

## **NOTICE INVITING BUDGETORY OFFERS**

Name of Work	"RECONSTRUCTION OF EARTHING PITS FOR SUBSTATION A"			
Date of submission of budgetary quotation	On or Before 12/01/2023 at 15:00 Hrs.			
Address for communication:	Executive Engineer (E-HR), 2nd floor, Mechanical Engineering Department, Mormugao Port Authority, Admin. Building, Headland sada Vasco-de-Gama Goa - 403804 Phone: (0832) 2594207, 2594577,2594579			
Contact Details Website	Email: mohamed.shaik@mptgoa.gov.in  www.mptgoa.gov.in			

**EXECUTIVE ENGINEER (E-HR) MORMUGAO PORT AUTHORITY** 

मान्य पत्तन प्रशिवस्य आईएसओ 9001-2015 पत्तन AN ISO 9001-2015 PORT

MORMUGAO PORT AUTHORITY
ENGINEERING MECHANICAL DEPARTMENT
ELECTRICAL HARBOUR SECTION

Sub: "RECONSTRUCTION OF EARTHING PITS FOR SUB-STATION A ""

Ref: Budgetary Quotation No. CME/XEN (E)/HR/ H-6/22/B6

Mormugao Port Authority intends to carryout work of "RECONSTRUCTION OF

EARTHING PITS FOR SUB-STATION A".

As such, it is requested to kindly furnish budgetary quotation for the same (Scope of

work, technical specifications are enclosed at Annexure-I and Price Schedule

enclosed at Annexure- II).

Your budgetary quotation should reach to this office on or before 12/01/2023 at

15:00 Hrs.

Thanking you,

Yours sincerely,

**EXECUTIVE ENGINEER (E-HR)** 



ANNEXURE-I

# TITLE OF WORK: "RECONSTRUCTION OF EARTHING PITS FOR SUB-STATION A"

#### **TECHNICAL SPECIFICATIONS**

#### 1.0 GENERAL

Mormugao Port trust proposes to provide 29 nos earth stations for H.T transformers at substation A in accordance with IS 3043 and as per technical specifications:

### **2.0 SCOPE OF WORK**

- a. The scope of work shall be for Providing Earthing for equipment's of Substation-A G.I. complete with earth plate electrode 600mmX600mmX6.0mm thick buried into the ground with its face vertical at a depth of not less than 3 meters from ground level, filled with alternate layer of common salt and charcoal and connected to G.I. earth strip 50mm X 6 mm thick by means of SS nuts bolts and Washers, including necessary PCC earth pit chamber size 450mm X 450mm with cast iron chamber cover having suitable arrangement for lifting, watering arrangement shall be made with funnel having mesh suitably earthed. All the material required to complete the work has to be supplied by the contractor.
- b. Each of the Earth pits covers shall be duly painted and identified with earth pit number, name of Equipment, neutral or body Earthing, date of testing, individual pit resistance value and due date for measurement.
- c. The contractor shall Supply GI strip of size 50mm x 6 mm. The laying of GI strip to be done above the ground and should be connected to neutral and body of the equipment with SS bolts, nuts & washers. Interconnections and joints for earth conductors shall be carried out using SS material only. Sharp bends required in GI strip should be formed by the use of a bending machine. Earthing Strips which are



installed below the ground should be covered adequately with insulating Sleeve to avoid corrosion. For installing GI strip on wall, GI clamps to be used for every one metre.

- d. The necessary tools and tackles, material and labour required for carrying out the works mentioned hereunder is in the scope of the contractor. All the works shall be completed to the satisfaction of Port engineer.
- e. Excavation shall be carried out by taking extreme precaution so as not to damage any cable in the vicinity. After excavation broken lumps and stones, if any, are to be removed from the earth pit.

**Note**: Utmost care should be taken by the contractor when connecting the earthing strips to the body of the live HT panels.

### 2.2 MEASUREMENT OF EARTH PIT RESISTANCE:

- a) The job includes measurement of resistance of the new earth pits after installation using earth tester. Copy of valid calibration certificate of the above earth tester and earth testing certificate has to be provided to the Port.
- b) The values shall be tabulated and submitted to Engineer-in-charge.
- c) The individual earth pit resistance value shall be < 5 ohms, earth pits measuring higher than 5 ohms are liable for rejection.
- d) Testing of earth pit shall be carried out in the presence of Engineer –
   In charge or his representative.

#### 3.0 TECHNICAL SPECIFICATION:

Provision of earth stations at substation A has to be carried out in accordance with IS 3043 and relevant IS standards.



#### 4.0 MINIMUM ELIGIBILITY CRITERIA

4.1 The Bidder shall have successfully completed one Similar Work during last 7 (Seven) years ending last day of month previous to the one in which quotations are invited.

**Note:** Similar works means " Construction and commissioning of earth pits at any Port / Government / PSU / Private organizations ".

### 5.0 Special terms And Condition:

- i. The contractor at his own cost shall visit MPT site, before quoting.
- ii. Power supply shall be provided to contractor free of cost.
- iii. In some locations, the work may be carried out near Live High voltage bus bars/lines, contractor has to follow all safety rules & regulations etc. and guide his manpower for safe working
- iv. All the material required for execution of the work has to be arranged by contractor at his own cost. Connecting new earth pits to existing pits / main earth grid is in the scope of the contractor.



ELECTRICAL HARBOUR SECTION

**ANNEXURE-II** 

## **BUDGETORY QUOTATION**

# Name of the Tender: **RECONSTRUCTION OF EARTHING PITS FOR SUB- STATION A**

Sr. No.	Description of work	Unit	Qty.	Rate per Unit (Rs.)	Amount (Rs.)
1.	Reconstruction Of Earthing Pits for Sub- Station A as per Technical specification	No	29		
2	Supply and laying of GI strip size 50mm x 6 mm	RM	750		
	Total				

(In words Rupees	
	only)

### Note:

- 1) The rates quoted above shall be exclusive of GST.
- 2) Applicable GST shall be paid to the concerned authority by the Contractor and documentary evidence of the same shall be produced to MPT for reimbursement at actual