

MILITARY ENGINEER SERVICES

Name of Work: **REPAIR/ MAINTENANCE OF STREET LIGHT AND CONNECTED WORKS
AT INS MANDОВI UNDER GE (P) NAVY MANDОВI**

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Signature of Contractor

AGE (Contracts)
For Accepting Officer

Phone: 0832 2401177
Email: age-mes.goa@nic.in

Garrison Engineer (P) Navy Mandovi
Military Engineer Services
Naval Base PO
Verem, Goa – 403 109.

8684/ 03/ E8

08 MAY 2026

M/s _____

**REPAIR/ MAINTENANCE OF STREET LIGHT AND CONNECTED WORKS AT INS
MANDOVI UNDER GE (P) NAVY MANDOVI**

Dear Sir(s),

1. Tender documents in respect of the above work is uploaded on **08 MAY 2026** in the MES e-tendering portal of www.defproc.gov.in. The tender is based on single stage two cover e-tendering system. The contents of Cover 1 and Cover 2 are specified in Notice Inviting Tender (NIT).
2. Bids will be received online by Accepting Officer up to the “Last date of bid submission” mentioned in 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. Bids will be opened on the “Date of bid opening” mentioned in NIT. Cover 1 will be opened first. Tenderers may see the result of the opening of Cover 1 on the tender portal. Date of opening of Cover 2 shall be decided after technical evaluation of Cover 1 keeping in view the various eligibility criteria given in the NIT and the same will be intimated to the tenderers while uploading the technical evaluation on the tender portal.
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 starts. You are requested not to write piecemeal points and forward your points duly consolidated in one go.
5. Un-enlisted contractors are required to submit the scanned copies (in pdf file) of documents required as per eligibility criteria mentioned in instructions for filling the tender documents and Appendix ‘A’ to NIT along with EARNEST MONEY DEPOSIT (EMD) and tender fee, as stipulated in NIT, on e-procurement portal and submit the physical documents in the office of GE (P) Navy Mandovi 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.

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6. 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 GE (P) Navy Mandovi before date & time fixed for this purpose.
7. The contractor must ensure that the tender/bid on the tender portal using the authorized DSC 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.
8. Keeping in view delays due to system failure or other communication related failures, it is suggested that the tender/ bid be uploaded sufficiently in advance of the due date and time fixed on the portal.
9. 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. Tenderer is also requested to keep the copy of these documents with him as same are available in the market.

10. **PERFORMANCE SECURITY DEPOSIT**

After acceptance of the tender, the contractor will be required to lodge with the Accepting Officer a PERFORMANCE SECURITY for an amount equivalent to 5% of the Contract Amount. The amount is required to be lodged within 28 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.

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

Yours faithfully,

Encls: - (As above)

Signature of Contractor

(Shakeel Ahamad Shariff)
AE (QS&C)
AGE (Contracts)
For Accepting Officer

INSTRUCTIONS FOR FILLING AND SUBMISSION OF TENDER**1.0 EARNEST MONEY DEPOSIT**

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

-

- (a) Deposit at Call Receipt from a Scheduled Bank in favour of **GE (P) Navy Mandovi.**
- (b) Receipted Treasury Challan for the amount being credited to the Revenue Deposit of **GE (P) Navy Mandovi.**

- 1.2 It is advisable that Earnest Money is deposited in the form of deposit call receipt from an approved Scheduled Bank for easy refund. In case the tenderer/ bidder wants to lodge EMD in any other form allowed by MES, a confirmation about its acceptability shall be obtained from the Accepting Officer well in advance of the Last date of bid submission. EMD shall be submitted in the name of **GE (P) Navy Mandovi.**

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).

2.0 PERFORMANCE SECURITY DEPOSIT

- 2.1 The successful contractor shall be required to lodge with the Accepting Officer 'PERFORMANCE SECURITY DEPOSIT', for an amount equivalent to 5% of the Contract Sum in any one of the following forms, within 28 days of receipt of the Letter of Acceptance (See Condition 19 of IAFW-2249): -

- (a) A Bank Guarantee in the prescribed form issued by Nationalized / Scheduled Indian Bank, but its confirmation shall be done only the Head Office of the Bank
- (b) Government Securities, FDR or any other Government instruments stipulated by the Accepting Officer in favour of **GE (P) Navy Mandovi.**

- 2.2 The amount is required to be lodged within twenty-eight days of the receipt by the contractor of notification of acceptance of his tender/ bid, failing which the award of work shall be cancelled and Earnest Money shall be forfeited. In case of MES enlisted contractor, amount equal to the Earnest Money stipulated in the Notice Inviting Tender, shall be deposited 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.

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

- 2.3 The Performance Security Deposit shall be refunded to the contractor after the expiration of the defect's liability period (See Condition 46 of IAFW-2249) by the GE, provided always that the contractor shall first have been paid the final bill and have rendered a No-Demand Certificate (I.A.F.W. - 451). (See Condition 68 of IAFW-2249).

3.0 **GENERAL INSTRUCTIONS FOR COMPLIANCE**

- 3.1 The bids received only in electronic form will be considered. All bids shall be submitted on "defproc.gov.in" portal. Documents should be scanned and uploaded in pdf form or xls form as indicated. 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 accepted.
- 3.2 All bids should be digitally signed using authorized DSC. All pages of tender documents, drawings, corrections/ alterations shall be signed / initialed by the lowest bidder after acceptance of tender for making original and CTC of the contract.
- 3.3 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 Article of Association of the Company) in all matters pertaining to the contract with Union of India including arbitration clause. A scanned copy of the documents in confirmation of such authority shall be attached with the tender/ bid in pdf form in Cover 1. 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 and Article of Association.
- 3.4 Drawings, if issued in physical form must be returned duly initialed by the tenderer/bidder in separate envelope indicating his name and address.
- 3.5 The tender shall be signed, dated and witnessed at all places provided for in the documents after acceptance. All corrections shall be initialed. The contractor shall initial every page of tender and shall sign all drawings forming part of the tender. Any tender/ bid which proposes alterations to any of the conditions, whatsoever, is liable to be rejected.

4.0 **BOQ**

- 4.1 The tenderer shall quote his rate on the BOQ EXCEL file only as per the guideline of e-procure web portal. No alteration to the format will be accepted, else the bid will be disqualified.
- 4.2 In case any tenderer wishes to revise / modify the rates quoted in the BOQ file, he can do so only in the BOQ files before uploading the tender through defproc.gov.in site only before the Last date of bid submission.

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

- 4.3 After the uploading of tender, department may upload the errata/amendment through corrigendum. The tenderer/bidder should submit their offer considering the errata/amendment carried out through corrigendum issued from time to time.
- 4.4 While uploading the bid, the tenderers/ bidders should specifically check whether any revised BOQ has been uploaded by department through corrigendum prior to Bid Submission start date. Tenders/ bidders attention is specifically drawn to the fact that they should submit their offer on revised BOQ only. In case any tenderer/bidder submits offer on pre-revised BOQ in lieu of revised BOQ, it will be considered as willful negligence by the tenderer/bidder and quotation shall be considered non-Bonafide.
- 5.0 Tenderers/bidders who have 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.
- 6.0 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.
- 7.0 The contractor shall employ Indian Nationals after verifying their antecedents and loyalty. Attention is also drawn to special condition 3 referred here-in-after and also conditions 24 & 25 of IAFW (General conditions of contract).
- 8.0 These instructions shall form part of the contract documents.

Signature of Contractor

AGE (Contracts)
For Accepting Officer

MILITARY ENGINEER SERVICES**NOTICE INVITING TENDER**

1. A tender is invited for the work as mentioned in Appendix 'A' to this NOTICE INVITING TENDER.
2. The work is estimated to cost as indicated in aforesaid Appendix 'A'. This estimate however, is not a guarantee and is merely given as a rough guide and if the work costs more or less, a tenderer will have no claim on that account.
3. The work is to be completed within the period as indicated in aforesaid Appendix 'A' in accordance with phasing, if any, indicated in the tender from the date of handing over the site which will be on or about two weeks after the date of Acceptance of tender.
4. Contractors whose names are on the MES approved list and within whose financial category the estimated amount would fall and unenlisted contractors may submit tender/bid subject to other criteria mentioned in Appendix. However, in case of term contracts, enlisted contractors of Class 'SS' to 'E' may submit tender/bid. Not more than one tender/ bid shall be submitted / uploaded by one contractor/ firm. 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 contract as separate competitors. Two firms shall be deemed to have business dealing if any of the partners/ proprietor/ director is common among both of them. A breach of this condition will render the tender/ bids of both the parties liable for rejection.
5. The Office of the Garrison Engineer (P) Navy Mandovi will be the Accepting Officer here-in-after referred to as such for purpose of the contract.
6. Not more than one tender/ bid shall be submitted / uploaded by one contractor/ firm. 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 contract as separate competitors. Two firms shall be deemed to have business dealing if any of the partners/ proprietor/ director is common among both of them. A breach of this condition will render the tender/ bids of both the parties liable for rejection.
7. The Technical Bid and Financial Bid (Cover 1 and Cover 2) shall be uploaded by the tenderer/ bidder on or before the date and time mentioned in Appendix 'A'. A scanned copy of DD with enlistment details and other documents as specified in Appendix 'A' shall be uploaded as Cover 1 (Technical Bid) of the tender on e-tendering portal. DD is refundable in case the contractor is not considered eligible in technical evaluation of Cover 1 resulting in non-opening of Cover 2. The applicant contractor shall bear cost of bank charges for procuring and encashing the DD including revalidation of DDs and shall not have any claim from Government whatsoever on this account.

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NOTICE OF TENDER (CONTD...)

