

Tender Details		05-02-2024 05:43:41
Tender Code	SE/Akl/T/DyEE-I/23-24/T-09 R	
Tender Type	Works Tender	
Type Of Bid	Two Bid	
Description	Manufacture and Supply of 8 mtr. /140kg & 9 mtr. / 200 kg Prestressed Cement Concrete Poles as per REC designs anywhere in Akola Circle under Akola Zone	
Estimated Cost (In Lakhs)	10	
Basis of prices	NA	
Tender Validity	NA	
Delivery Requirement (In Months)	NA	
Tender on rate contract basis	NO	
Tender Fee (In INR)	1000	
GST In INR (@18% on Tender Fee: SAC No.	180	
Total Tender Fee Amount including GST in INR.	1180	
Contact	Jyoti S Sambhe , 7875763337 ,seakola@gmail.com	
Pre-Qualifying Req	As per tender qualifying criteria	
Budget Type	Revenue	
Scheme Code	NA	
Scheme Name	NA	
Department	Works Department	
Office Type	CIRCLE	
Location Type	Akola Circle	
Designation	Deputy Executive Engineer(Distribution)	
Pre-Bid Meeting Address	The Superintending Engineer, O&M Circle, MSEDCL, Akola.	
Bid Opening Address	The Superintending Engineer, O&M Circle, MSEDCL, Akola.	
Version No	1	
Call for Deviation	NO	
Is Annexure C1 Applicable	NA	
Is Manufacturer Applicable	NO	
Is Trader Applicable	NO	
Minimum % of Offered Quantity	NA	
Is Power Supplier Applicable	NO	
Tender Sale Start Date	06-02-2024 11:00	
Tender Sale End Date	15-02-2024 15:00	
Bid Start Date	06-02-2024 11:30	
Bid End Date	15-02-2024 17:30	
Pre-Bid Meeting Date	12-02-2024 11:00	
Techno-Commercial Bid opening on	16-02-2024 11:00	
Price Bid opening on	19-02-2024 11:00	

Annexure C1 Opening Date	NA
Winner Selection Date	19-02-2024 15:00
Can Bidder Opt EMD Exemption	N

SE/Akl/T/Dy.EE-I/T-09 R (23-24)



**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED**

**TENDER SPECIFICATION NO. SE/Akl/T/Dy.EE-I/T-09 R (23-24)**

**TENDER FOR**

***Manufacture and Supply of 8 mtr. /140kg & 9 mtr. / 200 kg Prestressed Cement Concrete Poles as per REC designs anywhere in Akola Circle under Akola Zone***

**ESTIMATED COST Rs. 10,00,000/-  
(excluding GST)**

**e-TENDER SUBMITTED BY**

**M/S** \_\_\_\_\_  
\_\_\_\_\_

**Earnest Money Deposit: Rs. 10000/-**

**Date of sale opening: 06.02.2024 to 15.02.2024**

**Due dt of submission: 15.02.2024 Up to 17.30 Hrs.**

**Pre-bid meeting – Dt. 12.02.2024**

**Tech bid opened on Dt. 16.02.2024 at 11.00 Hrs.**

**Commercial bid opened on Dt. 19.02.2024 at 11.00 Hrs.**

**To be submitted: - On-line on Web site [www.etender.mahadiscom.in](http://www.etender.mahadiscom.in)**

**Superintending Engineer, O&M Circle, MSEDCL,  
1st floor, Vidyut Bhavan, MSEDCL,  
Durga Chowk Akola.**

**TENDER PRICE - Rs. 1180.00 (Including 18% GST)**

**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION COMPANY LTD.****BID NO. –I**

**Pre-qualification tenders for the manufacture and supply of 8m/140Kg & 9m/200 kg PSC Solid Poles as per REC design anywhere in *AKOLA CIRCLE* in Maharashtra State.**

**TABLE OF CONTENTS**

<b>Sr.No.</b>	<b>Description</b>	<b>Page No.</b>
<b>1.</b>	<b>e-Tender Notice</b>	<b>3</b>
<b>2.</b>	<b>Prequalifying Documents Required for Eligibility</b>	<b>4</b>
<b>3.</b>	<b>Instructions to tenderers</b>	<b>5-7</b>
<b>4.</b>	<b>Bio-data &amp; Questionnaire (Documents to be submitted)</b>	<b>8-10</b>

## **BID- I**

### **Pre qualifying Documents:**

Scan copies of following documents shall be uploaded.

#### **A) Compulsory**

- 1) **Paid EMD** Money receipt (Upload transaction receipt in case of online payment).
- 2) **GST Registration certificate** (If the agency has applied for GST registration, he acknowledgment receipt shall be uploaded)
- 3) **Valid Solvency certificate** from any Nationalized/Schedule Bank of **20% of the estimated cost of tender.**
- 4) **Provident Fund registration certificate**
- 5) I.T returns filled of **Latest/last financial year**
- 6) **Vendor Approval by MSEDCL**
- 7) **Poles should not be supplied before inspection of Civil Division, MSEDCL.**

#### **B) Secondary**

- 7) Partnership deed (If applicable)
- 8) Details of Infrastructure – plan of factory, T&P, etc.
- 9) Bio-date questionnaire as given in this tender document. –**Mention clearly the site of factory /Depot from where the supply will be made.**

**Note :-** EMD can be paid online/ in cash/ D.D. in the Office of The Superintending Engineer, O&M Circle, MSEDCL, Akola before opening of tender. **If the same is not received by this office, concerned tender will be rejected un-conditionally.**

Interested tenders shall please note that e-copy of following documents to be submitted under pre qualifying **bid 1** duly digitally signed & shall keep ready originals of all above documents & if required by tender scrutiny authority/committee of MSEDCL same shall be immediately provide before them, for verification of documents. If any agency fails to provide original documents on request of MSEDCL, his price bid will not be considered & liable for rejection.

