



**MORMUGAO PORT TRUST**  
**ENGINEERING (CIVIL) DEPARTMENT**

**TENDER No.: CE/10/2017**

**Name of Work: Geo-technical Soil Investigation for Navigational  
Channel & Vasco Bay at Mormugao Port Trust, Goa**

**S E C O N D C O V E R**  
**(PRICE BID)**



**MORMUGAO PORT TRUST**  
**ENGINEERING (CIVIL) DEPARTMENT**

**NOTICE INVITING TENDER (LIMITED)**

**TENDER NOTICE NO.CE/N-06 /2017**

**TENDER No.: CE/10/2017**

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Item rate tenders in the prescribed form in sealed covers (in two cover system) superscribing the Tender No. and due date and time are invited by the Chief Engineer for the above work from the shortlisted bidders as per the details given in the table below:

Cost of tender document	Estimated cost	Tender Sale From/To	Submission on	Opening on
EMD	Completion Time			
<b>Rs.2500/- (Rupees Two Thousand Five hundred only)</b>	<b>Rs.73,33,000/-</b>	<b>13.02.2017 to 22.02.2017 Upto 15.00 hrs.</b>	<b>22.02.2017 Upto 15.00 hrs.</b>	<b>22.02.2017 at 15.30 hrs. Technical Bid (Cover No.1)</b>
<b>Rs.74,000/- (Rupees Seventy Four Thousand only)</b>	<b>90 days including monsoon</b>			

Detailed tender notice along with complete tender documents can be downloaded from our website [www.mptgoa.com](http://www.mptgoa.com) on or before the last date of sale of tender document. Tenders are also available for sale at the Civil Engineering Department of Mormugao Port Trust.

For further details and general enquiries, prospective bidders may contact the Executive Engineer (Project I), Mr.G.R.Jirage, telephone no. 0832-2594607, mobile 9420686276 during working hours before the last date and time of sale of tender document.

**Chief Engineer**



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**SECOND COVER (PRICE BID)**

**Name of Work: Geo-technical Soil Investigation for Navigational Channel &  
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**1 - Preamble to Schedule of Quantities and Rates**

1. The Bill of Quantities must be read with the Conditions of Contract, the Specifications and Drawings and the contractor is deemed to have examined the documents and to have acquainted himself with the detailed description of the works to be done and the way in which they are to be carried out
2. The quantities set down against the items in this Bill of Quantities are an estimate of how much of each kind of work is intended to be done in the Contract and are given for the convenience of forming common basis for evaluation and comparing tenders. They are not to be taken as a guarantee that the quantities scheduled will be carried out or required.
3. The quantities shall therefore not be considered as representing the final measurement, it being the intention of the Contract (except where otherwise specifically stated) that all works embraced therein shall be measured up by the Engineer or his authorised representative on completion and paid for at the prices and rates entered in the Bill of Quantities by the Contractor. .
4. Each item in the Bill of quantities is to be priced or if any of the items is left unpriced' it will be assumed that the value of the work or commitments described thereunder is allowed for elsewhere in the Bill.
5. The Tenderer's attention is particularly directed to the fact that conditions of contract do NOT include a variation in price of labour or materials. This should be allowed for in the rates stated by the Tenderer in the Bill of Quantities.
6. The rates set down against the items are to be the full inclusive value of the work described thereunder and are to include for profit and for the cost of every description of work and materials together with all costs in connection therewith or arising from the completion of the

works as specified. They are to include (but not by way of limitation) for all labour, transport, cartage, materials, plant, equipment, floating crafts, pumps, generators, engines, lifting devices, cables, plain and perforated linings, measuring devices and taking of records, machinery and appliances, stagings, medical and welfare facilities, housing accommodation for Contractor's staff and employees fuel, water, lighting, drainage, pumping, all costs in dues, all taxes (including sales tax) unless specifically mentioned to have been excluded elsewhere in these documents, establishment charges, bond, royalties, rents, telephone services, watching and assistance, their messing, kit allowances and all contingent expenses, liabilities and responsibilities mentioned and referred to or to be inferred from the Conditions of Contract, Drawings, Specifications, Bill of Quantities or other contract Documents annexed thereto.

7. The Tenderer shall be deemed to have inspected the site and to have obtained on his own responsibility and at his own expense all the information which may be necessary for making his Tender.
8. None of the possible variation in number of grid lines shall effect either the validity of the contract or the rates quoted herein.
9. The Tenderer's attention is drawn to the various Clauses in the Specifications requiring him to submit with his Tender the following details:
  - a) Time to commence, time to complete on site, time to submit report.
  - b) Details of floating craft, echosounder, seismic profiler, sampling tools and procedures.
  - c) A detailed programme for carrying out the work.