8. Tender form and conditions of contract and other necessary documents shall be available on defproc.gov.in site for download and shall form part of contract in case the tender/ bid is accepted.
9. In case of MES enlisted contractor who has not executed the Standing Security Bond and un-enlisted contractor, the Cover 1 shall be accompanied by Earnest Money for the amount mentioned in Appendix A in the form of deposit at call receipt in favour of GE (P) Navy Mandovi by a scheduled bank or in receipted treasury challan the amount being credited to the revenue deposit of GE (P) Navy Mandovi. The GE will return the earnest money wherever applicable to all unsuccessful tenderers/ bidders by endorsing an authority on the deposit-at-call receipt for its refund, on receipt of intimation from the Accepting Officer to do that.
10. In case of successful contractor i.e. the lowest contractor having submitting EMD, he shall have the option of converting the EMD instrument into part of the Performance Security to be deposited by him within 28 days from the receipt of intimation of acceptance from Accepting Officer.
11. Sample of materials and samples to be supplied by the contractor will also be available for inspection by the bidder at the office of GE during working hours. The bidder is advised to visit the site of work by making prior appointment with the GE who is the executing agency of the work (See Appendix A). The bidder shall be deemed to have full knowledge of all relevant documents, samples, site etc whether he has inspected them or not.
12. Any bid which proposes any alteration to any of the conditions laid down or which proposes any other condition or prescription whatsoever, is liable to be rejected.
13. The uploading of bid by a bidder implies that the bidder has read this notice and the conditions of contract and has made himself aware of the scope and specifications of work to be done and of the conditions and rates at which stores (as applicable) etc. will be issued to him and local conditions and other factors bearing on the execution of the work.
14. The bidder must be in possession of a copy of MES Schedule of Rates (SSR Part I and Part II of latest edition) including amendments and errata thereto.
15. The Accepting Officer does not bind himself to accept the lowest or any tender/bid or to give any reasons for not doing so.

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NOTICE OF TENDER (CONTD...)

16. The Accepting Officer reserves the right to accept a tender submitted by a Public Undertaking/ Small & Medium Enterprises (SMEs), giving a price preference/ purchase preference over other tenders/bids which may be lower, as are admissible under the Government Policy. No claim for any compensation or otherwise shall be admissible from such tenderer/bidder whose tender/bid is rejected.
17. This Notice Inviting Tender (NIT) including Appendix 'A' and Annexures thereto, if any, shall form part of the contract agreement.

Signature of Contractor

AGE (Contracts)
For Accepting Officer

**(TO BE USED IN CONJUNCTION WITH GENERAL CONDITIONS OF
CONTRACTS IAFW-2249)**

MILITARY ENGINEER SERVICES

Phone: 0832 2401177
Email: age-mes.goa@nic.in

REGISTERED ACK DUE
Garrison Engineer (P) Navy Mandovi
Military Engineer Services
Naval Base PO
Verem, Goa – 403 109.

8684/ 03/ E8

08 MAY 2026

**ITEM RATE TENDER AND CONTRACT FOR WORKS REQUIRED IN THE EXECUTION OF
REPAIR/ MAINTENANCE OF STREET LIGHT AND CONNECTED WORKS AT INS
MANDOVI UNDER GE (P) NAVY MANDOVI**

M/s _____

is hereby authorised to tender/bid for the above work. The technical and price bid (Cover 1 & 2) to be uploaded in the web site **www.defproc.gov.in** on or before **29 MAY 2026 up to 1800 Hrs.**

Any correspondence concerning to this tender, should be addressed as indicated at the top of this sheet, quoting the tender id mentioned in defproc.gov.in portal as reference.

**“THE PRESIDENT OF INDIA DOES NOT BIND HIMSELF TO ACCEPT
THE LOWEST OR ANY TENDERS.”**

Signature of Contractor

Signature of the Officer issuing
the Tender Documents

SCHEDULE - 'A'**REPAIR/ MAINTENANCE OF STREET LIGHT AND CONNECTED WORKS AT INS
MANDOVI UNDER GE (P) NAVY MANDOVI****NOTES:**

1. The entire works covered under this contract shall be completed within **180 days (One Hundred Eighty days)** from the date of commencement as indicated in Work Order No 1.
2. The scope of work covered under this contract is given in Schedule 'A' (BoQ) in a separate Excel sheet. The work included under the scope lies at GE (P) Navy Mandovi.
3. The quantities shown in Schedule (BOQ sheet) column 3 are approximate and inserted as a guide only. They do not constitute any guarantee of the ultimate quantities which will be ordered on the contractor. They shall not however be varied beyond the limits laid down in condition 7 of IAFW-2249, General conditions of contract.
4. Tenderers are required to insert unit rates in figures under Col 5 of the BoQ against each item of schedule 'A' and upload after due validation.
5. The rate quoted for each item under Col 5 of Sch 'A' (BoQ) shall include for all necessary works required for the entire completion all as specified
6. The unit rate quoted by the tenderer under Col 5 of Sch 'A' (BoQ) shall be deemed to inclusive for all incidental and additional labor and materials to cover all the work enumerated and described under the description of items and in the preamble to similar items in SSR Part II 2020. It is an express condition of this contract that the rates quoted in this tender for various items of work shall be deemed to be for the full and entire execution and completion of this contract. The Government will not entertain any claim whatsoever on account of in accuracies, misunderstanding, if any in the aforesaid rates. Unless otherwise specifically mentioned in schedule 'A' the rate quoted for schedule 'A' items shall be deemed to include for the provisions of all materials, labor, processor, operations including requirements as detailed in the particulars specifications.
7. Unit rate quoted by the tenderers against various items of Schedule 'A'(BoQ) shall interiliac, be deemed to include minor details of construction which are obviously and fairly intended but which may not have been specifically stated in tender documents but are essential for execution and completion of work. In case of any difference of opinion as to whether or not any items of work constitute "minor construction details" which is deemed to have been included in the contractor's quoted prices, the decision of the Accepting Officer shall be final, conclusive and binding.

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SCHEDULE - 'A'**NOTES:** (Contd....)

8. Description of items given in Schedule 'A' (BoQ) are in brief. These are deemed to be amplified and read in conjunction with latest ISS, Special Conditions, Particular Specifications, Specification of materials of workmanship and condition given in the relevant sections of the SSR Part I (Specifications) and SSR Part II (Rates) (latest editions).
9. The tenderer shall satisfy himself by visiting the site with prior appointment of GE regarding working conditions, local conditions, nature of site/ground, climatic conditions, nature of work, availability of labor and means to access to site and other issues/circumstances which may affect the execution of work at a later stage. No extra payment with regard to aforesaid reasons shall be admissible under any circumstances.
10. The contractor shall make all precautionary arrangements not to damage the existing assets to the extent possible. It is becoming inevitable to execute the subject contract including cutting etc., the disturbed/ damaged surfaces/assets shall be made good to the original specifications without any extra cost to the govt.
11. The following abbreviations have been used in schedule/tender: -

(a)	RM	- Running Metre
(b)	Kg	- Kilogram
(c)	Sqm	- Square Metre
(d)	Cum	- Cubic Metre
(e)	Qtl	- Quintal
(f)	GE	- Garrison Engineer
(g)	CWE	- Commander Works Engineer
(h)	CE	- Chief Engineer
(j)	JE	- Junior Engineer
(k)	Lab	- Laboratory
(l)	Govt	- Government
(m)	Sch	- Schedule
(n)	Dept	- Department
(o)	MD	- Ministry of Defence
(p)	EIC	- Engineer-in-Charge
(q)	DRG/drg	- Drawing
(r)	SSR	- Standard Schedule of Rates
(s)	M & L	- Material and labor
(t)	S & F	- Supply and fix

SCHEDULE - 'A'**NOTES:** (Contd....)

12. All royalty and Cess charges for Bricks, stone aggregate, sand, other boulders including all earthwork done at site of work and other allied items for which royalty and Cess charges are levied by State Government as per statutory rules/law shall be deemed to be included in unit rates quoted by contractor for the items of Sch 'A' (BOQ sheet in excel) and no claim whatsoever on this account is admissible. The contractor shall be solely responsible to pay necessary royalty and Cess charges and the same shall be recovered from any payment due to the contractor and remitted to the State revenue authorities in case of default/ dispute of any or on receipt of demand notice from them.
13. Since the work lies in restricted area, carrying camera enabled mobile phone by contractors or their agents are strictly prohibited. Also, all vehicles brought by contractors in connection with execution of work shall possess valid papers and license and shall produce for security check. The contractor, his agents, work people etc. shall adhere to the security instructions as laid down in the contract conditions strictly. No claim whatsoever for observance of restrictions imposed at site shall be admissible at any stage of work.
14. The rate quoted by the tenderer shall be inclusive of all types of taxes / cesses viz GST and any other tax imposed / modified by the central / state govt during the currency of the contract. Nothing extra shall be admissible on this account. Tenderers are advised to independently ascertain the rate / percentage of goods & service tax, surcharge etc., and shall quote their rates accordingly. No claim on account of any kind on misunderstanding on this issue shall be entertained at a later date.
15. Particular attention of the participants is invited to amendment No 21 applicable to condition 6 A (A) of IAFW 2249. In case the contractor does not quote the rates against any of the item (s), the quoted rates for such item (s) shall be deemed to read as Rs NIL and prices/cost for provision of such items shall be deemed to be covered against other item (s) of BoQ.
16. In case the BoQ is revised by the Dept and the bidder has failed to quote his rates in revised BoQ (i.e. the contractor has quoted in pre-revised BoQ), it shall be treated as willful negligence on the part of contractor and such Bid/Quotation shall be considered non-Bonafide. Also, necessary action against such contractor(s) shall be taken by the Accepting Officer. Further it is clarified that in such cases, lowest tender shall be determined by the lowest amount amongst the valid/Bonafide bids only.

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SCHEDULE - 'A'

NOTES: (Contd....)

17. PERFORMANCE SECURITY

- 17.1 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 on Sl pg no 4 Clause No.2 of this contract for an Amount equivalent to 5% of contract sum.

18. DEFECT LIABILITY PERIOD

- 18.1 Defect liability period for the contract is 1 (One) year from the certified date of completion.