**Superintending Engineer,  
O&M Circle, MSEDCL, Akola.**

**INSTRUCTIONS TO TENDERERS:-**

- 1) Tenders for manufacture and supply of PSC poles as per REC design of 8m/140 Kg & 9m/200 kg. used as conductor supports for transmission and distribution of LT and HT power lines are called on **item rate basis** from tenderers who pre-qualify for the purpose. The tenderers are required to specify their qualification in the questionnaire and also furnish other pre-requisites called for to enable evaluation of their capacity in the field of manufacture of PSC poles of similar products.
- 2) The qualifying tenderer shall have an established PSC pole factory or a factory premises with a manufacturing process suitable for conversion to a pre-stressed, pre-cast concrete manufacturing unit, either owned /leased/hired or exclusively under his control and the same shall be situated either in the specific location, for supply of poles as required. The period of lease and hire agreement should be one year more than time of contract period.
- 3) All the interested tenderers who have registered on MSEDCL web site [www.etender.mahadiscom.in](http://www.etender.mahadiscom.in) shall read carefully all the prequalifying documents requirements & fill up the prequalify bid No.1 online duly digitally signed and completing the requirement of documents as per prescribed proforma.
- 4) In case of those contractors who are not able to fulfill prequalifying document requirement or those who will not quote the such references or furnish the details of tender fee & EMD etc, such tenders will be rejected and their second bid i.e. price bid will not be considered.
- 5) Second bid i.e. price bid of only those contractors will be considered, who complete or qualify after first prequalifying bid.
- 6) All the original documents shall be immediately produced before tender processing committee for necessary verification, failure of which will liable for rejection.
- 8) Objections if any from other agencies who have submitted their offers, after opening must be submitted in writing only on the day of actual opening of tender through e- process or max up to next working day. Complaints/ objections in any form afterwards will not be entertained.

**8) Price variation clause & arbitration clause are not applicable in this contract. Right to reject any or all tenders without assigning any reason whatsoever is reserved by the undersigned.**

**9) MONETARY CONDITIONS GOVERNING SUPPLY.**

As already indicated, no financial assistance would be offered to the qualifying tenderer and all funds required for the purchase/lease of the plot and / or establishment of the manufacturing process and the factory shall be required to be arranged by him.

10) All raw materials including consumables required in the manufacturing process, such as cement, H.T. wire, G.I. wire, annealed wire, anchors and wedges as also steel moulds sand, water, metal, oil etc. shall be required to be purchased and utilized from time to time by the qualifying tenderer. MSEDCL will not issue any material for manufacturing process.

**11) ESTABLISHMENT OF FACTORY/ DEPOT FOR DELEVERY OF POLES**

As already stated, **the tenderer should have either established pole factory or a depot at suitable location in identified districts** as brought out in the Schedule 'C' of the tender and shall obtain all way leaves/permission/license/registration etc. required from the Authorities direct in their name only.

**12) FACTORY INSPECTION.**

Notwithstanding anything contained herein, the Executive Engineer (Civil) reserves the rights to assess the capacity and capability of performance of any tenderer by the information furnished in this tender document or from additional information as could be collected by him, and he cannot be called to question at any stage of selection of a party for placement of orders. On the same line, even discontinuation of supplies by cancellation of orders may also be effected.

**A) For bidder having existing pole factory.**

i) Capacity of the factory for supplying shall be min. 300 poles/p.m. as mentioned the size/details of poles as per tender specification.

**ii) Location of Factory.-**

Factory/ Depot should be located at a suitable location in identified district at a geographical location so that the carting distance throughout the district should be around 0 - 60 Kms. (preferably) in exceptional cases 80-85 Kms.

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

- iii) The factory should be preferably located at the road side of National Highway/ State Highway/ Major Dist. Road.
- iv) The factory should be equipped with all required pole casting bed/mixers/tension Machine, curing ponds, gantries, for loading and unloading of poles, pole testing equipment's, stacking yards, cement go-downs having adequate storage capacity, repairing workshop, broken pole dumping yard and cube testing machine and any other infrastructure required for smooth and quality production of poles.

**B) The bidders having no existing pole factory in the specific location of the identified districts but having a depot for delivery of poles.**

- i) The depot should be located at geographical location as stated under A (ii) & (iii) above.
- ii) The depot should have a stacking capacity of about 1000 poles at a time.
- ii) The depot should be equipped with gantries for loading and unloading of poles, pole testing equipment's for testing of poles as per I.S. requirement.

**13) The right to reject any or all tenders without assigning any reason thereof, is reserved with the company.**

**Superintending Engineer,  
O&M Circle, MSEDCL, Akola.**



**BIO-DATA QUESTIONNAIRE—(to be uploaded duly filled in along with qualifying documents.)**

**Tenderer shall fill in the following questionnaire and certify as mentioned herein. Tenderer shall also attach additional sheets if the column space available is insufficient, along with schedule called for in true copies duly certified.**

1. Name of the firm :
2. A) Registered Address :
- B) Registration No. with MSEDCL :
3. Local Address :
4. **Whether factory for manufacture of  
PSC poles or any other cement product  
Is existing/OR depot in the required area.** :
- a) If yes, the installed production capacity :
- b) MSEDCL may require the poles immediately/  
after 1 month from the date of LOI @ 300 poles/month.  
Whether the tenderer is able to  
comply the requirement.
5. Details as to the location map, factory layout :  
giving indications of space and facilities available  
such as number of beds, curing ponds, tools and  
plants, machinery such as mixers, cube  
testing machine, prestressing machine, pole  
testing, stacks yard etc. also be submitted.
6. Whether the Tenderer agree to the commercial :  
terms and conditions of MSEDCL, as stipulated  
the tender.

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

7. **Location from where the Supply will be made.**
8. Minimum and maximum number of poles :  
Can be supplied by the tenderer annually and also the average and minimum per month.
9. Names of Directors / Partners (if partnership :  
firm, attach partnership deed)
10. Names of technically qualified persons who :  
would head the existing /proposed Pole  
Factory.
11. His qualification & experience in this field.:
12. Skilled/ Unskilled persons working in :  
existing unit.
13. Registration Details
  - a) (Under Factory Act/ Workman :  
Compensation Act./ Engagement of Labour Act/  
Godown Workers Act, S.S.I./M.S.I./P.F. Act/  
Works Contract Act.)
  - b) S.S.I. Registration whether you are :  
registered as a small scale industry to  
manufacture the prestressed Concrete  
Poles/products.
  - ii) Please quote the authority with whom you :  
are registered & quote your registration No.  
and Date.
  - iii) **Please quote the date upto which your :  
Registration is valid/** (enclose Photostat  
xerox copies of your valid S.S.I. Registration  
Certificate. Please note that if copy of valid  
S.S.I. Registration is not Received, you shall  
not be entitled for concessions applicable to  
S.S.I. units)
- 14 A) SICOM/ REGIONAL DEVELOPMENT  
AUTHORITY ELEFIBILITY  
Whether you hold valid eligibility Certificate :  
of SICOM/ Regional Development Authority  
under Package scheme of graded incentives.  
If so enclose copy of eligibility Certificate.

