

NOTICE INVITING BUDGETORY OFFERS

Name of Work	"Supply, Installation, Testing and Commissioning of underground LT cables from 33KV Substation "A" to Gate No 9, PUC Bldg. and Old Power House at MPA, Goa "
Budgetary Quotation No	CME/XEN (E-HR)/ 23/ B8
Date of submission of budgetary quotation	On or before 06/01/2024 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
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**EXECUTIVE ENGINEER (E-HR)
MORMUGAO PORT AUTHORITY**

Name of work: “Supply, Installation, Testing and Commissioning of underground LT cables from 33KV Substation “A” to Gate No 9, PUC Bldg. and Old Power House at MPA, Goa.

TECHNICAL SPECIFICATIONS

1. GENERAL

MPA intends to carry out the work of “Supply, Installation, Testing and Commissioning of underground LT cables from 33KV Substation “A” to Gate No 9, PUC Bldg. and Old Power House at MPA, Goa”.

The scope of work and specifications of items shall be carried out as detailed under.

2. SCOPE OF WORK :

2.1 The brief scope of work is as listed below:

- a. The contractor shall supply 1.1 KV voltage grade aluminium armoured XLPE cables of following size
 - i. 4 core x 300 sq.mm
 - ii. 4 core x 240 sq.mm
 - iii. 4 core x 120 sq.mm
 - iv. 4 core x 70 sq.mm
- b. Contractor shall supply 4 pole, 415V, 400 Amps, enclosed type change over switch, install and commission the same at generator room as directed by Engineer in-charge.
- c. Contractor shall excavate cable trench of size 1.0m deep x 0.6m width in hard soil.
- d. The Contractor shall then lay
 - (i) 1 run of 4 C X 300 sq.mm armoured cable from outgoing panels of two DG sets to Change over switch, saddled on wall.
 - (ii) 2 runs of 4 core x 300 sq.mm aluminium armoured cable from Generator room of Berth no:10 to Substation “ A”
 - (iii) 2 runs of 4 core x 240 sq.mm aluminium armoured cable from Substation “A” to GCB building.
 - (iv) 2 runs of 4 core x 240 sq.mm aluminium armoured cable from GCB building to Gate no. 9.
 - (v) 2 runs of 4 core x 120 sq.mm aluminium armoured cable from Gate no. 9 to Old power house water pump main panel.
 - (vi) 1 runs of 4 core x 120 sq.mm aluminium armoured cable from Gate no. 9 to PUC building near IOC terminal.
 - (vii) 2 runs of 4 core x 70 sq.mm aluminium armoured cable from Electrical workshop to panel of High mast no. 21.
- e. While laying the cable in in-built RCC trench, the contractor shall open the trench by removing the slab, clean the trench and after laying the cable cover the trench with the removed slabs.
- f. The cables laid in the excavated trench shall be protected by covering with

Kadappa stones and backfilled thereafter.

- g. Contractor shall supply and lay Hume pipes of 8" dia., for cables at road crossing. Road cutting has to be carried out by the contractor
- h. Contractor shall dismantle, existing panel of size 1.8L X 2.05H X 0.5W meter along with stand and install the same at Substation "A" by grouting the existing stand as directed by Engineer in charge. If any modification is required for fixing panel at new location, the same has to be carried out by the contractor.
- i. Contractor shall Install Distribution panel at gate no: 9 by casting 02 nos., RCC pedestal, grouting of MS frame into the casted pedestals, plastering and curing. (MS frame and Distribution panel will be supplied by Port.).
- j. All cables shall be terminated with lugs and glands of suitable sizes in the panel as directed by Engineer in charge. Required Lugs and Gland shall be supplied by the contractor.
- k. Contractor shall lay G.I strips from the nearest earthing station connect the earthing strips to the panels from the existing earthing pits as directed by Engineer in-charge.

3. MINIMUM ELIGIBILITY CRITERIA

- i. Only Electrical contractors possessing a valid Electrical license to work on minimum 415V lines issued by the licensing board shall be eligible to quote for the enquiry.
- ii. 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.

4. SPECIAL TERMS AND CONDITIONS

- i. The Contractor shall commence and complete the work as per the BOQ and technical specifications. The work and quantity is to be carried out as per the site conditions and relevant IS standards.
- ii. The Contractor shall complete the work in all respect to the satisfaction of the Engineer-In-Charge or his representative.
- iii. The work should be carried out with utmost safety precaution with minimum possible disruption of power supply.