19. Total amount in Column H of BOQ is not firm. A Separate Schedule of credit has been enclosed along with this tender. The amount of schedule of credit shall be deducted from the total amount of BOQ to arrive at the "Contract Sum" referred to in IAFW2249.

Signature of Contractor

AGE (Contracts)
For Accepting Officer

**REPAIR/ MAINTENANCE OF STREET LIGHT AND CONNECTED WORKS AT INS
MANDOVI UNDER GE (P) NAVY MANDOVI**

SCHEDULE OF CREDIT

NOTES:

1. Dismantled materials as detailed in this schedule shall become the property of contractor for which necessary recovery will be affected. The quantity of material given in the schedule of credit is only approximate.
2. The materials mentioned in the 'Schedule of Credit' shall be measured 'NET'.
3. Necessary gate entry pass to the contractor will be issued by the GE for carting away/ removing the materials from the site of work as issued through the 'Schedule of Credit'.
4. The unserviceable materials not covered in the schedule of credit shall be returned to the department at MES store yard place of issue of schedule 'B' stores. However demolished materials which have no salvage value as decided by the Engineer-in-charge and rubbish shall be used for filling in low lying area or disposed off at site as directed by Engineer – in – charge.
5. The contractor shall be responsible to remove both serviceable and unserviceable materials from the site and leave the site neat and tidy on or before the date of completion.
6. The recovery on account of materials listed in the 'Schedule of Credit' shall be made immediately from payment due to contractor irrespective of the fact that these have been removed from site or not.
7. Prior order of Engineer-in-charge shall be obtained before dismantling etc. the contractor's particular attention is drawn to section 21 of MES schedule and condition 47 of IAFW-2249.
8. Contractor shall have no claim whatsoever on account of quality and quantity of retrieved materials becoming his property and the recovery rates mentioned in 'Schedule of Credit'.
9. The unit rate for each dismantled material shall be treated as the firm. In this regard the tenderer shall visit the building before tender is submitted and ascertain the condition of materials included in the unit rate of dismantled materials given against each as assessed by the department in the schedule of credit and no adjustment thereof is permitted irrespective of materials obtained by the contractor after dismantling.
10. The cost of dismantled materials covered in the schedule of credit obtained upto the date of respective RAR will be priced at the unit rate inserted by department and recovered from RAR.

Contd/--

SCHEDULE OF CREDIT (CONTD.)

11. All dismantling/ demolition shall be carried out carefully in such a way so as not to damage the remaining parts of adjoining structures and if such damage occurs through negligence of the contractor and he shall be responsible for making good the same at his own cost. GE's decision as to whether the damage has caused due to contractor's negligence or not shall be final and binding.

Ser No.	Description of items	Unit	Qty	Rate	Amount	Remarks
1	Old U/S junction box of any make/ type	Each	205	5.00	1025.00	
2	Old U/S PVC insulated cable of size 1.5 sqmm	RM	600	4.00	2400.00	
3	Old U/S PVC insulated cable of size 2.5 sqmm	RM	700	5.00	3500.00	
4	Old U/S PVC conduit of size 20/ 25 mm	Each	980	0.50	490.00	
5	Old U/S poles 3.0/ 4.0 mtrs height	Each	8	30.00	240.00	
6	Old U/S MCB of rating up to 70 Amps	Each	4	2.00	8.00	
7	Old U/S LED fitting of 60W	Each	25	10.00	250.00	
8	Old U/S LED fitting of 90W	Each	29	20.00	580.00	
9	Old U/S LED fitting of 150/ 170W	Each	20	20.00	400.00	
10	Old U/S LED fitting of 200/ 210W	Each	17	20.00	340.00	
11	Old U/S post top light of 20/ 45W	Each	15	10.00	150.00	
12	Old U/S bollard light of 8/ 12W	Each	30	10.00	300.00	
13	Old U/S LED driver up to 250W	Each	105	5.00	525.00	
14	Old U/S DWC pipe OD size up to 50 mm	RM	980	1.00	980.00	
15	Old U/S XLPE insulated cable of size 25 sqmm	RM	200	15.00	3000.00	
16	Old U/S XLPE insulated cable of size 16 sqmm	RM	200	12.00	2400.00	
17	Old U/S XLPE insulated cable of size 10 sqmm	RM	200	10.00	2000.00	
18	Old U/S solar PCB	Each	18	10.00	180.00	
19	Old U/S GI tube bracket, clamp	RM	50	5.00	250.00	

Contd/--

SCHEDULE OF CREDIT (CONTD.)

Ser No.	Description of items	Unit	Qty	Rate	Amount	Remarks
20	Old U/S LED bulb	Each	80	1.00	80.00	
Total					11,955.00	

Note: The Amount of Schedule of Credit shall be deducted from the amount quoted by the bidder for Sch 'A' - BoQ1 brought forward from Serial Page No 26 to arrive at the Amended Contact Sum.

Signature of Contractor

AGE (Contracts)
For Accepting Officer

**REPAIR/ MAINTENANCE OF STREET LIGHT AND CONNECTED WORKS AT INS
MANDOVI UNDER GE (P) NAVY MANDVI**

SUMMARY

- | | | |
|---|---|---------------------|
| 1 | Total of BoQ B/F from Serial Page No. 26 | : Rs. |
| 2 | Deduct Schedule of Credit B/F from Serial Page No. 29 | : Rs. 11,955.00 (-) |
| 3 | Contract Sum | : Rs. |

Signature of Contractor

AGE (Contracts)
For Accepting Officer

SCHEDULE 'B'
ISSUE OF MATERIAL TO THE CONTRACTOR
 (See Condition 10 of IAFW-2249)

Srl No.	Particulars	Rate at which materials will be issued to the Contractor		Place of issue (by name)	Remarks
		Unit	Rate		
-----NIL-----					

SCHEDULE 'C'
LIST OF TOOLS AND PLANTS (OTHER THAN TRANSPORT)
WHICH WILL BE HIRED TO THE CONTRACTOR
 (See Condition 15, 34 & 35 of IAFW-2249)

Ser No	Qty	Particulars	Details of MES Crew supplied	Hire Charges per unit per working day	Standby Charges per unit per off day	Remarks
1	2	3	4	5	6	7
-----NIL-----						

SCHEDULE 'D'
TRANSPORT TO BE HIRED TO CONTRACTOR
 (See Condition 16 & 35 of IAFW-2249)

Ser No	Qty	Particulars	Rate per unit per working day	Place of issue (by name)	Remarks
1	2	3	4	5	6
-----NIL-----					

Signature of Contractor

 AGE (Contracts)
 For Accepting Officer

TENDER

To

THE PRESIDENT OF INDIA

Having examined and pursued the following documents: -

1. Specifications signed by AGE (Contracts).
2. Drawings as detailed in the specifications.
3. Schedule 'A', 'B', 'C' and 'D' attached hereto.
4. MES Standard Schedule of rates 2009 (Part - I Specifications) and 2020 (Part - II rates) together with Amendments Nos.1 to 3 for Part I and Amendments Nos.1 to 122 for Part II (here-in-after referred to as the MES Schedule) as applicable to the above said Schedule.
5. General conditions of contract IAFW-2249 (1989 Print) together with amendment Nos 1 to 48 and errata 1 to 20.
6. WATER: - Condition 31 of IAFW - 2249 General Conditions of Contract
Water will not be supplied by MES.
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 account of the Performance Security Deposit or shall be repaid by the Government on receipt of the full amount of performance security deposit within the time specified in Condition 19 of IAFW-2249.
- (b) To execute all the work referred in the said documents upon the terms and conditions contained in the aforesaid Schedule 'A' or at such other rates that may be fixed under the provisions of condition 62 of IAFW 2249 and to carry out such deviations as may be ordered vide conditions 7 of IAFW-2249 up to 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 examinations of Sub-Division II of Institution of Surveyors (India) recognized by the Government of India to be appointed by the Chief Engineer (Navy), Mumbai or in his absence officer officiating as Chief Engineer whose decision shall be final, conclusive and binding.

** to be deleted wherever not applicable.

Contd.....

TENDER (CONTD...)

(Signature) _____ signed by (Name) _____

_____ in the capacity of _____

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

M/s _____.

(IN BLOCK CAPITALS)

WITNESSSignature: _____ Postal
address _____Address: _____

_____Mob
No: _____**ACCEPTANCE**

_____ alterations have been made in this document and as evidence that these alterations were made before the execution of the contract agreement, they have been initialed by contractor and Mr. Shakeel Ahamad Shariff, AE (QS &C), AGE (Contracts).

The said officer(s) is/are hereby authorized 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 for the Amended Contract sum of Rs. _____ (Rupees _____)

_____ only) on the _____ day of _____ 2026.

Signature _____ Dated this _____ day of _____ 2026.

(For and on behalf of the President of India)

Appointment: GARRISON ENGINEER (P) NAVY MANDОВI
NAVAL BASE PO, VEREM
GOA – 403 109.

GENERAL CONDITIONS OF CONTRACTS

(IAFW-2249 - 1989 PRINT)

FOR ITEM RATE CONTRACT (IAFW-1779-A)

A copy of the GENERAL CONDITIONS OF CONTRACTS (IAFW-2249 1989 Print) with Errata 1 to 20 and Amendments No.1 to 48 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.

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 with Errata 1 to 20 and Amendment Nos.1 to 48 form part of these tender documents.

(* Delete whichever is not applicable)

Signature of Contractor

AGE (Contracts)
For Accepting Officer

SCHEDULE OF MINIMUM FAIR WAGES

(PAYABLE BY THE CONTRACTOR UNDER MINIMUM FAIR WAGES ACT)

(See Condition 58 of IAFW-2249)

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

2. My/our* signature(s) here under amounts to my/our* having signed the aforesaid Schedule of Minimum Fair Wages forming part of this tender.

NOTE: "Schedule of Minimum Fair Wages" referred to above is available for reference in the Office of the GE (P) Navy Mandovi.