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

15. Tax Assessment details/ Registration/ :  
Exemption (GST).
16. Bankers
17. Solvency Certificate (including certificate :  
from Bankers certifying financial soundness)
  - 1) I hereby certify that the information given above is true to the best of my knowledge and belief.
  - 2) The true copies of the licenses /returns mentioned above are enclosed.

**SIGNATURE OF TENDERER**

**BID NO.II****TENDER FOR MANUFACTURE AND SUPPLY OF 8M/140Kg & 9 M/200 Kg PRESTRESSED CEMENT CONCRETE POLES TO *AKOLA CIRCLE*****I N D E X**

<b>Sr. No.</b>	<b>Description</b>	<b>Page No.</b>
1.	INSTRUCTIONS TO TENDERERS	11-13
2.	SPECIAL CONDITIONS OF CONTRACT	14-16
3.	TECHNICAL SPECIFICATIONS	17-21
4.	TEST REPORT FORMAT – 8.0m/140Kg Pole	22-23
5.	TEST REPORT FORMAT – 9.0M/200Kg Pole	24-25
6.	DESIGN DATA – 8.0m/140Kg pole	26
7.	DESIGN DATA - 9.0/200 Kg Pole	27
8.	GENERAL GUIDELINES FOR CONSUMPTION OF MATERIALS FOR – 8.0m/140Kg	28
9.	GENERAL GUIDELINES FOR CONSUMPTION OF MATERIALS FOR – 9.0m/200Kg	29
10.	SCHEDULE “B” - 8.0m/140Kg & 9.0m/200 Kg	30
11.	DRAWINGS OF 8 MTR PSC POLES.	31
12.	DRAWING OF 9 MTR PSC POLES	32

**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.**  
**INSTRUCTIONS TO TENDERERS**

1. MSIEDCL intends to tie up with suitable agencies who can supply prestressed cement concrete poles of size 8m/140Kg & 9m/200 Kg to meet the pole requirement of **AKOLA CIRCLE** either from the existing established pole factory or from depot, as brought out in the notice inviting e-Tender. The supply of poles shall be made either ex-factory or ex-depot existing at suitable location in the identified districts.
2. e-Tender is invited from established pole factory owners and experienced manufacturers in prestressed cement concrete poles/products having adequate infrastructure.
3. The tenderers are required to manufacture and supply 8m/140Kg & 9m/200 Kg prestressed cement concrete poles as mentioned in the schedule B as per prescribed REC design and technical specification and drawings attached with the tender, over a period of one year.
4. The delivery of pole shall commence immediately from the receipt of the order and the entire quantity of poles as ordered shall be completed within **02 months** thereafter including curing, testing etc. of the last lot of production. No extension of the delivery period shall be considered. The contractor shall complete the delivery of poles as per Schedule 'C'. In the event of short delivery, if any, within the stipulated time, the contract shall be treated as closed on the original due date of completion. In case the entire supply is completed before the Scheduled date, this date shall be considered as the date of completion and the contract will be closed.
5. Exemptions given to SSI Units for remittance of EMD in respect of purchase of Tenders are not applicable to this supply contract.
6. The Tenderers shall quote their rates for supply of poles Ex- their existing factory / depot required for each districts, in schedule 'B'.
7. The successful tenderer will have to pay **Security Deposit amounting to 10 %** of tendered value in the form of cash/ **FDR of any Nationalized bank** within 07 days of the receipt of LETTER OF INTENT, failing which no order will be issued. Failure to furnish the prescribed Security Deposit shall entail cancellation of LETTER OF INTENT and forfeiture of earnest money.
8. Tenderer shall upload the tender with the specification and schedule of quantities and rates, drawings and other schedules duly digitally signed. Any tender not bearing the signatures of the tenderer on all the documents accompanying the tender, is liable to be rejected.
9. Tenders which do not fulfill all or any of the above conditions or which are incomplete in any respect are liable for summary rejection.
10. Before uploading the tender offer by e-process, which shall be for the finished pole, the tenderer shall examine closely and in detail the specifications, terms and conditions, delivery schedule etc. and carefully study the drawings and all documents which form part of the contract to be entered into by the successful tenderer.

11. Uploading of a tender by the tenderer implies that he has read the Instructions and conditions of contract etc. and has made himself aware of the scope and specifications, local conditions and other factors having bearing on the execution of contract or supply.  
MSEDCL will not, however, after acceptance of contract rate, pay any extra charges for any other reasons, in case, the tenderer is found, later on, to have misjudged himself.
12. The tenderer shall arrange for transport of all materials and include all such cost in the rates quoted by him for the supply of finished poles. The tenderer shall make his own arrangements for the supply of wagons, if required by him, for the transport of his materials.
13. A schedule of quantities is included in the tender documents. It shall be clearly and definitely understood that the MSEDCL does not accept any responsibility for the correctness or the completeness of this schedule, which is liable to alteration by omission, deduction or addition at any stage at the discretion of Superintending Engineer O&M Circle, Akola as set forth in the conditions of the contract.
14. The tenderer shall furnish along with the tender, information regarding the manufacture of prestressed concrete poles carried out by him in any other department and submit copies of certificates in the proof thereof.
15. Rates shall be quoted for the supply of poles as required for the district in Schedule B. **The rates shall be written in both figures and words.** The tender documents shall be written legibly and shall be free from erasers, over-writing or correction of figures. Correction where unavoidable shall be made by crossing out, initialing dating and rewriting.
16. The Maharashtra State Electricity Distribution Co. Ltd. or its Officer who accept the tender shall have the right for rejecting all or any of the tenders and will not be bound to accept the lowest tender or to assign any reason, whatsoever for the rejection of any tenders or all tenders. The authority accepting this tender will reserve the right to decide placing of order for such quantity considering the production capacity and other related performance. The tenderer on his part binds himself to supply any quantity so decided by the MSEDCL from his offer in part or whole, at the option of the MSEDCL.
17. The tenders shall remain open for acceptance subject to provision of Clause No.17 above, for a period of 4 (four) months from the date of opening in accordance with the Clause No. 17 or any other extended date for their receipt and during this period no tenderer shall be allowed to withdraw his tender. Any such withdrawal during the said period shall entail forfeiture of earnest money deposit.
18. The tender shall be accompanied by solvency certificate (in original) to the extent of 20% of amount of tender cost issued by any Nationalized /Scheduled Bank in favour of the tenderer to be obtained from one Bank only without which tender will not be considered. The existing manufacturers and suppliers to erstwhile MSEB and now the Company are exempted from submission of solvency certificate.

