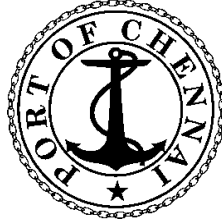


CHENNAI PORT TRUST

NOTICE INVITING BUDGETARY OFFER

MEE/U3/58/2019/Dy.CME (OH)



BUDGETARY OFFER

FOR

**SUPPLY OF NEW PUMP SET,REMOVEL OF OLD PUMPSET,
INSTALLATION OF NEWPUMPSET, TESTING AND
COMMISSIONING AT OLD PUMP HOUSE IN OIL JETTY.**

Submission on or before : 21.09.2019

To the address of :

**Office of the Dy.Chief Mechanical Engineer (OH)
Chennai Port Trust
Royapuram, Chennai – 600 013.**

BUDGETARY OFFER FOR SUPPLY OF NEW PUMP SET,REMOVAL OF OLD PUMPSET,INSTALLATION OF NEW PUMPSET,TESTING AND COMMISSIONING AT OLD PUMP HOUSE IN OIL JETTY.

TECHNICAL SPECIFICATION

SCHEDULE – ‘A’

GENERAL

The Trust proposes to replace defective pump set by supply of new pump set, Removal of existing old GO4B pump set, installation of the supplied New Pump set, by carrying out required alterations , Testing and commissioning at old pump house in Oil jetty as per detailed technical specifications furnished hereunder Everything may not be fully specified and there may be modification required .This however shall not relieve the contractor for not completing the work in every aspect for satisfactory completion. The firm while submitting the budgetary offer should read Schedule –A and Schedule – A1 in conjunction.

SCOPE OF WORKS:

- 1) The firm shall supply New pump set as detailed in schedule A1.
- 2) The firm shall remove the old defective GO4B pump set from old pump house and to be sent to RSO yard of Chennai port trust.
- 3) The firm shall provide new foundation bed suitable for the newly supplied pump set at OPH.
- 4) The supplied New pump set to be erected on the newly constructed pump foundation Bed with necessary fasteners.
- 5) The firm shall connect the suction and delivery pipe line to the new pump set by making suitable alterations to the existing suction and delivery along with priming pipe lines.
- 6) The new pump set shall be tested for the required pressure of 16 Kg/cm². During testing any leaks noticed in the firms scope of work ,to be rectified.
- 7) The 16” dia suction vertical pipe with foot valve assembly to be removed, cleaned and re-assembled.
- 8) The exhaust pipe of the engine to be connected with the existing exhaust system.

The Contractor shall be responsible for:

- i. Supply of pump set (pump with engine), factory painting, factory testing, packing, Forwarding, transit insurance, inspection, and

unloading at Chennai Port Trust. Trust shall provide storage facility based on the availability for the materials brought to execute the contract and tools & articles required for carry out the work.

- ii. The pump + Engine + Base plate + Integrated coupling +Battery to be supplied by the firm.
- iii. Transportation to erection site, installation, mounting, laying, erection, testing, successful commissioning and handing over to the ChPT.
- iv. Safe custody including insurance during storage, Transit, erection, testing, and commissioning of all Mechanical and electrical equipment, cables, erection materials and working persons.
- v. The scope of supply shall include complete erection, accessories and materials, all steel members (angles, channel, plate, sheet etc.) for installation of new pump set.
- vi. Clearing of all old materials from the premises and depositing the same to the RSD yard of the trust.
- vii. All Civil and structural foundation works for pump set shall be carried by the contractor.
- viii. NPSH (Net Positive Suction Head): Designed for maximum efficiency (The fire pump will draw water from the OPEN SEA under suction lifts condition).
- viii. Pump characteristic shall meet the requirement as per OISD 156 and pump should be capable of discharging 150 % of its rated discharge at a minimum of 65% of rated head. Pump shall witness hydrostatic pressure test to 1.5 times the maximum design working pressure of pump. Pump casing must withstand the hydrostatic test pressure for a period of 5 minutes without evidence of rupture. Inside of pump shall be coated with suitable protection coatings like ceramic coating to avoid marine growth.
- ix. Both Pump and engine to be mounted and aligned on suitable foundation of one foot from the ground. Necessary foundation bolts along with the heavy duty vibration damper to be provided.
- x. All rotating parts to be have suitable sheet metal guard.

- xi. Suitable Positive priming device to be incorporated and pressure gauge connection with a stop cock to be provided at the pump discharge. Pressure gauges to be supplied.
- xii Both pump and Engine should be certified for quality from IRS or any other Govt. authorized certifying agencies and relevant test certificates along with warranty certificate to be given along with supply of the pump set.
- Xiii During the Warranty period if any breakdown occurs the same will be informed to the firm through email. The firm should inspect the site within 24 Hrs from the receipt of information and mobilize required materials and labour for the work and the breakdown to be completed within in a reasonable time .

SPECIFICATION OF FIRE WATER PUMP

Type	:	Horizontal centrifugal split casing pump with self Priming arrangement.
Quantity	:	1 No.
Delivery Pressure	:	16 Kg/cm ²
Capacity	:	not less than 910 m ³ / Hr (as per OSID 156-2017)
		[The pump should be capable of discharging 150 % of its rated discharge at a minimum of 65% of rated head. The shut-off head shall not exceed 120% of rated head for horizontal centrifugal pumps]
Medium	:	Sea Water from Open Sea
Efficiency	:	Designed for maximum Efficiency
Stage	:	Multi Stage/single stage as required to meet OSID-156
		Guide lines
Rating	:	Continuous / Marine Duty.
Parts of the Pump	:	Pump Casing, impeller , Shaft, shaft sleeve – Super Duplex SS
Approval By	:	UL/FM approved /certified.
Note	:	Existing suction/Delivery :350mmX350mm

ENGINE SPECIFICATION

The engine should be turbo-charged, horizontal inline, water cooled, four stroke, cold start, heavy duty compression ignition engine.