(* Delete whichever is not applicable)

Signature of Contractor

AGE (Contracts)
For Accepting Officer

SPECIAL CONDITIONS**1.0 GENERAL**

- 1.1 The following special conditions shall be read in conjunction with the General Conditions of Contracts IAFW-2249 and IAFW-1779A including Errata / Amendments thereto. If any provision in these special conditions is at variance with that of the aforesaid documents, the former shall be deemed to take precedence there over.

2.0 SECURITY OF CLASSIFIED DOCUMENTS

- 2.1 Contractor's special attention is drawn to conditions 2A and 3 of IAFW-2249 (General conditions of Contracts). The contractor shall not communicate any classified information regarding work either to subcontractors 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 work or on earlier determination of the contract. The contractor shall along with the final bill, attach a receipt from the Engineer-in-Charge in respect of his having returned the classified documents as per condition 3 of IAFW-2249 (General Conditions of Contract).

3.0 PERIOD FOR KEEPING THE TENDER OPEN

- 3.1 The tender shall remain open for acceptance for a period of 60 (sixty) days from the next day subsequent to the bid submission end date.

4.0 ADMISSION TO SITE BY CONTRACTOR AND RESPONSIBILITY TO ASCERTAIN HIS OWN INFORMATION

- 4.1 The tenderers shall contact the GE concerned for the purpose of inspection of site (s) and relevant documents other than those sent herewith, who will give reasonable facilities for this purpose. The tenderers shall also make themselves familiar with working conditions, accessibility of site(s), availability of materials/ labor's and other cogent condition which may affect the execution and entire completion of work under this contract.
- 4.2 The tenderers shall be deemed to have visited the site[s] and made themselves familiar with the working conditions, accessibility of site [s], availability of materials and other cogent conditions, etc. which may affect the entire completion of work under this contract, whether they actually inspect the site[s] or not. No extra payment consequent on any mistake or misunderstanding otherwise on this account will be allowed.

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SPECIAL CONDITIONS (CONTD...)**5.0 SECURITY AND PASSES**

- 5.1 Contractors attention is invited to condition 25 of IAFW-2249. He shall employ only Indian Nationals after verifying their antecedents and loyalty. The contractor shall on demand by the Engineer-in-Charges, submit list of his agents, employees and working people concerned and shall satisfy the Engineer-in-charge as to the Bonafide of such people.
- 5.2 The Engineer-in-charge shall at his discretion have the right to issue passes as per rules and regulations of the installation/area in force to control the admission of the contractor, his agents, and employees and work people to the site of the work or any part thereof. Passes should be returned at any time on demand by the Engineer-in-Charge of the authorities concerned and in any case on completion of works.
- 5.3 The contractor and his agents, employees and work people shall observe all the rules promulgated by the authority controlling installation/area in which the work is to be carried out e.g., prohibition of smoking and lighting, fire precautions, search of persons on entry and exit, keeping to specific routes, observing specified timing etc. Nothing extra shall be admissible for any man hour etc. lost on this account.

6.0 ROYALTIES

- 6.1 Reference condition 14 of General Conditions of Contracts (IAFW-2249). No quarries on Defence land are available.

7.0 SAMPLE OF MATERIALS

- 7.1 Refer condition 10 of IAFW-2249 and clause 1.6 and 1.7 of MES Schedule, Part- I.
- 7.2 Materials provided by the contractor for incorporation in the work shall be of makes as given in Particular Specifications. The contractor shall not procure materials unless the samples are first got approved by the GE.
- 7.3 The tenderer is advised to inspect the materials which are displayed in the office of GE, 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 actually inspected them or not.
- 7.4 The order of precedence for acceptance of materials shall be as under: -
- (a) Materials of makes as given in Sch 'A'.
- (b) Materials of makes given in Particular Specifications.

Contd/---

SPECIAL CONDITIONS (CONTD...)

(c) Materials whose makes are not given in Schedule 'A'/Particular Specifications, then such material shall be ISI marking. IS means Indian Standards as issued by the Bureau of Indian Standards Wherever in the specifications IS referred to; it means the edition with all amendments, current on the due date of receipt of the tender documents. In case of non-manufacturer of ISI marked materials, materials shall confirm to relevant ISI.

(d) In case of non-availability of materials at (a) & (b) above, best available materials in the market as desired in clause 1.3(b) of SSR 2009 Part I and approved by GE.

7.5 For obtaining sample approval, contractor shall down load list of BIS marked manufacturers from BIS site www.bis.org.in and select manufacturers meeting contract specifications criteria and hand over the report with a request letter to Engineer-in-Charge with his signature. The GE shall convey the approval of samples within 7 days of contractor's request after verifying the correctness of details submitted by the contractor.

8.0 MINIMUM WAGES PAYABLE

8.1 Refer condition 58 of IAFW-2249. The contractor shall not pay wages lower than minimum wages for labor as fixed by the Government of India /State Government / Union Territory whichever is higher.

8.2 Schedule of minimum fair wages is not enclosed along with the tender but the contractor is deemed to have full knowledge of the minimum fair wages payable to the labor as legally effective on the day of submission of tender irrespective of the fact that the gazette notification may not have been published or that he was un-aware of the increase in the minimum wages/ For the purpose of special condition 16, the minimum wages legally effective on the date of receipt of tender shall be the basis for reimbursement, refund on the variation in prices. The minimum wages legally effective referred above are the minimum wages notified in Gazette or any local regulations whichever is higher.

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

9.0 WATER

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

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SPECIAL CONDITIONS (CONTD...)

- 9.2 Water will not be supplied by MES and contractor shall make his own arrangements to supply of requisite quantity of water required for the work. However, the Contractor if he so desires, will be permitted to drill bore well(s) at his own cost within the Government land with the prior written permission of GE and no charges shall be levied against the contractor for water drawn from such wells. The contractor shall make his own arrangements for storing the water required for the works, labor, workmen etc., at his own expenses. Any such wells shall become the property of Government after completion of work under the contract and the contractor shall have no claim whatsoever on this account. The contractor shall at his own cost, get the water tested from recognized Govt. laboratory about the potability and shall be produce the certificate to the GE.

10.0 ELECTRIC SUPPLY

- 10.1 In case the contractor desires to buy electricity from MES, he shall be charged for the electric energy consumed at the rate of **Rs. 15.01 per unit** for lighting and power. Electric supply up to a maximum of 10KW, three phase, 415 volts shall be mase available by the MES at the incoming terminal of the main switch marked on the site plan. The main switch and KWH meters to register the electric energy supplied shall be provided and installed by MES. The contractor shall provide all necessary cables, fittings, etc., from the main switch in order to ensure proper and suitable supply of electricity.
- 10.2 MES do not guarantee for continuity of supply and no compensation whatsoever shall be allowed for supply becoming intermittent or for breakdown in the system by any reason whatsoever.
- 10.3 GE or his representatives shall be free to inspect all the power consuming devices or any electric lines provided by the contractor, which, if not to the satisfaction of the GE shall be disconnected from the supply, if so directed by him.

11.0 ALLOTMENT OF LAND FOR STORAGE OF MATERIALS, TEMPORARY WORKSHOP STORES ETC

- 11.1 Refer condition 24 of IAFW-2249. Contractor shall be permitted to store his materials including erecting temporary sheds therefore at the areas as directed by GE and he shall ay a license fee of Re. 1/- per year or part thereof in respect of each and every separate area of land allotted to him. The land / open space available within vicinity of site of work as directed by GE may also be used by the contractor for this purpose but free of charge”.

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SPECIAL CONDITIONS (CONTD...)**12.0 CONTRACTOR'S REPRESENTATIVES, AGENTS AND WORKMEN**

- 12.1 Refer condition 26 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 work. If for reasons of technical collaboration or other considerations 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. GE shall order the contractor to cease to employ in connection with this contract any representative agents, servants and workmen or employees, whose continued employment, in his opinion, is undesirable. The contractor shall not be allowed any compensation on this account.
- 12.2 The contractor shall, on demand by the Engineer-in-Charge submit list of his agents, employees and work people concerned and shall satisfy the Engineer-in-Charge as to the Bonafide of such people.
- 12.3 Verification of antecedents of contractor's representatives/labor 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/Security Agency shall be borne by the contractor.

13.0 RECORD OF MATERIALS

- 13.1 The quantity of materials such as cement, paints, steel water proofing compound, chemicals for anti-termite 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, on demand, produce to the GE, original receipted paid vouchers in respect of the supplies. The paid vouchers so produced shall be verified, defaced and stamped by Engineer-in-Charge indicating contract number name of work under his dated signature. The contractor shall ensure that the materials are brought to site, in original sealed containers / packing, bearing manufacturer's marking except in the case of the requirement of material (s) being less than smallest packing.

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SPECIAL CONDITIONS (CONTD...)

- 13.4 Contractor shall produce paid vouchers from the manufacturers and / or their authorized agents for the full quantity of the materials, as applicable as a prerequisite before submitting claims for payment for advance on account of the work done and / or materials collected in accordance with condition 64 of General Conditions of contracts IAFW-2249.

14.0 CONTRACTOR'S PLANT/ EQUIPMENT AT SITE

- 14.1 The contractor shall furnish to the Engineer-in-Charge every morning distribution return of his plants/ equipment's on the site of work stating the following particulars: -

- (i) Particulars of plants/equipment's, their make, manufacture 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, indication No. (Quantity at each location on the site of work)
- (iv) Purchase value on the date of purchase. For the purpose of the condition, plant/equipment, vehicle No i.e. trucks and lorries but neither the workman's tools nor any manually operated tools/equipment shall be given. The Engineer-in-Charge shall record the particulars supplied by the contractor in the works diary and send the return to the GE for record in his office.