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

- 19 All royalties are required to be paid by the tenderers as also tolls, local taxes, licence fees , etc. if any and the same shall be deemed to have been included in the tendered rates. All registers, Record and accounts in the prescribed proforma pertaining to statutory payments shall be maintained up to date by the contractor. The statutory requirements of Excise Department such as auditing/costing by Chartered Accountant etc. shall be complied with by the contractor. All the statutory licenses as per Act of Central/state Government/ Local Bodies are required to be obtained by the contractors in their name without any liability to the MSEDCL. The contractor shall avail all benefits/incentives for the payment of statutory taxes being made available to their units by the Central/State Government from time to time and pass on the same to the MSEDCL.
- 20 These instructions to the tenderers shall also form part of the contract.
- 21 Tenders having conditions, which are at variance with the MSEDCL's standard terms and conditions, shall be summarily rejected.
- 22 GST will be applicable as per prevailing Govt. rules

**NOTES:**

Special attention is invited to the requirement that all corrections must be initialed and dated by the tenderer and that all the pages shall require the digital signature of the tenderer at the foot of each page.

**Superintending Engineer,  
O&M Circle, Akola.**

Digital - Signature, Name and Address  
of the Tenderer.

**Dated:**

**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.****SPECIAL CONDITIONS OF THE CONTRACT****1. Scope of Contract.**

The tenderers are required to manufacture and supply of 8m/140Kg & 9m/200 Kg Prestressed cement concrete poles as per prescribed REC design, technical specifications and drawings attached with the tender, over a period of **TWO months** to **AKOLA CIRCLE** in the state of Maharashtra.

**2. Time Limit: - 02 (TWO Months) Calendar months** from the date of supply order.**3. Security Deposit.**

The successful tenderer will have to pay security deposit amounting to **10% of** tendered value in the form of **cash/ FDR of any Nationalized Bank** towards the performance of the contract. The Security Deposit is payable in the office of the Executive Engineer CCCM Division, **MSEDCL Akola**. Non-remittance of the same shall entail forfeiture of the earnest money deposit in full. In the event of the failure to execute the order/non fulfillment of the terms and conditions of contracts, security deposit shall be liable to be forfeited or apportioned towards amount due or becoming due from the contractor.

**4. Departmental Supply of Materials.**

No departmental supply of material will be made to the contractor under this tender and they will have to arrange for procurement of the same.

**5. Tax /Royalties etc.**

a) **Raw materials:** All levies such as Royalty or any other duty payable for the materials required for the manufacture of the poles shall be borne by the contractor. The element of tax shall be deemed to have been covered in the rate quoted by the tenderer and any concessions / set off available should be considered while quoting the rates. All amounts due on this account shall be paid to the appropriate authorities directly by the contractor. In case the above levies are not paid by the contractor, the same shall be Recoverable, in case of demand from the concerned authorities. The contractor shall not be entitled for any refund on this account in such cases.

b) **Finished Poles:** The statutory levies taxes shall be paid by the MSEDCL, if applicable, on finished poles at the scheduled rate, **provided mentioned specifically in schedule B.**



**6. Schedule of Manufacture/Delivery of Poles and Penalty**

The contractor shall maintain the average production of poles as per requirement and in no case the production and delivery of poles shall be less than minimum stipulated in the schedule. In case the contractor fails to maintain the minimum level of production and delivery, penalty shall be levied upto ½% (half) percent of the value of the undelivered portion of supply per week or part thereof subject to a maximum of 10% of the contract value, save for the loss of production on account of the following reasons:

- a) Non-lifting of poles by the MSEDCL resulting in accumulation of more than 300 poles at a time and closure of production thereof.
- b) Heavy rainfall in the area, which has paralyzed the production schedule (to be supported with documents).
- c) Force majeure viz. natural calamities.
- d) General strike of essential services such as transport railway and traders.
- e) Shortage of water supply in the vicinity of contractor's factory due to acute drought conditions (to be supported by certificates from the Revenue authority).

**7. Specification of Poles.**

The manufacture and supply of poles shall be carried out in accordance with the REC design, specification and drawings appended with this tender and also as per instructions given at site by the MSEDCL's Engineer. The poles which do not stand the prescribed test as detailed under technical specifications appended herewith shall be rejected.

**8. Subletting of Contract**

The contract or any part thereof shall not be assigned or sublet without the written permission of the RED-III, Nagpur. In case such permission is granted, the responsibility for executing the contract according to the specifications and within the stipulated time shall be entirely rest with the successful tenderer.

In respect of the subletting of work in terms of labour contract, if any, it shall be sole responsibility of the MSEDCL's main contractor to guard that none of the requirements of the Maharashtra Contract Labour (Regulation and Abolition) Act and Rules (1971) get infringed. The contractor shall indemnify the MSEDCL in respect of any action that may be brought by the Government against the MSEDCL, if any, in this respect.

**9. Liquidated Damages.**

In the event of the failure of the contractor to execute the contract partly or wholly by the contractor, the MSEDCL may make the purchase elsewhere after giving due notice to the contractor to this effect and at his risk and cost such quantity not so delivered, without canceling the contract or to cancel the contract reserving the right to recover the damages in accordance with the provisions of Indian Contract Act.

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

**10. Terms of Payment.**

100% payment will be made on the poles actually lifted from the factory duly tested on production of material requisition, gate pass and test certificate issued by the MSEDCL's authorized officer **by the concerned O&M Circle, i.e. O&M Circle Akola.**

**11. Lifting of Poles.**

The contractor shall extend due facilities available with him at all times such as gantry, chain pulley blocks etc. for loading of poles in MSEDCL's hired trucks while taking delivery from contractor's works, free of charge.

**12. Disputes.**

If at any time any question, dispute or difference arise, between the Engineer-in-charge and the contractor, either party may forthwith give to the other one months notice in writing of the existence of such question dispute or difference and the same shall be referred to the Chief Engineer Akola Zone Akola. The decision of the Chief Engineer Akola Zone Akola about the issue shall be final, conclusive and binding on the contractor.

**Superintending Engineer,  
O&M Circle, Akola**

Digital - Signature, Name and Address  
of the Tenderer.

