



CHENNAI PORT TRUST

MEE/ GC1 / 025 / 2017 / Dy.CME(ES&CH)

BUDGETARY OFFER

FOR

**DESIGN, MAUFACTURE, FABRICATION, SUPPLY,
TRANSPORTATION TO SITE INSTALLATION, TESTING,
COMMISSIONING OF 5 Nos. 30M HIGH MAST TOWER
ALONG WITH LUMINARIES AND SHIFTING OF 1 NO. 30M
HIGH MAST TOWER AT ONB YARD IN CHENNAI PORT
TRUST.**

SUBMISSION ON OR BEFORE 22.08.2017

THE CHIEF MECHANICAL ENGINEER

**7TH Floor, Centenary Building
Rajaji Salai, Chennai – 600 001.**

BUDGETARY OFFER FOR DESIGN, MANUFACTURE, FABRICATION, SUPPLY, TRANSPORTATION TO SITE INSTALLATION, TESTING, COMMISSIONING OF 5Nos. 30M HIGH MAST TOWER ALONG WITH LUMINARIES AND SHIFTING OF 1 NO. 30M HIGH MAST TOWER AT ONB YARD IN CHENNAI PORT TRUST

TECHNICAL SPECIFICATION

SCHEDULE 'A'

1.0 GENERAL:

Chennai Port Trust proposes to install 5 Nos. 30 Mtrs. High Mast Tower with suitable lighting arrangements at ONB yard and shifting of 1 No. 30Mtrs. High mast tower No. 32 in the ONB yard to S & A yard road inside the ONB yard.

2.0. SCOPE OF THE WORK:

The scope of work under this Tender includes:

1. Designing High mast light towers of 30 M, height and furnish all design calculation along with the offer to provide uniform illumination atleast 30 Lux for radius of 50 Mtrs. by providing and using HPSV, SON-T lamps of 400W which can be used with the combination of 1X400W or 2 X400W. Furnish the illumination contour diagram.
2. Manufacture all the high mast tower and transport it to site for installation.
3. Provide suitable RCC foundation for the towers at various locations by supplying all the civil materials, necessary workers and tools required for the above construction work.
4. Erection of high mast towers on the foundation with required lighting systems. All the men, materials, cranes and tools required are included in the contractors scope of work for erecting the entire High mast towers.
5. Provision of inbuilt individual and dedicated lantern hoist / lower motorized winch unit along with manual operation facilities.
6. The mast structure shall have lightning protection confirm with relevant IS standards.
7. Supply and laying of 3.5 core 70 sq.mm, XLPE, LT cable from the nearest feeder pillar through existing trench to high mast tower junction box.
8. Supply and installation of Fiber glass feeder pillar in removed feeder pillars for high mast towers comprising of MCCB, timer, toggle switch for auto and manual and contact relay with internal wiring.
9. Provision of 2 Nos. maintenance free earthing system for each high mast towers.
10. All the components used in high mast towers shall conform to relevant standards and code as applicable.

11. The head frame designed as a capping unit of the mast shall be welded construction galvanized both internally and externally. Suitable Pulley block shall be provided made up of non-corrosive material with self lubricating materials. The rotating portion shall be provided with gum metal bushes. Close fitting guides and sleeves shall be provided to ensure that the ropes and cables do not get dislodged from their respective positions in the grooves.

The head frame shall be Testing, commissioning and guaranteeing of the entire high mast towers.

The entire work shall be carried out on Turn key basis.

12. Dismantling of 1 No. 30 M high mast tower No. 32 along with feeder pillar box.
13. Providing the square fencing arrangement of size 3 M X 3M around the each high mast tower using Rails /GI pipes with GI chain links.

3.0 CONDITION OF SERVICE

Climate condition:

The towers are to be located very close to the sea and shall withstand the rigorous atmospheric conditions inside port premises during cyclonic periods. The climate is generally dry, damp, and tropical.

During summer, the mean daily temperature is maximum 45° C and the mean relative humidity is 80%. During the two monsoon periods the humidity may raise to even 100% with corresponding temperature ranging from 21°C to 29°C.