15.0 RELEASE OF PERFORMANCE SECURITY DEPOSIT.

- 15.1 Refer Condition 68 of IAFW-2249 General Conditions of contracts

- 15.2 The Performance Security Deposit shall be refunded to the contractor after the expiration of the defect's liability period by the GE, provided always that the contractor shall first have been paid the final bill and have rendered a No-Demand Certificate (I.A.F.W. - 451). (See Condition 68 of IAFW-2249)

- 15.3 The defects liability period shall be as follows (See Condition 46 of IAFW-2249): -

- (a) Thirty-Six calendar months after the works have been handed over to the Government for runway works, marine & harbor works, high altitude works and specialist works of hospital and medical equipment / medical gas.
- (b) Twelve calendar months after the works have been handed over to the Government for works of Periodical Services and Welcome Maintenance, Minor works and Revenue works and works for 'Maintenance & Operation' including repairs and Works for Maintenance and Repair / Replacement.
- (c) Thirty days or date of taking over the installation by MES, whichever is earlier for works of 'Manning & Operation' & 'Maintenance & Operation' involving predominantly Outsourcing of Services through Deployment of Manpower/ workforce and not involving Repair / Replacement.

Contd/---

SPECIAL CONDITIONS (CONTD...)

- (d) Twenty-four calendar months after the works have been handed over to the Government for works other than mentioned in sub para (a) to (c) above.

16.0 DAMAGE TO EXISTING STRUCTURES.

- 16.1 Any damage done to the existing pavement and structure. etc., during the execution of the work shall be made good by the contractor at his own expenses and site of works left clean and tidy on completion. Rectification, reinstatement, replacement, making good and touching up etc., shall be carried out to conform to the materials and workmanship originally as 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 and binding.

17.0 APPROACHES

- 17.1 The contractors 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 GE to the layout of such approaches.

18.0 OUT OF POCKET EXPENSES

- 18.1 No out of pocket expenses incurred by the tenderer in submitting the tender shall be reimbursed whether his tender is accepted or not.

19.0 RETENTION MONEY/ COMPENSATION FOR DELAY

- 19.1 Refer condition 64 and 50 of IAFW-2249. For the purpose of calculating retention money under condition 64 of IAFW-2249, and compensation for delay under condition 50 of IAFW-2249, the value of contract as revised by price variation shall be taken into account.

20.0 CONDITIONS OF WORKING IN RESTRICTED AREA

- 20.1 The work under this contract lies in RESTRICTED AREA.

20.2 Visit to Site Within Restricted Area

- 20.2.1 Permission to enter the restricted area before submission of tenders can be obtained through the GE. Tenderers are advised to send prior intimation of their agents, representatives etc., if any, dates and time of their proposed visit so that necessary arrangements may be made by GE to secure admission. Whether a tenderer visits the site or not, he shall be deemed to have full knowledge of the conditions viz., restrictions of entering into / exit from and working within the Restricted Area.

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SPECIAL CONDITIONS (CONTD...)**20.3 Entry / Exit**

20.3.1 The contractor, his agent (s) / representatives, workmen etc., and his materials, carts, trucks or other means of transports etc., will be allowed to enter through and leave only from such gate or gates and at such times as the GE or authorities in charge of the authorized representative is required to be present at the place of entry and exit for the purpose of identifying his truck etc., to the personal in charge of the security of Restricted Area.

20.4 Identity Cards or Passes

20.4.1 The contractor, his agents and representatives are required individually to be in possession of an identity card or pass duly verified by the GE. The identity card or pass will be examined by the security staff at the time of entry into or exit from the restricted area and also at any time or number of times inside the Restricted Area.

20.5 Identity of Workmen

20.5.1 Every workman shall be in possession of an identity card. The identity card will be issued after thorough investigation of the antecedents of the laborers employed by the contractors and attested by the officer-in-charge of the unit concerned in accordance with the standing rules and regulations of the units. Contractor shall be responsible for the conduct and action of his workmen, agents or representatives.

20.6 Search

20.6.1 Thorough search of all persons and transport shall be carried out at each gate and for as many times as a gate is used for entry or exit and may also be carried out at any time or any number of times at the work site within the Restricted Area.

20.7 Female Searcher

20.7.1 If the contractor desires to employ female labor on works to be carried out inside the area of a factory, Depot, park etc., and a female searcher is not borne on the authorized strength of the factory, Depot, park etc., at the time of submission of the tender, he shall be deemed to have allowed in his tender for pay and allowance etc., for a female searcher (Class IV Servant / Group 'D' Servant) calculated for the period female labor is employed by him inside that area. If more than one contractor has / have to employ female searcher in addition to the authorized strength of the factory, Depot, Park etc., the salary and allowances paid to the additional female searcher(s) shall be distributed on an equitable basis between the contractors employing female labor taking into consideration the value and period of completion of their contractors. The GE's decision in regard to the amount recoverable on this account from any contractor shall be final and binding.

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SPECIAL CONDITIONS (CONTD...)**20.8 Working Hours**

20.8.1 The units controlling restricted area, usually work during six days in the week and remain closed on the 7th day. The working hours available to contractor's labor and staff however, appreciably reduced because of the time taken in security checks observed at the time of entry, exit and during working hours.

20.8.2 The exact working hours, days and non-working days observed for the restricted area, where works are to be carried out, shall be deemed to have been ascertained by the contractors before submitting his tender. The tenderer's attention is invited to the fact that the total number of working hours for a unit is prescribed in regulations and they cannot be increased by the GE.

20.8.3 Contractor's materials, transport etc. shall normally be permitted to come in / go out of the area between 9 A.M to 5 P.M only.

20.9 Work on Holidays

20.9.1 The Contractor shall not carry out any work on gazette holidays, weekly holidays and other non-working days except when he is specifically authorized in writing to do so by the GE. The GE may at his sole discretion declare any day as holiday or non-working days without assigning any reason for such declaration.

20.10 Access to Restricted Area After Completion Of Work

20.10.1 After the works are completed and surplus stores etc., removed, the contractor, his agents, representatives or workman etc., may not be allowed to have access to the restricted area except for attending any rectification of defects pointed out to him by the GE.

20.11 Fire Precautions

20.11.1 The contractor, his agents, representatives, workmen, etc., shall strictly observe the orders pertaining to fire precautions prevailing within the restricted area. Motor transport vehicles, if any, allowed by authorities to enter the restricted area must be fitted with serviceable fire extinguishers.

21.0 SCOPE OF CONCILIATION

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

- (a) Disputes relating to levy of compensation for delay in completion- Actual amount of compensation.

Contd/---

SPECIAL CONDITIONS (CONTD...)

- (b) Disputes relating to technical examination of works.
- (c) Disputes relating to interpretation of the provisions of the contract with reference to their application to parties.
- (d) Disputes relating to non-return of Schedule 'B' stores over-issued to contractor.
- (e) Any other disputes having fair chances of being resolved by conciliation and considered fit to be referred to conciliation by the parties.
- (f) For (b), (c), (d) and (e) each as stated above the financial limit shall be Rupees two lakh or one percent of the contract amount whichever is less.

21.2 Commencement Of Conciliation Proceedings

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

21.3 Number of Conciliators

- 21.3.1 There shall be a sole conciliator.

21.4 Appointment of Conciliator

- 21.4.1 All disputes brought out in para 23.1 (a) to (e) above shall be referred to the sole conciliator viz serving officer not below the rank of Superintending Engineer / Superintending Engineer (QS & C) having degree in Engineering or equivalent or having passed final / direct final examination of Sub division II of Institution of Surveyors (India) to be appointed by the officer officiating as Engineer-in-Chief or Director General of works specifically delegated by the Engineer-in-Chief, Army Headquarters, New Delhi or in his absence the officer officiating as Engineer-in-Chief or Director General of works specifically delegated by the Engineer-in-Chief in writing.

21.5 Status of Effect of Settlement Agreement

- 21.5.1 The settlement agreement signed by the parties as a result of conciliation proceedings shall have the same status and effect as it is an arbitral award on agreed terms.

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SPECIAL CONDITIONS (CONTD...)**22.0 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 on materials, GST on works contracts, Labor welfare Cess / tax etc. as applicable), duties, Royalties and other levies as applicable under the respective Statutes. No reimbursement / refund for variation in rates of taxes duties, Royalties and other levies, and / or imposition / abolition of any new / existing taxes, duties Royalties and other levies shall be made except as provided in sub para here-in-below: -
- (i) The taxes which are levied by Govt at certain percentage rates of Contract Sum/Amount shall be termed as "Taxes directly related to Contract value" such as GST on works Contracts, Labor Welfare Cess / Tax and the like as applicable but excluding Income Tax. The tendered rates shall be deemed to be inclusive of all "taxes directly related to contract value" with existing percentage rates as prevailing on last due date for receipt of tenders. Any increase in percentage rates of "taxes directly related to contract value" with reference to prevailing rates on last due date for receipt of tenders shall be reimbursed to the contractor and any decrease in percentage rates of "taxes directly related to Contract value" with reference to prevailing rates on last due date for receipt of tenders shall be refunded by the Contractor to the Govt/deducted by the Govt from any payments due to the Contractor. Similarly, imposition of any new "taxes directly related to Contract value" after the last due date for receipt of tenders shall be reimbursed to the Contractor and abolition of any "taxes directly related to contract value" prevailing on last due date for receipt of tenders shall be refunded by the Contractor to the Govt/deducted by the Govt from the payments due to the Contractor.
- (ii) The contractor shall, within a reasonable time of his becoming aware of variation in percentage rates and/or imposition of any further "taxes directly related to Contract value", give written notice thereof to the GE stating that the same is given pursuant to this Special Condition, together with all information relating thereto which he may be in a position of supply. The Contractors shall 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 authorized representative of Govt, and shall further, at the request of the GE furnish, verified in such a manner as the GE may require, any documents so kept an such other information as the GE may require.
- (iv) Re-imbursement 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 GE may require.

SPECIAL CONDITIONS (CONTD...)**23.0 SALES TAX ON WORKS CONTRACT/VAT BY STATE GOVT (PERSUANT TO THE CONSTITUTION 46TH AMENDMENT ACT 1982)**

23.1 Sales tax on works contracts/VAT by state Govt (pursuant to the constitution 46th amendment act 1982). The tenderers quoted rate shall deemed to include the sales tax on works contract/VAT levied by the Tamil Nadu Government as fixed from time to time and no claim on account of sales tax on works contract/VAT shall be admissible. Tender will be considered non Bonafide if any stipulation is made by the tenderers and tender will be liable for rejection. Sales tax/VAT at applicable percent will be deducted at source by GE as per State Govt Orders issued from time to time.