**Dated:**

**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.****TECHNICAL SPECIFICATIONS**

- 1.0 The work covered under this contract being of specialized nature, the tenderer is expected to visit the site of factory and acquaint him with the infrastructure available. The tenderer may also visit one of the MSEDCL's Pole Factory so as to have a clear understanding of the problems connected with the smooth running of the factory and also to study carefully REC design/drawing specifications etc.
- 2.0 The tender for the poles shall be in accordance with the specifications and the drawing enclosed with the tender. Alternative design/specifications shall not be considered which may be noted.
- 3.0 The Contractor shall furnish the manufacturer's test certificate in respect of H.T. wire, and cement purchased by him and the same shall conform to the relevant Indian Standard Specification. It is expected that the contractor shall use the lot of H.T. wire and cement only after satisfying himself as to its quality regarding U.T.S., proof stress and compressive strength setting time etc. for the H.T. wire and cement respectively. Insertion of 8 SWG G.I. wire is to be made in such a way that it does not touch H.T. wire, anywhere during concreting and about 100 mm projections are left out from the face of the pole as directed.  
The contractor shall also arrange for the necessary test on the materials like metal, sand, water etc. and shall see that the materials to be used in the manufacture conform to ISI Standards. The sand shall be washed before use by installing a sand washing machine in the factory and the same shall not contain silt and deleterious material. Since the design of concrete mix takes almost a month or more the contractor is expected to send the samples of the material to nearby Engineering College/Polytechnic/Test House etc. well in advance so that by the time the construction of the factory is over the production of poles could be started without loss of time.  
It will be the responsibility of the Contractor to make available all the test reports for inspection by the MSEDCL's representative. The expenditure on this account is deemed to have been included in the rate quoted by the Contractor.
- 4.0 All inspection shall be carried out with the responsibility of the contractor regardless of whether or not the MSEDCL's inspectors or agents are appointed or present during the test. In case any representatives of the MSEDCL are deputed they shall have free access to the contractor's works at any time during working hours for the purpose of inspection of manufacture and test on poles and materials.
- 5.0 The workmanship shall be of a high order and poles having flaws and defects would be rejected.
- 6.0 The poles shall be delivered in regular installments the first delivery commencing immediately but not later than one month from the date of order and to complete the delivery of the full quantity at the minimum monthly rate as shown in Schedule "C".
- 7.0 The poles shall generally conform to I.S. standards and specifications Recommended by REC and as per details given separately.

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

- 8.0 It is likely that during monsoon the MSEDCL may not be able to lift the poles from the factory. Hence, the manufacturer is expected to have an open air store yard having capacity of 500 poles.
- 9.0 8.0m/140Kg. PSC poles are to be manufactured as per REC standards. A drawing showing the reinforcement details is enclosed with the Tender for guidance. The Contractor has to make provision for holes while manufacturing the poles as per REC specifications and drawing and no extra claim for making holes shall be entertained – (inclusive of lifting holes & holes as per construction standards A-5 & or B-6 with reinforcement if required).
- 10.0 Sampling Inspection and Testing.**
- 10.1 Lot – In any Batch, all poles of the same class and same dimensions shall be grouped together to constitute a lot.
- 10.2 Sub Lot – If the number of poles in a lot exceeds 200, the lot shall be divided into a suitable number of sub-lots such as the number in any sub lot shall not exceed 200. The acceptance or otherwise of sub lot shall be determined on the basis of the performance of sample selected from it.
- 11.0 The number of poles to be selected from a lot or sub lot shall depend upon its size and shall be in accordance with Col. 1 & 2 of the table given below.
- 12.0

**TABLE – 1**

Size of lot or sub-lot	Sample size and criterion for conformity dimensional requirements		No. of poles for transverse strength test
	Sample size	Permissible No. of + Defective samples	
Upto 100	10	1	1
101 to 200	15	1	1

12.1 These poles shall be selected at random. In order to ensure randomness, all the poles in a lot or sub-lot be arranged in a serial order and starting from any random pole, every “rth” pole may be included in a sample, being the integral part of  $N/n$  where N is the size the lot or sub-lot and n is the sample size.

12.2 All the poles selected as above shall be tested for overall length, cross-section and uprightness examine whether they are within the permitted tolerances.

12.	<b>Tolerances</b>	Length	+/- 15 mm
		Cross Sectional Dimensions	+/- 3mm
		Uprightness	0.5%

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

The number of poles to be tested for transverse strength shall be in accordance with Column 4 of Table No. 1. These poles may be selected from those already tested as indicated above.

## **12.1 CRITERIA OF CONFORMITY**

A lot or sub-lot shall be considered as conforming to the specification if the conditions given below are satisfied.

12.1.1 The number of poles which do not satisfy the requirement of overall length, cross section and uprightness shall not exceed the corresponding number of defective samples given in the above table. If the number of such poles exceed the corresponding number, all poles in the lot or sub-lot shall be tested for these requirements and those not satisfying the test shall be rejected.

12.1.2 All the poles tested for transverse strength test shall satisfy the requirement of test as below:

- a) No hair cracks shall appear up to the application of the working load i.e. 140 kg
- b) The pole should not fail at a load less than the design ultimate load i.e. 350 kg and all the cracks produced during testing should disappear on removal of load.

12.1.3 The pole which satisfies all the above conditions is deemed to have passed the test and hence acceptable. The poles subjected to test and found to have passed shall be issued for work. If one or more poles fail, twice the number of poles originally tested shall be selected from those already selected and subjected to the test. If there is no failure among these poles, the lot or sub-lot shall be considered to have satisfied the requirements of this test. If one or more poles of the second sample fail, the lot or sub-lot represented by the corresponding sample shall be considered not to have passed the test.

12.1.4 No pole is required to be tested till failure but the poles are to be tested only upto the design ultimate load. i.e. 350 kg. The poles tested upto designed ultimate load shall have Recovery of deflection more than 85% within 24 hours.

## **12.2 Transverse Strength Test.**

### **12.2.1 General.**

The poles shall be tested in the horizontal position. Provision shall be made by suitable support to compensate for the overhanging weight of the pole. For this purpose the overhanging portion of the pole may be supported on a movable trolley or similar device. The frictional resistance of the supporting devices should be separately determined and deducted from the total final load applied on the pole (read Sub Clause 12.2.4 below).