The wind velocity of 25 to 60 KmPH is common on any day.

During cyclone wind upto 200 KmPH may reach occasionally.

4.0. TRUST APPROVED MAKES

S.No.	ITEM	Name of Manufacturers
1	MCB	L & T / LEGRAND / SIEMENS / ABB / SCHNEIDER / HAVELLS
2	FRLS PVC insulated copper conductor single/multi core stranded wires of 650/1100 volt grade	HAVELLS / FINOLEX / RPG /UNIFLEX /NICCO /RR Kables
3	Light Fixtures	PHILIPS / BAJAJ / WIPRO / CROMPTON/ HAVELLS
4	Lamps and Tubes	PHILIPS / WIPRO / BAJAJ / CROMPTON/ HAVELLS
5	Cable lug & Cable Gland	DOWELLS / JHONSON / RAYCHEM
6	Contactors	L&T / SCHNEIDER / SIEMENS/ABB / BCH

S.No.	ITEM	Name of Manufacturers
7	Timers	L&T / SIEMENS / TELEMECANIQUE/ABB
8	LT Cable (XLPE and FRLS)	UNISTAR / FINOLEX/ NICCO / HAVELLS / RPG / UNIFLEX

5.0. DESIGN REQUIREMENTS
HIGHMAST STRUCTURE:

High mast lighting installation shall be designed on stringent condition such as wind speed, highly abrasive, corrosive, dusty, and saline atmosphere, high humidity, seasonal heavy rainfall and environmental pollution etc,. Hence, adequate safety aspects will be taken into consideration while designing.

The high mast winch assembly, head frame, lantern carriage, wire rope, power supply feed cable, HPSV luminaries with connected accessories and components along with civil foundations, base flange, template, high tensile steel grade EN 10 -025, cut and folded to form polygonal section and telescopically jointed and welded and tested in accordance with BIS.

The high mast shall be manufactured with structural steel plates cut and folded to form multifaced and continuously tapered profile of polygonal cross.

The mast section material shall conform to IS 226 , 1975 standards. The inside and outside surface area of the high mast sections and components shall be hot dipped, galvanized conforming to IS 4759 – 1984, IS 2629 -1985 and IS 2633 -1072. Three sections of bottom, middle and top shall be not less than 6mm/4mm/3mm respectively.

The base section shall penetrate to full depth of the base flange and welded to the top and bottom to achieve perfect verticality and stability.

The mast sections shall be joined together by slip stressed fit method. Considering the locations of the high mast towers, the design shall take care of the towers to withstand the high wind speed of 200KMPH.

The bottom level of tower shall have suitable number lantern resting clamps with a provisions the fixing of clamps.

Necessary Lightning arrestor shall be provided in the top of the mast.

6.0. APERTURE COMPARTMENT

An adequate aperture of suitable size to accommodate winch electric drive, cable, plug and socket etc, and reinforced to maintain the mast strength shall be provided at the base section of mast. The opening shall permit clear access to winch cable plug and socket etc, and facilitate easy removal of winch. The door opening shall be complete with a close fitting, weather proof door provided with a heavy-duty double internal lock with a special paddle key.

The door opening shall be carefully designed and reinforced with welded steel section so that the mast base section shall be unaffected and undue buckling of the cut portion is prevented.

7.0. LANTERN CARRIAGE

Fabrication:

The fabricated lantern carriage shall be provided for fixing two rings of top layer and bottom layer to hold equal numbers fittings in each layer and holding the luminaries with control gearboxes and also have a perfect self-balance. The tubes acting as conduits for wires with holes fully protected by grommets. The lantern carriage shall be fabricated in two halves and joined by bolted flanges with stainless steel and plastic lock type stainless steel nuts for easy installation or removal from the mast. The inner lining of the carriage shall be provided with protective arrangement to avoid a swing and no damage is caused to the surface of the mast during the raising and lowering operation of the carriage. The entire lantern carriage shall be hot dip galvanized.

