW-2249.

19. <u>RE-IMBURSEMENT/REFUND ON VARIATION IN TAXES DIRECTLY RELATED TO CONTRACT VALUE</u>

19.1.1 The rates quoted by the contractor shall be deemed to be inclusive of all taxes /cesses viz GST, duties, Royalties, Octroi and other levies payable under the respective Statutes. No reimbursement/refund for variation in rates of taxes, duties, royalties, Octroi and other levies, and/or imposition/abolition of any new/existing taxes, duties, royalties, octroi & other levies shall be made except as provided in 19.1.5 here-in-below.

SPECIAL CONDITION (CONTD....)

- The taxes which are levied by Govt at certain percentage rates of Contract sum/Amount shall be termed as "taxes directly related to Contract value" such as GST on Works Contracts, Turn Over Tax, Labour Welfare Cess/tax and like but excluding Income Tax. The tendered rates shall be deemed to be inclusive of all "taxes directly related to Contract Value" with existing percentage rates of "taxes directly related to Contract value" with reference to prevailing rates on last due date of receipt of tenders shall be reimbursed to the contractor and any decrease in percentage rates of "taxes directly related to Contract value" with reference to prevailing rates on last due date shall be refunded by the Contractor to the Government /deducted by the Govt. from any payments due to the Contractor. Similarly imposition of the new/existing taxes/ cesses directly related to Contract value after the last due date of 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.
- 19.1.3 The contractor shall, within a reasonable time, of his becoming aware of variation in percentage rates and/or imposition of any further taxes directly related to Contract value, give written notice to the Govt stating that the same is given pursuant to this Special Condition, together with all information relating there to which he may be in a position to supply. The Contractors shall submit the other documentary proof/informations as the AGE(I) may require.
- 19.1.4 The contractor shall, for the purpose of this condition keep such books of account and other documents as are necessary and shall allow inspection of the same by a duly authorized representative of Govt, and shall, further at the request of the AGE(I), furnish, verified in such a manner as the AGE(I) may require, any documents so kept and such other information as the AGE(I) may require.
- 19.1.5 Reimbursement for increase in percentage rates/imposition of "taxes directly related to Contract Value" shall be made only if the Contractor necessarily and 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 AGE(I) may require.
- 20. **DEFECT LIABILITY PERIOD**
- 20.1 Refer Condition 46 of IAFW-2249.
- The defect liability period for the work is Twelve calendar months commencing from the date of completion of work certified by the Garrison Engineer/AGE(I).

21. MINIMUM TOOLS & PLANTS/MACHINERIES/TRANSOPORT

(a).	One Bag Capacity concrete mixer (diesel)	01	Each
(b).	Vibrators (Needle and Plate type)	01	Each
(c)	Pipe cutter	01	Each

SIGNATURE OF THE CONTRACTOR	AGE (I) ZAKHAMA
DATED:	ACCEPTING OFFICER

PARTICULAR SPECIFICATIONS

1.0 **GENERAL REQUIREMENT**

These particular specifications shall be read in conjunction with MES Schedule.

General specifications referred to/mentioned in IAFW-2249 and in other tender documents mean specifications including these provision and preamble given in MES Schedule.

Reference to some paragraphs of MES has been made in these particular specifications but other paragraphs and provisions as applicable are also to be followed e.g., reference to paras pertaining to general workmanship for brick work, joinery, iron and steel work etc. have not been made but provisions therein as required for work are applicable.

Where specifications for any item of work are not given in MES Schedule or in these particular specifications, specifications given in relevant Indian Standard Specifications or mode of practice shall be followed.

Where specifications/provisions given in these particular specifications are at variance with the provisions/specifications given in these particular specifications shall be followed.

2.0 **SCOPE OF WORKS**.

This contract included for full final and entire completion of works described in Schedule 'A' specifications in these particular specifications and/or shown on drawings, if any, forming part the tender documents.

This contract included for full final and entire completion of works described in Schedule 'A' specifications in these particular specifications and/or shown on drawings, if any, forming part the tender documents

The provision of Indian Labour Act shall be applicable to this contract.

3.0 **MATERIALS.**

of

of

All materials to be supplied by the contractor for incorporation in the work shall conform to relevant specifications of any materials needed for incorporation in the work is not contained in any of the contract documents, the specifications of such materials proposed to be incorporated in the work shall be got approved in writing from the GE before their incorporation in work by the contractor without any price adjustment.