### **12.2.2 Loading.**

The load shall be applied at a point 600mm from the top of the pole by means of a suitable device such a wire rope and a winch placed in a direction normal to the direction of length of the pole, so that the minimum length of the straight rope under pull (excluding the curved portion near the transmitting device) is not less than the length of the pole. If the loading device is set sufficiently far away from

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

the pole to make the angle between the initial and the final position of the pulling line small, the error in assuming that the pull is always perpendicular to the original direction of the pole axis, will be negligible. The pulling line shall be kept in level between the winch position and the point where the load is applied to the pole.

#### **12.2.3 Pulling Line.**

The pulling line shall be secured around the load point. Load measuring device shall be placed in a way so as to accurately measure the tension in the pulling line, the other end of which is attached to the loading equipment (winch).

#### **12.2.4 Load Measurement.**

Dynamometer or any other satisfactory method of load measurement may be adopted. The Dynamometer or other load measuring device shall be calibrated at regular intervals. The load measuring device shall be supported in such a way that the force required to pull it shall not add materially to the measured load on the pole and that no damage is caused to the instrument if the pole suddenly breaks under test. The frictional resistance of the supporting devices and the rope line pulleys shall be separately determined and necessary corrections applied to the readings of the dynamometer or other load measuring device.

#### **12.2.5 Procedure.**

Load shall be applied at 600mm from the top of the poles at right angles to the axis of the pole and shall be steadily and gradually increased to design value of the working load. The deflection at this point shall be measured. No crack shall appear till this load. The load shall then be reduced to zero and increased gradually to a load equal to the first crack load plus 10 percent of the min. ultimate transverse load and held for two minutes. This procedure shall be repeated until the load reaches the value of 60% and further 80% of the ultimate transverse load. The deflection at this load point shall be measured. The load shall be brought to zero and thereafter increased by intervals of 5% of the ultimate transverse load.

12.2.6 Each time the load is applied, it shall be held for 2 minutes. The testing of pole shall be done till the ultimate design load.

12.2.7 One out of 200 poles shall be tested upto design ultimate load, as per the above procedure. The Recovery of deflection at design ultimate load shall be more than 85% within 24 hours.

#### **12.2.8 Planting Depth.**

It shall be 1.5 mts. from the bottom of the pole.

### **12.3 Recording of Load and Measurement.**

12.3.1 Any hair cracks appearing at a stage prior to the application of 60% of the min. ultimate transverse load shall be recorded. It should also be Recorded whether the hair cracks if any, produced on application of the 60% of the min. ultimate transverse load close up on the removal or reduction of the test load.

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

**12.3.2 Measurement of Cover.**

After completion of transverse strength test, the sample pole shall be taken and checked for cover. The cover shall be measured to the nearest millimeter at 3 points, one within 1.8 m of the butt end of the pole, the second within 0.6 m from the top and the third at any intermediate point.

**12.4 Marking.**

The pole shall be clearly and indelibly marked with following particulars either during or after manufacture but before testing at a position so as to be easily read after erection in position.

- a) Month and year of Manufacture.
- b) Class of Pole (8m/140Kg) / (9m/200Kg)
- c) Manufacturer's serial no. or mark.
- d) Planting Depth at 1.5 mt. From the bottom.

12.5 The direction in which the pole is to be placed at site shall be suitably marked.

**12.6 General**

The testing of poles shall be done in the presence of MSEDCL's representative. The date of test shall be notified by the supplier in advance, so as to enable the MSEDCL's Officer to associate with the test.

The poles which are rejected shall be kept in a separate lot duly marked to ensure that the same do not get mixed with the good poles. Breakages due to any reasons within the factory premises shall be to the supplier's account.

**Superintending Engineer,  
O&M Circle, Akola.**

Digital - Signature, Name and Address  
of the Tenderer.

**Dated:**

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

**TEST REPORT OF POLES**

Lot No.                      Test No.                      Date:                      Size : 8m/140Kg  
Pole No.                      Date of Casting:

Pole manufactured with 8 Nos.  
of H.T. Wire having U.T.S.  
175kg/sqmm and 0.1% proof  
stress not less than 140 kg/mm<sup>2</sup>

Cement concrete cube test

1) At 3<sup>rd</sup> day=..... Kg/cm<sup>2</sup>

2) At 28<sup>th</sup> day=.....Kg/Cm<sup>2</sup>

Load in Kg. (140 Kg/W/L)	Deflection in Cms.	Permanent deflection in set Cms.	Remarks
-----------------------------	--------------------	-------------------------------------	---------

0

Each time the load is  
applied it shall be held  
for 2 minutes.

35

70

105

140

Working load.

0

175

0

210

0

245

0

280

0

298

315



SE/Akl/T/Dy.EE-I/T-09 R (23-24)

332

350

Design Ultimate load.

Gradual  
Reduction to

0

---

Name and signature of Officer Present.

1)

\_\_\_\_\_

2)

\_\_\_\_\_

3)

\_\_\_\_\_

- a) Certified that the test carried out in my presence on----- and according to the specification and procedure of the test prescribed for PSC Poles.
- b) Certified that the Recovery of deflection at ultimate load is more than 85% within 24 hours.
- c) Certified that the Test Report is found to be satisfactory/Unsatisfactory.

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

**TEST REPORT OF POLES**

Lot No.                      Test No.                      Date:                      Size : 9M/200 Kg  
Pole No.                      Date of Casting:

Pole manufactured with 8 Nos.  
of H.T. Wire having U.T.S.  
175kg/sqmm and 0.1% proof  
stress not less than 200 kg/mm<sup>2</sup>

Cement concrete cube test

1) At 3<sup>rd</sup> day=..... Kg/cm<sup>2</sup>

2) At 28<sup>th</sup> day=.....Kg/Cm<sup>2</sup>

Load in Kg. (200 Kg/W/L)	Deflection in Cms.	Permanent deflection in set Cms.	Remarks
-----------------------------	--------------------	-------------------------------------	---------

0

Each time the load is  
applied itshall be held  
for 2 minutes.

50

100

150

200\*

Working load.

0

250

0

300

0

350

0

400

0

425

450

SE/Akl/T/Dy.EE-I/T-09 R (23-24)

475

500

\*Design Ultimate load.

Gradual  
Reduction to

0

---

Name and signature of Officer Present.

1)

\_\_\_\_\_

2)

\_\_\_\_\_

3)

\_\_\_\_\_

- a) Certified that the test carried out in my presence on----- and according to the specification and procedure of the test prescribed for PSC Poles in IS 2905-1989 and also IS 1343 - 1980.
- b) Certified that the Recovery of deflection at ultimate load is more than 85% within 24 hours.
- c) Certified that the Test Report is found to be satisfactory/Unsatisfactory.