23.2 Any conditional tenders regarding payment of sales tax on works contract will not be considered and is likely to be rejected.

24.0 CLEANING DOWN

24.1 Refer condition 49 of IAFW-2249 General Conditions of contracts.

24.2 The contractor shall clean all floors, walls, remove cement / lime / paint marks / drops etc., clean the joinery, glass panes etc., touch up all other necessary items of work in connection therewith and leave the whole premises clean and tidy before handing over the buildings.

25.0 CONDITION 63 OF IAFW-2249:

25.1 Condition 63 of IAFW 2249 shall not be applicable to this contract and no price escalation what so ever shall be payable for works under this contract.

Signature of Contractor

AGE (Contracts)
For Accepting Officer

PARTICULAR SPECIFICATIONS**NAME OF WORK: REPAIR/ MAINTENANCE OF STREET LIGHT AND CONNECTED
WORKS AT INS MANDОВI UNDER GE (P) NAVY MANDОВI****1.0 GENERAL**

- 1.1 The following specification shall be read in conjunction with the General Condition of Contracts IAFW-2249 and IAFW-1779A including Errata/Amendments thereto. If any provision in these Particular Specification is at variance with that of the aforesaid documents, the former shall be deemed to take precedence there over.
- 1.2 The work under this contract shall be carried out in accordance with Schedule 'A' the particular specifications drgs and other provisions in MES Sch, read in conjunction with each other.
- 1.3 The term 'General Specifications' referred to in clause 1.1 hereinbefore as well as referred to in IAFW –2249, General Conditions of Contract shall mean the specifications contained in MES Standard Schedule of Rates 2009 Part I and 2020 Part II including errata and amendments.
- 1.4 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 those documents in which case the provisions in these documents shall take precedence over the aforesaid provision in the MES Schedule. The term as specified "wherever appears in tender documents and drawings relates to relevant particular specifications and in its absence general specifications. All references to MES Schedule (Standard Schedule of Rates) in these specifications relate to Part-I of MES Schedule unless otherwise mentioned. Reference to only some paragraphs of MES Schedule has been made in these particular specifications but other paragraphs and provision as applicable are also to be followed for all parts of Schedule 'A' even though not particularly mentioned here in after.
- 1.5 Where specifications for any item of work are not given in MES Schedule or in these particular specifications, specification as given in relevant Indian Standard or code of practice shall be followed.
- 1.6 Rate quoted for a particular item quoted by the tenderer shall be deemed to include for any minor details/items of work and/or constructions 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. Decision of the Accepting Officer as to whether any minor details of work and/or constructions is obviously and fairly intended to be included in the contract or not shall be final, conclusive and binding.

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PARTICULAR SPECIFICATIONS (CONTD...)**2.0 SCOPE OF WORK**

- 2.1 The scope of work of this contract is for full, final and entire completion of all items of works in Schedule 'A' in connection with **“REPAIR/ MAINTENANCE OF STREET LIGHT AND CONNECTED WORKS AT INS MANDОВI UNDER GE (P) NAVY MANDОВI”**

3.0 MATERIALS

- 3.1 All materials supplied/incorporated in the work by the contractor shall be brand new and in accordance with relevant IS Specifications. ISI certified goods will get preference over non certified goods even though they claim/that their materials confirm to IS. Contractor shall produce original invoices and receipt vouchers for the materials incorporated in the work conforming to IS Specifications.

4.0 SAMPLE OF MATERIALS

- 4.1 Before starting the work, the contractor shall produce samples of all materials to the Engineer-in-Charge and got approved by the GE. Samples that are approved will be retained by GE until the work is completed and accepted. The contractor will not be allowed to commence the work before the samples are produced and approved. The contractor shall ensure that the materials used in the work are identical with approved samples and are uniform throughout. All materials shall be accordance with latest edition of the IS/BS specification and shall be of the best indigenous make approved by the GE.

5.0 ELECTRICAL WORKMANSHIP AND GENERAL INSTRUCTIONS

- 5.1 All electrical work shall be carried out in conformity with requirement the Indian Electricity Act 1910 and Indian electricity Rules 1956 framed there under and fire insurance act as applicable and also the relevant regulations of Electric supply authorities concerned as amended from time to time. Extracts from the Indian Electricity Rules 1956 are given in Appx `A" of SSR Part –I in page No 19.41 to 19.46.
- 5.2 The work shall be of high standard and approved construction used in a modern electrical work both as regards design and workmanship. Complete work shall be suitable in every respect of type of voltage specified and shall be to the satisfaction of Engineer-in-Charge.
- 5.3 The electrification work shall be carried out only by licensed wireman under the supervision of a qualified Electrical Engineer. The contractor shall produce (for inspection) license of electrician/wireman if ordered by the Engineer-in-Charge.
- 5.4 Protection of wiring from mechanical damage shall be as per clause 19.119 of MES Schedule Part I

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PARTICULAR SPECIFICATIONS (CONTD...)

- 5.5 Passing of cables through walls, floors etc shall be protected as specified in clause 19.120 and 19.121 of MES Sch Part I.
- 5.6 Safety procedure and practices, fire safety shall be all as specified as described in clause No.19.2.7 and 19.2.8 of MES schedule SSR Part I of 1991.
- 5.7 **Electric Shut Down:** - Electric shut down shall be provided by department for only five hours per day any time between 0930 hrs to 1630 hrs as directed by engineer-in-charge. The contractor shall have to give intimation for providing shut down ten days in advance in writing to the engineer-in-charge.
- 5.8 **Test on Completion:** - The test shall be carried out by the contractor after completion of the work in the presence of the Engineer in charge to his entire satisfaction.

6.0 DEMOLITION/DISMANTLING/TAKING DOWN

- 6.1 Demolition/dismantling/taking down work shall be carried out all as specified in SSR Part I Section 21. Proper precaution shall be taken while demolition and any damage made by the contractor through negligence shall be made good at his own cost.
- 6.2 All materials other than items mentioned in the Schedule of Credit having salvage value shall be handed over to department at MES store yard i.e. place of issue of Sch 'B' stores. However, the demolished materials which have no salvage value as decided by the EIC and rubbish shall be filled in low lying areas or disposed off at the site as directed by EIC.
- 6.3 All dismantled materials as listed in Schedule of Credit shall become the property of contractor. The materials will be removed from the site only after the recovery has been made from the contractor and after obtaining written instructions from EIC.
- 6.4 Demolished surfaces shall be made good by using cement mortar 1:4 as directed by the Engineer in Charge.
- 6.5 All demolished and disposable materials which are not in reusable condition, as mentioned in Schedule 'A' shall be removed, spread and levelled at places at a distance mentioned under Sch 'A' item and all as directed by the Engineer-in-Charge. Debris shall be cleared from the site from time to time as directed by and to the satisfaction of Engineer-in-Charge, failing which the cost of the debris removal as worked out by the Engineer-in-Charge shall be withheld from the next RAR payment due to the contractor. The decision of Engineer-in-Charge on the value of withheld amount shall be final and binding.

7.0 EXCAVATION AND EARTH WORK

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PARTICULAR SPECIFICATIONS (CONTD...)

- 7.1 Excavation shall be carried out as specified in Clauses 3.12 to 3.15 of SSR 2009 Part I and as described in Schedule 'A'.
- 7.2 Filling of spoil in trenches and ramming shall be carried out in layers not exceeding 25cm thick and surfaces left slightly proud of the adjacent ground.
- 7.3 Surplus soil shall be disposed off to a distance not exceeding 50m.
- 7.4 Treatment of top surface of soil shall be carried out as per Clause No 3.26 of MES SSR 2009 Part I
- 7.5 If hard rock/boulder is met at site, Contractor shall immediately notify the fact to the GE in writing and shall be paid as deviation. The rock/boulder so obtained shall be handed over to GE (P) Navy Mandovi, sorted out and neatly stacked as directed by the Engineer-in-Charge, without any extra cost to Government. These rock/boulder so handed over shall be entered in the measurement book duly signed by the contractor, Engineer-in-Charge and the GE.

8.0 PROTECTION OF EXISTING WORK

- 8.1 All pipes, water main cables etc, met within the course of excavation shall be carefully protected and supported without extra cost to the government and shall be deemed to include in the rates quoted for Schedule 'A'.
- 8.2 The rates quoted by the contractor for various items in Schedule 'A' shall be deemed to include for all the contingencies referred above. No claim what so ever will be entertained by the department on this account.

9.0 XLPE LT CABLES

- 9.1 XLPE cable shall conform to IS: 7098 (part – 1) for LT Cables and as specified in clause 19.19.2 to 19.19.2.48 of SSR Part I.
- 9.2 Cable shall be laid in trenches all as specified in Clause 19.74 to 19.81, 19.93, 19.95 and 19.96 of MES Schedule Part I.

10.0 CABLE JOINTS

- 10.1 Jointing work shall be carried out only by a licensed/experienced cable jointer. Sufficient surplus cable approximately 3 metres shall be left on each end of the cable and on each side of underground joints at the time of original installation.

11.0 SAND CUSHIONING

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PARTICULAR SPECIFICATIONS (CONTD...)

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

12.0 PRECAST CABLE COVER

- 12.1 Precast concrete cable covers shall comply with IS 5820-1970, Specification for precast concrete cable covers and shall be of class and type as indicated. The concrete used in the manufacture of cable covers shall be of a grade not lower than M-20.