As far as practicable all manufactured materials/article other than those manufactured in contractor's workshop at site shall bear IS certification marks. In case, any article not bearing IS certification marks but conforming to a relevant specification is proposed to be incorporated in the work, samples of the same be were approved in wiring rom GE before their incorporation in work. The contractor shall submit sufficient evidence to the GE to show that such articles conform to the relevant specifications and no adjustment shall be made on this account.

Manufactured materials/articles shall be brought at site in original sealed containers, packing bearing manufacturer's marking unless the quantity required in fraction of smallest packing.

Letters conveying approval of samples/materials by GE shall interlia mention the sources of supply, name of manufacturer, trade name/brand (if applicable) and reference to clauses of tender documents containing specification of particular

3.1 MATERIALS OF LOCAL ORIGIN

Bricks size & strength	Fine Sand	Coarse Sand	Stone Aggregate
Old size bricks (locally	Yairipok/Thou	Yairipok/Thouba	Yairipok/Thoubal/Serou/Dhan
available best quality)	bal/Serou/Dha	1/Serou/Dhansiri/	siri/DeopaniDiphu River
	nsiri River	Deopani River	

PARTICULAR SPECIFICATIONS

<u>Note</u>: The above sources are given for guidance only. This does not absolve the contractor from his responsibility of incorporating various materials in the work as per specifications mention in contract. Contractor has to ascertain the availability of material at the source given above. In case of non availability/scarcity of material mentioned at the source above the contractor has to arrange the materials from other sources without any extra cost to the Government. No claim whatsoever shall be entertained by the department on this account at later stage

3.2 Cement.

Ordinary Portland, Portland Pozzolana or Portland Slag cement shall be contractor's supply. In case more than one type of cement are used in the works, a record shall be kept showing location and type of cement used. Different type of cement shall not be mixed together.

The periodically of striking of the form work and curing for works with ordinary Portland cement, shall be as stipulated in IS 456. Howeve, for pozzolana cement and Portland slag cement refer to notes of Schedule 'B'. The contractor's quoted lumpsum shall deem to cater for these provisions and nothing extra shall be admissible on this account.

3.3 Fine Aggregate:-

Fine aggregate for concrete work shall conform to material specifications and gradings within the limits of Grading Zones II to III all as specified in clause 4.4 of MES Schedule

3.4 Coarse Aggregate:-

Coarse aggregates for all cement concrete work shall be graded crushed/broken stone. However rounded shingle may be used for concrete PCC works at contractor's direction without price adjustment except that in case of FLOOR TOPPING i.e finishing and under layer of floors, only crushed/broken aggregate of approved quality shall be used all as specified in clause 4.4 of MES Schedule. Mixture of two types shall however, not be used.

3.5 Grading of Coarse Aggregate:-

Graded_Aggregate of nominal sizes given hereunder, shall be used unless specified otherwise in the specifications here-in-after :-

- (a) Plain or reinforcement cement concrete except in foundation of brick or stone walls/pillars, floors or sub-base to floors.
 - (i) For structural elements of depth/thickness more than and including 100mm: 20mm
 - (ii) For structural elements of depth/thickness less than and including 100mm: 12.5mm

Note:- However in all cases the nominal size of aggregate shall be greater than one fourth the minimum thickness of the member.

(b) Plain cement concrete in Foundation of Brick/Stone Walls Pillars, Floors and Sub Base to floors.

(i) Under 30mm thickness : 12.5mm

(ii) 30 to 50mm thickness : 20mm

(iii) Exceeding 50mm thickness : 40mm

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

PARTICULAR SPECIFICATIONS

4.0 **DEMOLITION AND DISMANTLING**

During demolition or dismantling every precaution shall be taken by the contractor to prevent damage to any adjacent structure which are to be left infact damage caused to structure and fittings due to carelessness, negligence of the contractor shall be made good by him at his own expense. He shall also take preventions if necessary to keep coarse due to nuisance etc. while carrying out demolition/dismantling.

The contractor shall be responsible for safe custody of serviceable materials which shall be reused in the work. The contractor shall return all other dismantled materials to MES store yard at Narangi except items of credit Schedule.

In case of any damage or loss of stores mentioned above while in custody of the contractor the panel rate of recovery @ two time of market rate shall be charged.

5.0 **EXCAVATION AND EARTH WORK**

Excavation and earthwork involved in this contract shall be soft/loose soil to the depth and gradient as required at site and ordered by Engineer-in-Charge.