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**BILL OF QUANTITIES**

<b>Sr. No.</b>	<b>Description</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate (Rs.)</b>	<b>Amount (Rs.)</b>
01	Mobilisation of jack-up barge, personnel survey vessel, boats, positioning system, survey equipments at site to commence the survey as per specifications of the tender and all plants/ equipments including fabrication of platform mounted on crafts/launches etc and providing floating pontoons if required for supporting all equipments, machinery, etc for considering soil investigation such as boring / drilling rig, tripod, pulley, winches, hydraulic power pack, pumps, drilling accessories, geotechnical field testing kit, generator, safety provisions, etc., for considering soil investigations in offshore areas , including operator, travel cost of operator, transportation of equipment to and fro, surface transport etc. complete as per tender requirement and instructions of Engineer-in-Charge and demobilisation / dismantling the same after completion of work and taking away all equipments from site.	1	Lump sum		

	i) 40 % amount of mobilisaiton after successful completion of 1 <sup>st</sup> marine offshore borehole.				
	ii) Balance 50 % shall be paid after successful completion of total number of boreholes				
	iii) Balance 10 % shall be paid after demobilisation of plant and machinery after successful completion of entire project.				
02	Shifting and positioning the platform at first borehole and subsequently to all other boreholes including accurately mooring of craft and jacking up at each position, hire of launches, survey work etc complete.	25	Nos.		
03	Boring (4") 100 mm dia. from bed level (varying from (-) 1.5m to (-) 7m in Vasco bay & (-) 14m to (-) 16m in the navigation channel) upto rock level in Vasco bay & (-) 20m in the outer navigation channel, all types of soil including boulders, including use of all materials such as casing pipes, accessories, consumables, etc as required, carrying out SPT at every 1.50 mtr. Interval and taking undisturbed samples of cohesive soil, preparing the soil samples serially in glass/plastic jars on site and conveying the same to laboratory as directed by Engineer in charge including geo-technical logging of the samples and carrying out field tests using pocket penetrometer and vane shear etc., complete.	330	Mtr		
04	Coring 'NX' size using triple tube core barrel in weathered and un-weathered basalt rock by daimond drilling machines including preservation of core boxes, taking core photographs, etc complete.	50	Mtr.		
05	Obtaining undisturbed soil samples (UDS) confirming to the specifications including collection and preservation of samples.	38	Nos.		
06	Obtaining disturbed soil samples (DS) confirming to the specifications including collection and preservation				

	of samples.	50	Nos.		
07	Conducting standard penetration test (SPT) and collecting samples as per specification at every change of strata at every 2m intervals or as directed by the Engineer-in-charge.	50	Nos.		
08	Collection of ground water samples for chemical analysis.	25	Nos.		
09	Collection of soil samples for chemical analysis.	25	Nos.		
10	Providing boxes of size 1.25 x 0.55 x 0.15 m made out of jungle wood planks (for preserving core samples) with all fixtures such as handles, locking arrangement, providing locks, etc complete.	25	Nos.		
11	Carrying out Mechanical Analysis of soil by sieve	63	Nos.		
12	Carrying out Mechanical Analysis of soil by hydrometer	25	Nos.		
13	Determine Atterberg's limit of soil like Plastic limit (PL) and Shrinkage limit (SL)	25	Nos.		
14	Determine Specific Gravity of soil	50	Nos.		
15	Determine Bulk and dry density of undisturbed soil samples (depending upon the thickness of soil strata)	50	Nos.		
16	Carry out unconfined compression test on remoulded clay samples	5	Nos.		
17	Carry out triaxial compression test (unconsolidated undrained) on undisturbed clayey sand to sandy clay soil samples	25	Nos.		
18	Carry out consolidated test on undisturbed soil samples wherever a clayey strata of thickness more than 4 mt is found	13	Nos.		
19	Carry out Natural Moisture Content (NMC) of soils by over drying method on UDS & block samples	25	Nos.		
20	Conducting Direct Shear tests	25	Nos.		
21	Conducting Free swell tests	13	Nos.		
22	Conducting chemical analysis of soil to determine Chloride and Sulphate content	25	Nos.		
23	Conducting chemical analysis of ground water to determine Chloride and Sulphate content & pH	25	Nos.		
24	Determine porosity of rock samples	50	Nos.		

25	Determine unconfined compressive strength of soaked rock samples	50	Nos.		
26	Determine point load index of soaked rock samples	50	Nos.		
27	Determine Tensile strength of rock	5	Nos.		
28	Determine Modulus of Elasticity of rock samples	1	No.		
29	Prepare and supply 2 advance copies of field & laboratory test results together with bore log details of soil investigation carried out (Interim Report)	1	LS		
30	Analysis and processing all collected data and preparation of report printing, compiling and submission of 4 copies of final report, and preparation of High density diskettes of data and report drawings on AutoCAD in all respects as per tender specifications and instructions of the Employer.	1	LS		
	GROSS TOTAL in figures				
	GROSS TOTAL in words <b>including all applicable taxes but excluding service tax</b>				

I/ We certify that I/we have written the unit rates in figures and words.

Name and address of the Tenderer

Signature of the Tenderer

**Note:** Tenderers should quote on item rate basis and should inspect the site to ascertain for themselves the nature and extent of work involved and also contain all clarifications they may require before filling in the tender. The quantities mentioned in the schedule of quantities are approximate and may vary as per site condition. **Service Tax as applicable shall be payable as extra.**