**DESIGN DATA****PARTICULARS OF 8.0m/ 140 Kg. PRESTRESSED CEMENT CONCRETE****POLES AS PER REC DESIGN.**

<b>Details</b>	<b>8m/140Kg Poles</b>
1. Working load	140 kg acting at 0.6 m from
2. Factor of Safety	2.5
3. Ultimate Load	350
4. First crack load (permissible) 250 kg	Not less than 175 kg
5. Strength of 4 mm H.T. Wire	a) U.T.S. 175Kg. /sqmm b) Proof Stress 1% of U.T.S.
6. Strength of concrete at 28 days	420 Kg/sqmm.
7. Minimum strength of Concrete on Release.	210 Kg/sqmm.
8. Planting depth.	Not to exceed 1.5 mts.

**DESIGN DATA****PARTICULARS OF 9m/ 200 Kg. PRESTRESSED CEMENT CONCRETE****POLES AS PER REC DESIGN.**

<b>Details</b>	<b>9m/200Kg Poles</b>
1. Working load	200 kg acting at 0.6 m
2. Factor of Safety	2.5
3. Ultimate Load	500 Kg
4. First crack load (permissible) 250 kg	Not less than 225 kg
5. Strength of 4 mm H.T. Wire	a) U.T.S. 175Kg. /sqmm b) Proof Stress 1% of U.T.S.
6. Strength of concrete at 28 days	420 Kg/sqmm.
7. Minimum strength of Concrete on Release.	210 Kg/sqmm.
8. Planting depth.	Not to exceed 1.5 mts.

**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD****GENERAL GUIDELINE FOR CONSUMPTION OF MATERIALS**

Sr.No.	Description	8.0m/140Kg.
		Quantity
1.	O.P. Cement (53 grade) Conforming to I.S. 12269 / 1987	1.38 Bags
2.	4 mm. H.T. Wire	7.24 Kg
3.	8 SWG GI Wire	0.70 kg
5.	Concrete Quantity per pole	0.137 Cum

**Note:**

The quantity shown above is inclusive of wastage @ 5% on cement, 2% on H.T. Wire and 5% on G.I. Wire over the theoretical quantity required per pole.

**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD**  
**GENERAL GUIDELINE FOR CONSUMPTION OF MATERIALS**

Sr.No.	Description	9.0m/200Kg. Quantity
1.	O.P. Cement (53 grade) Conforming to I.S. 12269 / 1987	2.10Bags
2.	4 mm.H.T. Wire	11.54 Kg
3.	8 SWG GI Wire	0.80 kg
5.	Concrete Quantity per pole	0.203 Cum

**Note:**

The quantity shown above is inclusive of wastage @ 5% on cement, 2% on H.T. Wire and 5% on G.I. Wire over the theoretical quantity required per pole.

**MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.****SCHEDULE "B" (Price schedule format)****(To be uploaded in BID-II)****Description of supply Item:**

Manufacture, testing & Supply of 8m/140Kg & 9m/200 kg Prestressed Cement Concrete Solid poles as per REC design, specification and drawings anywhere in Akola Circle of Akola Zone by establishing a new factory/from existing factory/ depot.

Sr. No.	Type of Pole	Proposed district/s for supply of poles (Please refer the tender notice)	No. of Poles	Rate to be quoted by the agency (per pole in figures and words) (in Rs.)
1	2	3	4	5
1.	8m/ 140Kg	Akola Circle	300 Nos. (approximately)	
2.	9m/ 200Kg	Akola Circle	100 Nos. (approximately)	

- The rate quoted by us is for manufacture ,testing, supply, Loading, Transportation & Unloading of 8m/140Kg & 9 mtr./200 kg PSC pole anywhere in Akola Circle under Akola Zone.
- Separate sheets showing the rate analysis and basic prices adopted for cement, 4mm H.T. Wire and 8 SWG GI Wire in support of the rates quoted are furnished. The element of tax is separately indicated in the basic price of raw materials.

**3. As on date GST will be payable by the MSEDCL as below:**

1. \_\_\_\_\_

2. \_\_\_\_\_

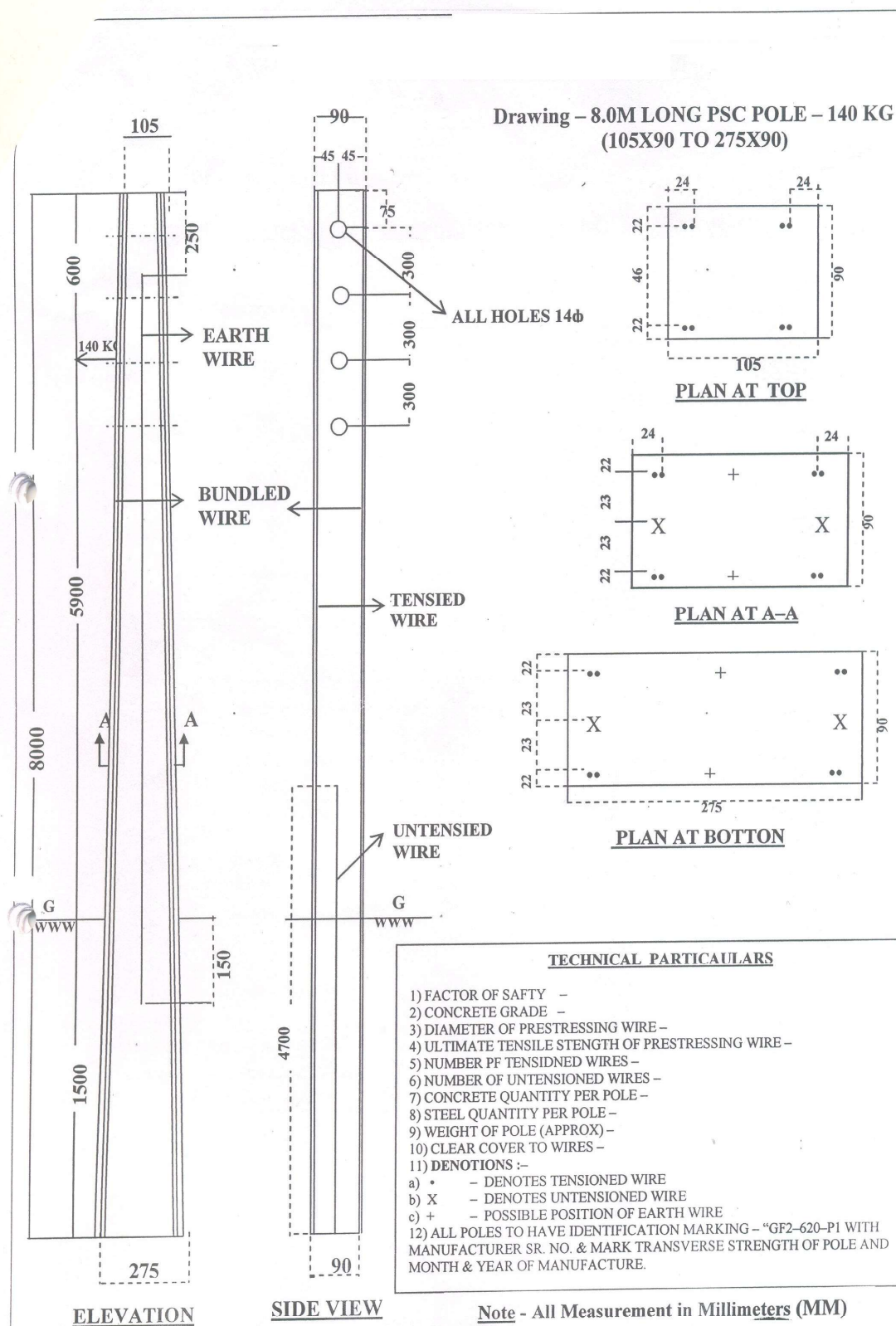
- We agree to commence the delivery of poles not later than one month from the date of Receipt of order and also agree for the delivery program as directed.