5.1 **EXCAVATION OVER AREAS**

Excavation in trenches in soil shall be carried out as described in paras 3.13.1 to 3.13.4 & 3.15 of MES Schedule Part-I. Bailing and pumping out of water, if required will be done as described in Para 3.17 of MES Schedule Part-I. No extra payment shall be admissible for the above-mentioned operation in the event of deviation no adjustment shall be made for cost of bailing, pumping and dewatering as specified here-in-before.

5.2 **EXCAVATION IN TRENCHES**

Excavation in trenches in soil shall be carried out as described in paras 3.13.1 to 3.13.4 of MES Schedule Part-I. Bailing and pumping out of water, if required will be done as described in Para 3.17 of MES Schedule Part-I. No extra payment shall be admissible for the above-mentioned operation in the event of deviation no adjustment shall be made for cost of bailing, pumping and dewatering as specified here in before.

5.3 **FILLING IN TRENCHES**

Filling excavated earth in trench shall be carried out as per Para 3.19.1, 3.19.2 and 3.19.3 of MES Schedule Part-I. Earth obtained from excavation and not approved for filling or surplus to the requirement shall be removed to a distance not exceeding 50 meters.

Before filling under trenches/over area the ground shall be clean of all vegetation, roots etc. filling shall be done in layers not exc3eeding 25cm thick each layers spread, leveled, watered and well rammed.

6. CAST IRON PRESSURE PIPES AND FITTINGS:

- (a) Centrifugally cast (Spun) iron pipes shall conform to IS 1536-2001. Spigot and socket pipes shall be of class LA, class A or class B and flanged pipes shall be of class A or class B as mentioned in schedule 'A'. Cast iron fittings for pressure pipes shall conform to IS 1538-1993 and all as specified in clause 18.2.3 of MES Schedule Part-I, 2009.
- (g) All pipes shall be coated internally and externally with composition having tar or otherwise similar base. The coating materials shall have good adherence and shall not scale off.
- (h) The tolerance permissible on weight shall be (+/-) 5 percent and of fittings (+/-) 8 percent Pipes and fittings weighing more than the nominal weight may be accepted without any price adjustment provided they comply in every other respect with the requirement of the relevant

7. **DUCTILE IRON PIPES AND FITTINGS:**

- (a) Refer Clause No. 18.94 of MES Schedule Part-I.
- (b) DI Pipe shall be conforming to IS 8329-2000. In case nothing is mentioned in Sch 'A', class & type of DI pipe shall be provided K-7 and Spigot and socket type I pipe for water supply. The DI pipe shall be used for drinking water supply purpose only and accordingly excise duty(ED) shall be applicable as per GOI notification. When pipe is crossing a road, a minimum cover of 1.0 metre is required.

PARTICULAR SPECIFICATIONS

(c) Fittings and Appliances shall be inspected, before delivery at the site to see whether they bear appropriate certification mark of the Indian Standards Institution or the mark of the testing station of the Authority. All fittings shall be inspected and tested by the manufacturers at their factory and shall comply with the requirements of this code. These shall be tested hydraulically under a pressure equal to twice the maximum permissible working pressure or under such greater pressure as may be specified. The pipes and fittings shall be inspected on site before laying and shall be sounded to disclose cracks. Any defective item shall be clearly marked as rejected and forthwith removed from the site.

(d) After laying and jointing, the main shall be slowly and carefully charged with water, so that all air is expelled from the main by providing a 25mm inlet with a stopcock allowed to stand full of water for few days if time permits, and then tested under pressure. The test pressure shall be the working pressure of pump or the OH Tank as the case may be.

8. **BOLTS, NUTS, WASHERS**:

All bolts and nuts shall be MS, HRH, and of the dimensions as directed by Engineer-in-Charge. They shall conform to IS-1363. The washers shall be of sufficient thickness. All bolts and nuts shall be of grade black (B) and in general shall comply with IS-1367 and shall be dipped in oil, while hot.

9. **RUN LEAD JOINT** Refer Para 18.48.2, 18.48.2.1 to 18.48.2.4 of SSR Part I.

10. **GI PIPES AND FITTINGS**:

(i) Mild Steel Tubes Shall comply with IS 1239 (Part I)-2004, specification for mild steel tube-tubulars and other wrought steel fittings, Part I mild steel tubes. These shall be hot finished welded, electric resistance welded, or high frequency induction welded pipes, galvanized, and screwed and socketed. The tubes shall be of light, medium or heavy grade as indicated.. Tubes shall be distinguished by colour bands, light tubes with yellow, medium tubes with blue and heavy tubes with red band.

