



आईएसओ 9001-2015 पत्तान
AN ISO 9001-2015 PORT

MORMUGAO PORT AUTHORITY
ENGINEERING MECHANICAL DEPARTMENT
ELECTRICAL HARBOUR SECTION

NOTICE INVITING BUDGETORY OFFERS

Name of Work	Relocation of existing High Mast near Toll Plaza.
Date of submission of budgetary quotation	On or before 13/11/2024 at 15:00 Hrs.
Budgetary Quotation No.	CME/XEN (E-HR)/ 24/H1/B4
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EXECUTIVE ENGINEER (E-HR)
MORMUGAO PORT AUTHORITY



TECHNICAL SPECIFICATIONS

1. GENERAL

MPA intends to relocate one existing High Mast (already removed from foundation) to a new site near the Toll Plaza.

2. Scope of work

2.1 Civil foundation: The contractor shall design the High Mast foundation to install the existing High Mast, considering the soil bearing capacity (SBC), test results of which shall be conducted at their own expense. The foundation should be designed to withstand a minimum wind speed of 180 km/hr. The contractor shall then obtain MPA's approval for the civil foundation drawings. The contractor must ensure correct vertical and horizontal alignment of the foundation bolts during construction by using a suitable steel template. The Contractor will be solely responsible for installing the existing High Mast onto the foundation they have cast.

Note: The Contractor is advised to inspect the site and get acquainted with the nature of civil foundation that would be required for erecting the High Mast. Scope of the contractor shall also include measuring PCD of High Mast and ensuring its correctness, shifting of the High Mast from current location, which is at an approximate distance of 100 mts from the proposed site.

2.2 Protection Guard/Fencing : Providing of Protection Guard/Fencing surrounding the High Mast with suitable size MS channel of not less than ISMC 150 vertically at four corners and 2 horizontal runs of MS angles ISA 75, 10 mm thickness. The height of guard shall not be less than 1.5 Mtr. from the ground level. The foundation of the channels shall be with cement concrete with muffing not less than 45 cm. above ground level. All the members of the guard shall be pre-treated and then painted with two coats of red oxide primer and two coats of yellow epoxy finish paint. The protected area surrounding the High Mast in no case shall be less than 2.5 Mtr. X 2.5 Mtr.

2.3 Erection of High Mast: The existing 30-meter high mast should be installed on the newly constructed foundation. All electrical fittings and distribution boxes must be attached to the lantern carriage, and the necessary wiring should be completed. Proper balancing of the lantern carriage will be ensured. The contractor shall connect the control and power cables from the high mast to the junction box control panel. This task also includes supplying and installing all required materials, such as glands, lugs, wires, etc. Connections from the top junction box to the individual luminaires will be made using 3-core, 2.5 sq. mm flexible PVC copper cables. The fittings and junction boxes will be supplied by MPA. Crane required for erection of Highmast has to be arranged by the contractor

2.4 **Earthing:** The contractor shall provide earthing using a GI pipe with a diameter of 40 mm, a thickness of 2.9 mm, and a length of 2.5 meters, equipped with a GI funnel with mesh and a suitably sized reducer fixed at the top of the earth electrode. The funnel should be enclosed in a concrete chamber measuring 400 x 400 x 400 mm with a cast iron cover. The electrode shall feature staggered holes of 12 mm in diameter and should be surrounded by alternate layers of salt and charcoal, extending 150 mm from the bottom of the pipe to the base of the concrete chamber. The connection from the electrode will be established using GI flats (25 x 3 mm) with GI bolts and nuts. A total of three earthing connections are to be provided, with two connected to the High Mast and one to the control panel.

3. **Other conditions:**

- a. All allied Electrical works as per the Bill of Quantities have to be carried out by the Contractor in all respects invariably mentioned or not mentioned in the specification so as to complete the work in all respects.
- b. Necessary electrical power supply required for erecting High Mast will be provided by MPA free of cost at nearest possible point. However, water arrangement shall be in the scope of contractor.
- c. The materials required/intended for the work should be handled carefully and neatly installed/laid/commissioned, damages if any during installation shall be rectified immediately to its original condition at the cost and risk of contractor.
- d. Miscellaneous works have to be carried out invariably, whether clearly mentioned or not in the specifications and BOQ to complete the project in all respects.

4. **GUARANTEE PERIOD:**

The work shall be guaranteed for a period of five (5) years from the date of commissioning and satisfactory handover. The contractor shall be solely responsible for any defects that may arise during the guarantee period that may emerge in the work complete. The contractor shall rectify such defects at their own cost.

5. **Qualification Criteria :**

The Bidder shall have successfully carried out work of Supply, Installation, Testing and Commissioning of High Mast during last 7 (Seven) years ending last day of month previous to the one in which quotations are invited for Central Govt. / State Govt. / Port Sector / PSU or any reputed organization.

6. **COMPLETION PERIOD:**

The entire work shall be completed within **60 days** from date of issue of Letter of Award (LOA) / PO.



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PRICE SCHEDULE (BILL OF QUANTITIES – BOQ)

Name of work: " Relocation of existing High Mast near Toll Plaza."

S.N	Item Description	UNIT	Qty	Rate Per Unit (Rs)		Applicable GST %	Amount (Rs.)
				In Fig	In words		
1	Design and casting of suitable foundation for the High Mast confirming to SBC results. The foundation Height of the High Mast shall be 500mm above the existing nearby ground level	no	1				
2	Design & construction of Protection Guard/Fencing surrounding the High Mast with suitable size MS channel and MS angles as per the Technical specifications	no	.1				
3	Installation and commissioning of the existing High Mast control panel by terminating the required cables such as Incomer, lighting and motor. Work also including supply and fixing of required materials such as glands lugs etc. complete in all respect.	no.	1				
4	Providing RCC/Stone masonry foundation complete in all respect including plastering for the High Mast control Panel and the dimension .The gap between the pillars is 350 mm for cable connection to the control panel. The foundation starts 300mm	no.	1				



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	below the ground after making 100mm stone soling and height of the foundation 750mm above the ground level and curing etc. and the panel should be stand on the well grouted Stainless steel bolts. The work shall be complete in all respect.						
5	Fixing of 16 no LED flood light luminaries Fittings , junction box with complete wiring work on existing High Mast lantern carriage (Fittings and Junction boxes will be provided by the Port)	no.	1				
6	Erection, testing and commissioning of 30 mtrs High Mast complete in all respect with the help of suitable equipment's	nO	1				
7	Supply and fixing of 5 core 4 sq mm copper trailing cable. The cable shall be EPR insulated and PCP sheathed to get flexibility and endurance with Rodent proof coating	mtr	35				
8	Providing GI earthing as per scope of work	no	3				
Total							

(In Words Rupees _____ only)

NOTE:

1. The rates quoted shall be inclusive of duties, transportation, lodging and boarding, but exclusive of GST. Applicable GST shall be paid extra as applicable.