The engine shall be provided with self starting arrangement comprising of battery, cable & self starter . The engine shall have protection against low lube oil pressure, high lube oil temp and high water temp. Lube oil gauge, water temperature gauge and lube oil pressure gauge to be provided and mounted on a separate panel away from the engine with necessary piping etc. and fitted to the same base plate with anti-vibration mounting. Silencer/muffler and other standard accessories are to be provided as necessary. .

Purpose : To give Required Drive to the pump specified not less than 910 m³/ Hr @ 16 Kg/cm²

Make : Caterpillar / Cummins / MAN/ Kirloskar or Equivalent.

Gear Drive : Suitable for the proposed pump.

Coupling : Mechanical Flexible Coupling.

Approval By : IRS or any other equivalent certifying society

OTHER ACCESSORIES:

- i. Necessary hoses, for transfer of fuel from existing tank to fuel pump and return line from injector leak off to fuel tank to be provided.

TERMS AND CONDITIONS

- 1) The firm shall submit their offer as per the enclosed schedule- 'A1'schedule of quantities and prices.
- 2) The firm shall inspect the site and acquaint themselves of the working area before quoting.
- 3) The necessary fire permit shall be obtained from the Trust Fire officer before commencing the work.
- 4) The firm shall arrange necessary essential oil dock entry permit to their employees.
- 5) The firm shall ensure that all the safety precautions to be adhered while working in oil dock.
- 6) The firm's vehicles like van, lorry, cranes etc., should have a spark arrester unit fitted in the exhaust pipe to work in the hazardous area.
- 7) The firm shall provide safety equipment like helmet, safety shoes etc., to their employees while on work.
- 8) The firm shall carryout the work during the allotted days only.

- 9) The firm must ensure compliance of ESI Act, 1948 in respect of labourers engaged for the above work. The details of employees proposed to be engaged shall be furnished before commencement of work. The payment to the firm shall be released only on production of documentary proof for having paid ESI Employer & Employee Contribution for all the employees engaged for the work.
- 10) All the required materials for executing the whole contract should be arranged by the contractor.
- 11) The firm shall furnish a copy of GST registration certificate.

COMPLETION PERIOD

The work shall be completed within 180 days from the date of the receipt of the work order.

GUARANTEE PERIOD

The work shall be guaranteed for 12 Months from the date of acceptance of work by the trust engineers.

PAYMENT TERMS

The payment shall be made within 30 days from the date of completion and acceptance of the work by the Trust engineer.

EXPERIENCE

The offerer should have experience in fire fighting pump set erection works during last 7 years in any port oil terminal or tank farms off shore /on shore installations. The offerer is requested to submit the list of clients to whom such works have been executed , indicating the name of clients, details of works , order value, date of work order and date of completion. If possible offerer to attach copy of work order / Agreement/ completion certificate.

**CHIEF MECHANICAL ENGINEER
CHENNAI PORT TRUST**

BUDGETARY OFFER FOR SUPPLY OF NEW PUMP SET,REMOVAL OF OLD PUMPSET,INSTALLATION OF NEW PUMPSET,TESTING AND COMMISSIONING AT OLD PUMP HOUSE IN OIL JETTY.

SCHEDULE OF QUANTITIES & PRICES
SCHEDULE – ‘A1’

<i>S. No.</i>	<i>Description of the Item</i>	<i>Unit</i>	<i>Qty.</i>	<i>Rate/Unit (Rs.)</i>	<i>Amount (Rs.)</i>
1	Supply of Pump+Engine+Baseplate+Integrated coupling +Battery as per the details given in schedule –A. a) Cost of pump b) Cost of engine with integrated coupling c) Cost of Fabricated Base plate d) Cost of Battery	No No No No	01 01 01 02		
2.	Cost of Testing , Packing, Forwarding, Transit insurance , Inspection of the pump set and other materials brought to execute the contract.	Lump sum.	.		
3.	Cost of shifting the pump set from firm site to the work place at Chennai port trust..	Lump sum.			
4.	Charges for Removal of the existing pump set ,other old material s removed , and handing over to RSD yard of Chennai port trust by arranging the firm’s own transport.	Lump sum.			
5.	Charges for constructing New foundation bed and providing foundation bolts for mounting the base plate of the pump set. (All materials required for the work to be arranged by the firm). Foundation Bed size: 3.75Mtrs X 1.5 Mtrs.x0.3Mtrs Length X Breath X Height. PCC foundation ratio of 1:1.5:3.	Lump sum.			
6.	Charges for Fixing pump set with base plate on the constructed foundation bed along with foundation bolts. (All materials required for the work to be arranged by the contractor)	Lump sum.			
7.	Charges for connecting pump suction and, delivery lines (cement coated)with priming line by suitably modifying the existing lines. (required pipes only will be supplied by trust and all other materials to be arranged by the contractor)	Lump sum.			

8	Charges for connecting engine exhaust to the existing exhaust system with necessary insulation and fuel lines from existing fuel tank to the engine. (All materials required for the work to be arranged by the contractor)	Lump sum			
9	Charges for checking Alignment, testing and commissioning the pump set	Lump sum			
Total(without GST)					
GST for material @SI.No(1)					
GST for charges from SI.No2 to 9					
GRAND TOTAL					

(Rupees _____ only inclusive of all taxes and duties)

CONTRACTOR'S SIGNATURE WITH SEAL