(ii) LAYING OF PIPE:-

- (a) Refer paras 18.46, 18.50, 18.51 and 18.56 of MES Schedule Part I. Unions shall be provided at suitable places as directed by the Engineer-in-Charge so that in case of repairs etc. long lengths of pipes are not disturbed.
- (b) Uncovered threaded portion of pipe shall be painted with approved paint.
- (c) The contractor shall provide screwed plug to all open ends of pipes/fittings at the end of days work and at time when the work is stopped. Concealed pipe work shall be embedded into chases formed/cut in the walls/floors and shall be made good after laying and testing of pipes. Cost of cutting/forming chases/holes in walls/floors and making good the same is included in the quoted rate.
- (ii) TESTING OF GI PIPE: Refer paras 18.50.4 of MES Schedule Part-I

11. GATE VALVES AND GLOBE VALVES

These shall be standard quality Class I conforming to IS-778 specifications and as approved by the GE. Valve shall be of class I suitable for 1.0 MPs working pressure. Gunmetal valve shall be heavy duty type and as described in schedule 'A' and shall be fixed as per clause No 18.62 of SSR 2009 of Part-I.

- 12. <u>SLUICE VALVE.</u> Sluice valve shall be cast iron, with stainless steel spindle, conform to IS14846-2000 and shall be ISI marked. Sluice valve shall be double flanged class PN 1:6 and shall be procured from IS approved manufacturer. For fixing details refer Para 18.57, 18.57.1 to 18.57.3 of SSR Part-I.
- 13. **NON RETURN VALVE.** Non return valves shall be 80/100 mm dia and shall be fixed at locations all as directed by Engineer-in-Charge.

PARTICULAR SPECIFICATIONS (Contd.....).

14 **ROAD CUTTING :-** Permission for road cutting shall be taken from Engineer-in-Charge/GE prior to commencement of work. Precautionary indication boards shall be kept while executing the work to avoid accidents. Work shall be executed in such a way it shall not affect the traffic. After laying of pipes/cable the surface shall be made good to match with existing surface.

SIGNATURE OF CONTRACTOR DATED:

AGE (I) ZAKHAMA ACCEPTING OFFICER

15. CATEGORIZED LIST OF PRODUCTS FOR INCORPORATION IN ALL MES WORKS

Ser	Product	Group of Prod	Remarks	
No		Group 1 (High end)		
1	2	3	4	5`
1	CI Pipes and fitting	(i) Electrosteel (ii) Kesoram (iii) Tisco	(i) Lanco (ii) Kejriwal (iii) Kalinga	
2	DI pipes with ISI marks in range of 80mm to 1000mm (Except DN 125 mm & 750mm) of class K7, K8 & K9 conforming to IS 8329/2000 and Fittings	(i) Jindal Saw Ltd (ii) Electrosteel Casting Ltd (iii) Tata Metaliks (iv) Tata Kubota	(i) Lanco Industries Ltd (ii) Electrotherm (iii) NECO (iv) Kiswok Industries Pvt Ltd	
3	ERW MS Pipes/GI Pipes/Fittings	(i) Surya Roshni Ltd (ii) Tata (iii) Jindal Steel (iv) Prakash	(i) Zenith (ii) Bansal (iii) Swastik (iv) BST (v) Nezone	
4	Sluice/Reflux/ Air Release/Foot/ Non Return Valve/Gate Valve/Butterfly Valve	(i) Kirloskar(ii) Leader(iii) Zoloto(iv) Audco(v) Venus(vi) Upadhyaya	(i) Kalpana (ii) Kartar (iii) BIR (iv) Sona (v) NE (vi) AIP	
5.	Gun metal gate valve	(a) BIR (b) KARTAR (c) VIP ISI Marked (d) BALAJI		
6.	Sheet Sheet/Plate	Tata Jindal Sail		

<u>Note</u>: Items considered in this tender for the materials categorized under Group 2 (Medium end) of above mentioned make list. In case of non availability of material listed under Group 2 (Medium end) in the list of make then material shall be considered from Group 1 (High end) of above make list. No price adjustment in this regard shall be made.

SIGNATURE OF CONTRACTOR DATED:	ACCEPTING OFFICER	