13.0 CABLES

- 13.1 Cable shall be of sizes and type as described in relevant items of schedule 'A' with multi stranded of copper conductor conforming to specifications laid down in clause 19.25 of MES Sch Part I. Unless otherwise indicated in Schedule, all cable shall be of 1100 volts grade and shall be of such size as to be capable of carrying the maximum current which will normally flow through them without their respective ratings being exceeding laid down in the IEE Regulations. Cables shall be delivered at site in maker's wrappers etc. with the seals intact and shall not be installed unless approved by the Engineer-in-Charge. If cables of sizes specified in Sch 'A' as per relevant IS are not available, cables of equivalent size with identical current carrying capacity and with multi stranded shall be got approved by the Accepting Officer before incorporation in works without extra cost to Government.

14.0 CONDUIT, CONDUIT ACCESSORIES AND CONDUIT WIRING

- 14.1 Non-metallic rigid PVC conduit shall conform to IS: 9537-1983 (Part-III) and Clause No 19.29 of MES Schedule Part I. It shall be of medium grade and bear ISI mark. The diameter of conduit shall be as specified in Schedule 'A'.

15.0 LIGHT FITTINGS

- 15.1 Light fittings shall be of approved make with ISI mark and shall conform to the description given in Schedule 'A'. The rate quoted shall be deemed to include for fixing the fittings and connecting up complete with necessary connectors, cables etc, all as directed by Engineer-in-Charge. The make shall be any one of the make as specified here-in-after.

16.0 STREET LIGHT FITTINGS

- 16.1 Street light fittings along with lamp shall be provided all as specified in Sch A. Fittings shall be of steel and shall comply with the requirements of IS 2149-1970, Specification for luminaries for street lighting. The rate quoted by the contractor shall include the cost of wiring, pipes, earth wires, clamps, nuts, bolts, testing etc., unless otherwise specified.

17.0 HIGH DENSITY POLYETHYLENE (HDPE) PIPE

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PARTICULAR SPECIFICATIONS (CONTD...)

17.1 HDPE pipe shall be as specified in Clause No. 18.6 of MES Schedule SSR Part-I and shall conform to IS 4984-1995.

18.0 TESTING

17.1 All electrical equipment and work shall be systematically tested by the contractor in the presence and to the entire satisfaction of Engineer-in-charge all as specified in MES schedule and in IS. All test results shall be recorded in duplicate and shall be kept in record duly signed by the Engineer-in-charge and the contractor. The contractor shall be liable to supply all apparatus, instruments and labor for testing without any extra cost to the Govt. Certain other tests are also mentioned in clause in SSR& IS.

19.0 RECORD OF INSTALLATION

29.1 On completion of work the contractor shall submit to the Engineer in Charge complete schematic diagram of equipment and connections for route layout plans of underground cables and OH lines work all as per relevant clause of SSR Part-I five sets of plans shall be submitted and it shall be ensured that the plans indicate complete site date of the installation all record submitted by the contractor without any extra cost of department.

20.0 PAID VOUCHERS/ TEST CERTIFICATE/ MANUFACTURER GUARANTEE CERTIFICATE

20.1 The contractor shall produce original with the photostat copies of paid vouchers from the original manufacturers or from their authorized agents for all the materials/as soon as these are purchased and brought at site.

20.2 The contractor shall produce manufacturer's test certificate for the equipment's as soon as the same is brought at site.

20.3 The contractor shall produce necessary test certificates from manufacturer for the parts/spares provided. Contractor shall also produce necessary paid vouchers for the spares/parts procured and fixed duly defaced by Engineer-in-Charge.

20.4 Contractor shall handover Manufacturer Guarantee Certificate/ Card to the Engineer in

21.0 CONCRETE

21.1 Cement concrete shall be of the specified grade or volumetric mix, as indicated. Cement concrete and reinforced cement concrete shall be provided in accordance with IS: 456-

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PARTICULAR SPECIFICATIONS (CONTD...)

2000. Where concrete is specified by its grade, i.e. characteristic strength, determination of proportions of cement, aggregates and water to attain the required strength shall be made by designing the concrete mix (Design Mix concrete) or by adopting a nominal concrete mix (Nominal Mix concrete), as indicated.

21.2 WATER

21.2.1 Water shall conform to the requirement stipulated in IS 456 and as per Clause 4.9 of MES Schedule.

21.3 MIXING DEPOSITING AND CONSOLIDATION

21.3.1 All cement concrete plain and reinforced shall be machine mixed deposited and rammed/ or compacted as specified in MES Schedule. The GE may however approve and mixing for small quantities of work such as bed blocks and cills. Where hand mixing is permitted it shall be taken to ensure that mixing is continued until the concrete is uniform in color and consistency using mechanical vibrator shall be used for compaction in structural concrete. Hand pinning/tamping with rods may be permitted by the GE in location where vibration cannot be used.

21.4 IMPORTANT REQUIREMENT OF REINFORCED CEMENT CONCRETE/ PLAIN CEMENT CONCRETE

21.4.1 All the materials, workmanship inspection and testing for the cement concrete shall be as per requirements given in IS-456-2000.

21.4.2 The contractor shall provide all facilities for casting, curing and conveyance of test cubes of cement concrete to authorized laboratory as approved by the GE for testing as laid down in IS-456-2000 at no extra cost to Government.

21.4.3 Engineer-in-Charge shall maintain a record of actual consumption of cement in proper register (other than the cement register mentioned in (special condition) for all design mix and initial the entry for every change in quality of cement bag.

21.4.4 All cement concrete, both plain and reinforced shall be mixed in mechanical mixer of Hopper type. However, in case of small quantity (i.e.) the quantity of concrete required being less than one batch of mix, the contractor may, after obtaining written permission of the Engineer-in-charge, be allowed hand mixing without any price adjustment. Where hand mixing is permitted, it shall be carried out on a water tight platform and care shall be taken to ensure that mixing is continued until the concrete is uniform in color and consistency. However, all design mix concrete shall be weighing batched and volumetric conversion will not be permitted.

PARTICULAR SPECIFICATIONS (CONTD...)**21.5 COMPACTION**

21.5.1 Concrete should be thoroughly compacted and fully worked around the reinforcement, embedded fixtures and into corner of the form work. Internal vibrators (needle vibrator) shall be used for compaction of RCC beams, columns and the slabs of thickness more than 150mm. For slab of thickness up to 150mm, screed vibrator (surface vibrator) shall be used for effective compaction.

22.0 CEMENT

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

22.2 Type of cement for the subject work shall be Ordinary Portland Cement, grade 43 (forty-three) in accordance with IS-8112-1989, contractor may be permitted to use ordinary Portland Cement Grade 53 (fifty-three) in accordance with IS No 12269-1987, also without any extra cost to the Government.

22.3 SOURCES OF PROCUREMENT

22.3.1 Cement shall be procured by the contractor from any of main producers/manufactures of cement listed here-in-after. However, where estimated requirements of cement for this work is less than 1200 bags, the Contractor can procure cement from the authorized distributors / dealers of approved firms but the Contractor will have to submit test certificates of the batch issued by the main producers. The particulars of the main manufacturers of cement along with the date of manufacture shall be obtained from the Contractor for every lot of cement separately. The documents in support of the purchases of cement shall be verified by the site staff and GE.

22.3.2 The contractor shall furnish the particulars of the manufacturer of cement along with the date of manufacturing of cement to the Asst Garrison Engineer for every lot of cement separately.

22.3.3 For each lot of cement brought by the contractor, before acceptance of the cement the following actions will be taken by the GE/AGE (I) and Engineer-in-Charge: -

- a) Inspect the lot and verify the General conditions of the cement.
- b) Obtain the vouchers (IN ORIGINAL) of the manufacture of cement for each lot containing the date of manufacturing, from the contractor.

PARTICULAR SPECIFICATIONS (CONTD...)

- c) Obtain from the contractor for each lot of cement the manufacturer's Test Certificate (IN ORIGINAL) along with Test Sheets giving the result of each physical test and chemical composition of cement or authenticated copy thereof duly signed by manufacturer. The Test Sheet should include the results of the following mandatory test: -
- i. Specific surface by Blain's air Permeability method.
 - ii. Soundness Test by Le" Chatelier method
 - iii. Initial setting time
 - iv. Final Setting time
 - v. Compressive strength test at 3,7 & 28 days as specified in the relevant IS code
 - vi. The test report should also show the chemical properties of the cement as per relevant IS Codes
- (d) Verify the documents listed at Clause Nos 22.3.3(b) & (c) above given by the contractor from the manufacturer.

22.3.4 The cement so brought shall be fresh and in no case older than 60 days from the date of manufacture. The GE/AGE (I) accordingly in consultation with the contractor will work out the Schedule of procurement and ensure that the same is adhered to. This Schedule should be vetted by GE from time to time. The document in support of the purchases of cement shall be verified by the Garrison Engineer. Before placing the order for supply of cement by the contractor, he shall obtain written approval from the GE/AGE (I) regarding name of manufacturer, quantity of cement etc. Cement shall be procured for minimum requirement of one month and not procured for minimum requirement of more than two months at a time and should match with the physical progress of the work. The cement shall be consumed in the work within three months after receipt. Cement shall conform to the requirement of Indian Standard Specification and each bag of cement shall bear relevant ISI mark. The weight of each consignment shall be verified by the GE/AGE (I) and recorded. The content of cement shall be checked at random to verify the actual weight of cement per bag. However, the content of cement per bag shall be 50 Kg only subject to tolerance given in relevant IS code.

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

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

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PARTICULAR SPECIFICATIONS (CONTD...)

22.3.6 The test certificate and test sheet shall be furnished with each batch of manufacture. The Engineer-in-Charge shall record these details in cement acceptance register to be maintained by him which will be signed by Junior Engineer (Civil), Engineer-in-Charge, Garrison Engineer and the contractor as given in the format here-in-after for verification.

22.3.7 In case, the contractors are procuring cement from authorized distributors/dealers of approved make, test certificate issued by the factory for the particular batch shall be produced, if not independent testing as per IS 4031 (method of physical test for hydraulic cement is mandatory).