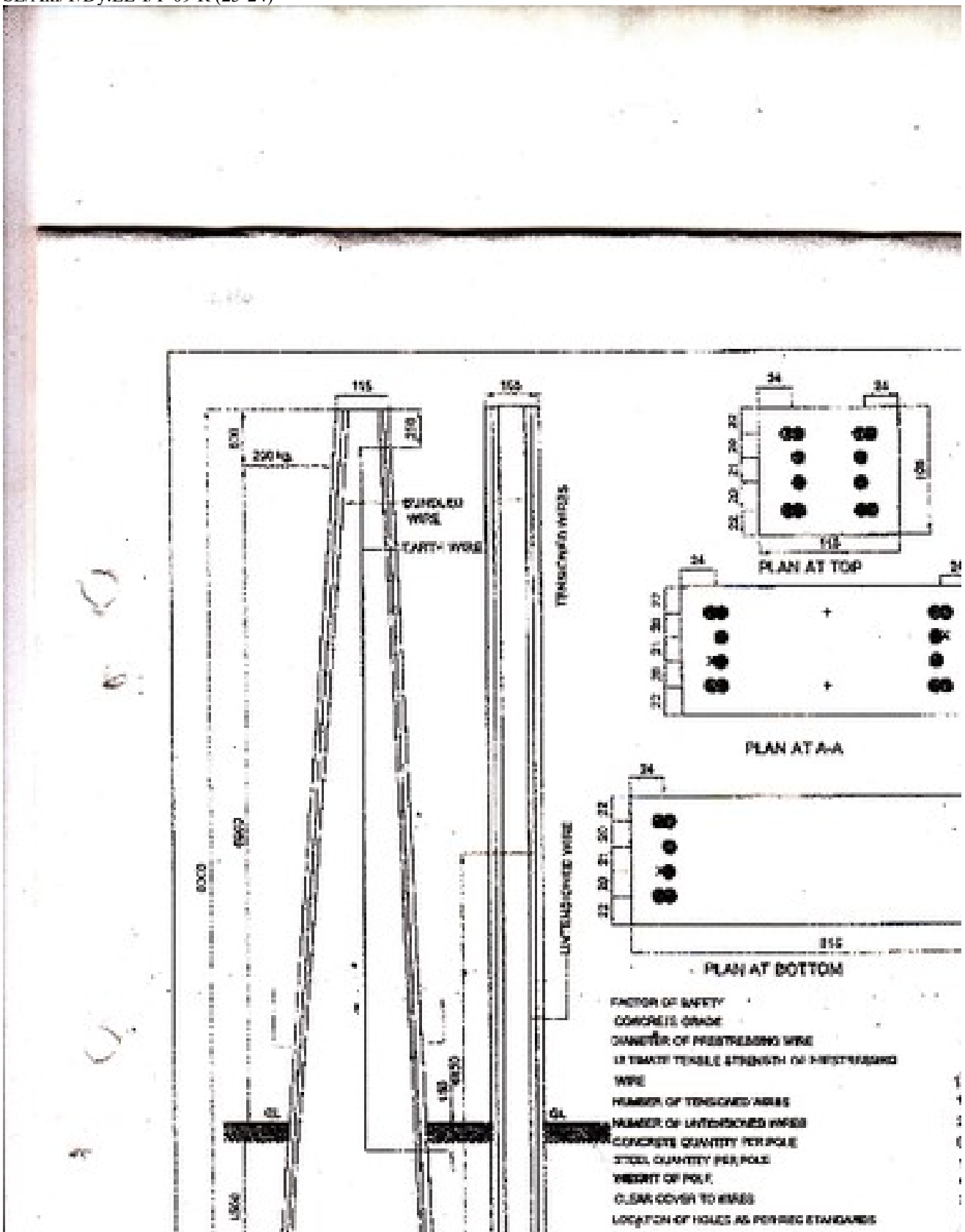
**Note : Bidder have to fill OR strike off, wherever necessary.**

Signature of the Tenderer

**Superintending Engineer,  
O&M Circle, Akola**







LIST OF SERVICES

SR. NO.	SERVICE NAME	ACTIVITY NUMBER	UOM	SAC CODE	REQ. QTY	VERSION	MATERIAL TYPE
1	PSC pole 8 Rmt erection	PM.HTLC22.0 99	Number	995461	100		null

Required Documents (To be uploaded online)
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Sr. No.	NAME	SECTION	ITEM	DESCRIPTION
1	Price Bid	Price Section	PSC pole 8 Rmt erection	Price Proposal
2	Tech Bid	Technical Section	PSC pole 8 Rmt erection	Technical document
3	commercial document	Commercial Section		commercial document