5. Completion Period:

The entire work shall be completed within **75 days** from date of issue of Letter of Award (LOA) / PO.

PRICE SCHEDULE (BILL OF QUANTITIES)

Laying of new cables from Substation "A" to Gate no.9, from Gate no.9 to GCB, PUC building and shifting of Panels.

Sr. No.	Description of work	Qty	Unit	Rate (Rs)	Amount (Rs)
1.	Supply of 4 corex300 sq.mm LT, 1.1 KV grade aluminium XLPE armoured cable.	400	mtr.		
2	Laying of 02 runs LT cable of size 4 core x 300 sq.mm. (From Beth no: 10 S/S to S/S"A".)				
a	in RCC trench	350	r.m		
b	On the wall with proper size saddles (Saddles shall be supplied by the contractor)	50	r.m		
3.	Supply of 4 corex240 sq.mm LT, 1.1 KV grade aluminium XLPE armoured cable.	1100	mtr.		
4	Laying of 02 runs of LT cable of size 4 core x 240 sq.mm. (from S/S "A' to GCB building)				
a	in RCC trench	200	r.m		
b	in excavated trench	400	r.m		
c	through Hume pipes at road crossing	50	r.m		
5	Laying of 02 runs of LT cable of size 4 core x 240 sq.mm. (from GCB to Gate no:9)				
a	in excavated trench	400	r.m		
b	through Hume pipes at road crossing	50	r.m		
6.	Supply of 4 corex120 sq.mm LT, 1.1 KV grade aluminium XLPE armoured cable.	1500	mtr.		
7	Laying of 02 runs of LT cable of size 4 core x 120 sq.mm.(From Gate no.9 to Old power house)				
a	in excavated trench	800	r.m		
b	through Hume pipes at road crossing	100	r.m		
8	Laying of 02 runs of LT cable of size 4 core x 120 sq.mm.(From Gate no.9 to PUC building)				
a	in excavated trench	500	r.m		
b	through Hume pipes at road crossing	100	r.m		
9.	Supply of 4 corex70 sq.mm LT, 1.1 KV grade aluminium XLPE armoured cable.	500	mtr.		
10	Laying of 02 runs of LT cable of size 4 core x 70 sq.mm .(From Electrical workshop panel to High mast 21)				
a	in excavated trench	450	r.m		
b	through Hume pipes at road crossing	50	r.m		
5.	Supply of 400 Amps, 430 volts, 4-pole Change Over Switch (COS).	01	no.		

6.	Supply of Hume pipes of size 8" dia.,	150	r.m		
7	Laying of Hume pipes of size 8" dia in excavated trench.	150	r.m		
8.	Removing, shifting and re-installation of LT Distribution panels (Dimensions 1.8L X 2.05H X 0.5W) along with foundation channel etc., from Berth no: 10 Substation to Substation "A".	01	no		
9	Casting of 2 nos., RCC pedestal of size 0.2m thick x 0.6m above and 0.6m below ground level, grouting of MS frame of size 1.2m length x 0.6m width into casted pedestals, plastering and curing. (MS frame will be supply by Port).	01	no		
10	Installation/ and fixing of Distribution panel of size 1.2m length x.6m widthx1.2m height on the MS grouted frame with nut/bolts, washers. (Distribution panel will be supply by Port).	01	no.		
11.	Excavation of trench in hard soil 1.0 meter deep and 0.6 meter width in hard soil and Back filling of trench.	1300	r.m		
12	Supply and laying of kadappa of size 1 m X 0.4 m in the excavated trench	900	r.m		
13	Laying kadappa stone of size 1m X 0.4 m above the cable in the excavated trench	900	r.m		
14	Supply and Installation of LT cable route markers along the route of the cable at an interval of 30 meters.	25	no		
15	End Termination of LT Aluminium XLPE providing suitable glands and lugs.	1.1 KV 3cables of following sizes by			
i)	4 corex300 sq.mm	10	set		
ii)	4 corex240 sq.mm	08	set		
iii)	4 corex120 sq.mm	06	set		
iv)	4 corex70 sq.mm	04	set		
16	Supply of GI strip size 25mm x 3 mm	80	r.m		
17	Laying of GI strip size 25mm x 3 mm	80	r.m		
TOTAL (Rs)					

Rupees: (_____).

Note: The rates quoted shall be inclusive of freight, packing & forwarding, insurance and exclusive of GST

Single line drawing of Cable layout