22.4 STORAGE/ACCOUNTING/PRESERVATION OF CEMENT

22.4.1 Cement shall be stored in covered godown over dry platform at least 20cm high in such a manner as to prevent deterioration due to moisture or intrusion of foreign matter. In case of store room, the stack should be at least 60cm away from floors and walls. Different lots of cement received will be stacked separately. The stacking of cement shall be done as specified in relevant IS. The storage, accounting and preservation of cement supplied by the contractor shall be done as per standard engineer practice till the same is incorporated in the work and the cost of the same shall be deemed to be included in the unit rate/amount quoted by the tenderer. The Engineer-in-Charge shall inspect once a day to verify that cement lying at site is stored, accounted, preserved and maintained as per the norms. If the GE/AGE (I) is not satisfied with the storage/age/preservation of cement, he may order for any test(s) of cement as applicable for that consignment to ensure its conformity to the quality mentioned in the manufacturer's test certificate. The contractor shall bear the cost of necessary testing(s) in this regard and no claim whatsoever shall be entertained.

22.5 SCHEDULE OF SUPPLY

22.5.1 The contractor shall procure the cement timely as required in accordance with CPM chart agreed between GE/AGE (I) and the contractor. The contractor will forfeit his right to demand extension of time if the supply of cement got delayed due to his failure in placing order in time to the manufacturer.

22.6 MEASUREMENTS AND PAYMENT OF CEMENT

22.6.1 The entire quantity of cement shall also be suitably recorded in the Measurement Book for record purposes as 'Not to be abstracted' before incorporation in the work and shall be signed by the Engineer-in-Charge and the contractor.

22.7 ACCEPTANCE /REJECTION OF CEMENT

22.7.1 The contractor will keep a separate stack of cement brought at site for inspection, away

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PARTICULAR SPECIFICATIONS (CONTD...)

from the accepted lot of cement. In case the new lot is rejected by the GE/AGE (I) it will be removed from the site with 24 hours, at the cost of the contractor. The cement may be rejected if it does not comply with any of the requirements as per relevant IS codes. The cement should be weighed and each bag shall be of nominal average net mass of 50 Kgs. The tolerance on weight of the cement shall be as per the relevant IS codes.

23.0 AGGREGATES

23.1 Coarse aggregate shall be graded crushed or broken hard granite stone obtained from approved quarries and shall comply to the requirements specified in MES Schedule Part I clause 4.4 to 4.4.7.3.

23.2 GRADING OF COARSE AGGREGATE

23.2.1 Graded aggregate of nominal sizes given here under shall be used unless specified otherwise: -

- (a) All reinforced cement concrete: - Size shall be as per IS-456, but in no case more than 20 mm.
- (b) PCC in foundation of brick/stone wall pillars, floors and sub base to floors: -
 - i) Up to and incl 30 mm thickness : 12.5 mm
 - ii) Over 30 and up to and incl 75 mm thickness : 20 mm
 - iii) Exceeding 75 mm thickness : 40 mm

23.3 FINE AGGREGATE

23.3.1 Fine aggregate for concrete work shall conform to material specifications and grading within the limits of grading zones II and III all as specified in Clause 4.4 of MES Schedule Part I.

23.3.2 Contractor may use manufactured sand produced from hard granite/basalt/black trap stone having cubical shaped particles with grounded edges of ground gradation zone II/III as per IS: 383-1970. In market it is known as M-sand / Robo Sand / i-sand etc.

23.3.3 Manufactured sand shall be used only in concrete and masonry works. For plastering, river sand shall only be used.

24.0 CEMENT BASED PAINT

24.1 Cement based paint of approved make shall be applied as directed by EICas specified in clause 15.15 of MES Schedule Part I.

24.2 The tint of the paint shall be as directed by the GE. The paint shall be of first quality and shall conform to relevant IS.

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24.3 Silicon based water repellent compound need not be used separately while preparing of cement-based paint, in case, the same has been added by the manufacturer while manufacturing of cement-based paint. This shall be as per manufacturer's literature.

24.4 Primer shall be of the same manufacturer/make of cement base paint as approved by GE.

25.0 LIST OF MANUFACTURERS

25.1 The make of various items of materials are as under. The contractor shall ensure that the items of these makes only are incorporated in the works which conform to the relevant specifications/requirement/stipulations in the contract. Other products which are equivalent in the specification having IS certificate shall be permitted in the work if approved by GE.

SI No.	Description of item	Name of Manufacturer / Brand
1.	UG LT XLPE, PVC Insulated Aluminium Conductor for 1100 Volts	M/s Cable Corporation of India, Mumbai (CCI); Asian Cable Co, Chhattisgarh; M/s Finolex Cable Ltd Pune (Finolex); M/s Polycab Pvt Ltd (Polycab); M/s Gloster (Gloster); M/s Universal Cables Ltd (Universal); M/s RR Kabel; M/s RPG Cables Ltd, Thane (RPG Cables); M/s Havells India Ltd (Havells); M/s KEI India (KEI); M/s Plaza Cables (Plaza); M/s Grandlay Electricals India; M/s Paragon Cable India; M/s HPL Electric & Power Ltd (HPL); M/s V-Guard Industries Ltd (V-GUARD); M/s Asian Galaxy Pvt Ltd (Asian Galaxy); M/s Pymen Cables (India); M/s Vishal Cables (Vishal); M/s Ultracab (Ultracab)
2.	PVC Insulated Copper/ Aluminium Cables 1100V of all types	Plaza; Finolex; Anchor; Havells; Nicco; Polycab; RPG; Gloster; RR Kabel; M/s KEI Industries Ltd (KEI); M/s HPL Electric and Power Ltd (HPL); M/s Paragon Cable India; M/s Paraflex; M/s GM Modular Pvt Ltd; M/s Dneo Cables Pvt Ltd; M/s Grandlay Electricals India; M/s V-Guard Industries Ltd (V-GUARD); M/s Asian Galaxy Pvt Ltd; M/s Fortune Arts Wires & Cables Pvt Ltd (FortuneArt Cable); Kalinga; CRI; M/s V K Industries (VINAY); M/s Cosmo Electric India Pvt Ltd (KOLORS); Preefit; Tamara; M/s Bonton Cables (India) Pvt Ltd; Tamra

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SI No.	Description of item	Name of Manufacturer / Brand
3.	Cement	1. "ACC" by M/s The Associated Cement Companies Ltd, Jasola New Delhi; 2. "ULTRATECH" by M/s Ultra Tech Cement Ltd, Mumbai; 3. M/s The India Cement, Chennai; 4. "DALMIA INFRA PRO" by M/s Dalmia Cement (Bharat) Ltd, Tiruchirappalli; 5. "CENTURY" by M/s Century Cements, Mumbai; 6. "SAURASHTRA" by M/s Saurashtra Cement, Andheri (East), Mumbai; 7. "RAMCO" by M/s Ramco Cements Ltd (Formerly Madras Cement), Mylapore, Chennai, 8. "MANGALAM" by M/s Mangalam Cement Ltd, Kota Rajasthan; 9. "BIRLA" by M/s Birla Corporation Ltd, Kolkata; 10. "BIRLA-A1" by M/s Orient Cement, Hyderabad; 11. "NUVOCO" by M/s Nuvoco Vistas Corporation (Formerly M/s Lafarge Cement), LBS Marg, Kurla (West), Mumbai; 12. "SHREE" by M/s Shree Cement, Ajmer, Rajasthan; 13. "J K" by M/s JK Cement, Kanpur; 14. "J K LAKSHMI" by M/s JK Lakshmi Cement Ltd, Rajasthan; 15. "JAYPEE" by M/s Jaypee Rewa Cement, Rewa, MP; 16. "AMBUJA" by M/s Ambuja Cement Ltd, Junagadh, Gujarat. 17. "BIRLA SHAKTI" (OPC 43, OPC 53 & PPC) by M/s Kesoram Industries Ltd, Telangana (upto Dec 2024) 18. "SAGAR" (OPC 43, OPC 53, PPC & PSC) by M/s Sagar Cements Ltd., Jubilee Hills, Hyderabad (Upto Aug 2025) 19. "MAHA CEMENT" by M/s My Home Industries Ltd, Madhapur Hyderabad; (PSC, OPC 43 and PPC upto Oct 2027)

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PARTICULAR SPECIFICATIONS (CONTD...)

Sl No.	Description of item	Name of Manufacturer / Brand
4.	Street Light fittings (LED)	M/s Bajaj (Bajaj); M/s Phillips (Phillips); M/s Crompton (Crompton); M/s Havells India Ltd (Havells); M/s Jaquar (Jaquar); M/s Orient Electric (ORIENT); M/s Gold Medal Electrical (Goldmedal)
5.	Light fittings LED	M/s Bajaj (Bajaj); M/s Phillips (Phillips); M/s Crompton (Crompton); M/s Havells India Ltd (Havells); M/s Jaquar (Jaquar); M/s Orient Electric (ORIENT); M/s Gold Medal Electrical (Goldmedal)
6.	PVC conduits (Rigid or Flexible)/ FRLS Rigid PVC Conduits/ fittings	Anchor; Modi; Presfit; Precision; Astral; M/s Panasonic Life Solutions (Panasonic Anchor); M/s Polycab Wires Pvt Ltd (Polycab); AKG; Plaza; Kaliga; National Pipe Products (VIP); M/s GM Modular Pvt Ltd (GM); M/s VIP Extrusions (ATUL); Avonplast; M/s Asian; M/s Bajaj Plast
7.	Junction Boxes	National; Sintex; Hensel
8.	Precast Concrete Cover Slab	M/s Mehtab; Tiles; M/s Lucky Cement Block Works (LC); M/s Sukhi Enterprises
9.	HDPE Pipes & Fittings	Finolex; Prince; Supreme; M/s Jain Irrigation Sys; Kisan; M/s R.C. Plasto Industries; Tirupati
10.	Cement Based Paint	M/s Super Snowcem; M/s Duracem; M/s Aquacem; M/s Shalimar Paints; M/s Berger Paints; M/s Asian Paints; M/s Acrocem; M/s Nltco Mumbai; M/s Jenson &- Nicolson

Signature of Contractor

AGE (Contracts)
For Accepting Officer