The weatherproof junction box shall be not less than IP 65 enclosure made of cast aluminium shall be provided on the carriage assembly as required from which the interconnections to the designed number of luminaries and associated control gears fixed on the carriage shall be made.

7.0 RAISING AND LOWERING MECHANISM:

For installation and maintenance of the luminaries and lamps a suitable winch arrangements to lower and raise the lantern carriage assembly shall be provided with the winch fixed at a base of the mast and the specially designed head frame assembly at the top. The winch drum shall be designed for three phase motor for raising/ lowering of lantern carriage at optimum speed.

8.0 WINCH

The winch shall be of completely self-sustaining type without the need for break shoe, springs or clutches. Each driving spindle of the winch shall be positively locked when not in use. Gravity activated pawls. Individual drum also should be operated for fine adjustment of lantern carriage. The capacity operating speed safe working load of the winch and the recommended lubrication and serial number of the winch shall be clearly marked on each winch.

The gear rating may be according to manufacturer's standard. The winch shall be self lubricating type by means of an oil bath and the oil shall be readily available grades and of reputed manufactures.

The winch drum shall be grooved to ensure perfect seats for stable and tidy rope lay with no chances of rope slippage. The rope termination in the winch shall be such that distortion or twisting is eliminated and at least 5 to 6 turns of rope remain on the drum even when the lantern carriage is fully lowered and rested on the rest pads. It should be possible to operate the winch manually by a suitable handle and or by an External integrated power tool. It shall be possible to remove the double drum after dismantling through the door opening provided at the base of the Mast. Also a winch gear box for simultaneous and reversible operation of the double drum winch shall be provided.

The test certificate shall be furnished from the original manufacturer of each winch in support of the maximum load operated by the winch.

9.0 HEAD FRAME

It shall be provided with guides and stops with suitable buffer for docking the lantern carriage.

10.0 STAINLESS STEEL WIRE ROPE

The suspension system shall essentially be without any intermediate joint and shall consist of only non corrodible stainless steel wire of AISI 316 or better grade and No intermediate joints are acceptable in view of safety. The stainless steel wire ropes shall be of 7/19 constructions the central core being of the same material. The over all diameter of the rope shall not be less than 6mm. The breaking load of each rope shall have factor of safety not less than the 5 times safe working load of the winch. Two continuous lengths of stainless steel wire ropes without intermediate joints shall be used in this system. **No intermediate joints / terminations, either bolted or else, shall be provided on the wire ropes between winch and lantern carriage.**

The end constructions of ropes to the winch drum shall be fitted with talwrit. The thimbles shall be secured on ropes by compression splices.

11.0. ILLUMINATION REQUIRED

Each high mast towers shall be provided with combination of 1x 400 W / 2x400 W HPSV, SON T light fitting with lamp with independent control gear on top ring and same quantity in the bottom ring a uniform symmetrical lighting distribution with uniform illumination level of 30 Lux in an area of 50M radius for the 30M high mast tower.

The lighting system shall be designed with 1x 400 W / 2X400W HPSV, SON T luminaries. The firm shall furnish the Illumination contour drawing along with the offer.

12.0. ELECTRICAL SYSTEM CABLE AND CABLE CONNECTIONS

The electrical supply shall be made with at least 2 runs of 4.0 sq.mm (five) core copper conductor flexible circular sheathed power cables of appropriate rating confirm to relevant BIS.

A suitable terminal box shall be provided at the base compartment for terminating the incomer cable. The system shall have inbuilt switching arrangements to switch on the second ring luminaries with delay of 15 minutes and safety facilities for testing the luminaries while in lowered position.

Also suitable provision shall be made at the base compartment to facilitate the operation of externally mounted electrically operated power tool for raising and lowering of the lantern carriage assembly. The trailing cables of the lantern carriage rings shall be terminated by means of metal clad plug and socket provided in the base compartment for easy disconnection when required.

13.0. FIBER GLASS FEEDER PILLAR BOXES:

1) Pillar Box shall be made of fibre glass re-inforced polyester and fire retardant electrical and mechanical corrosion resistance and confirm to self extinguishing enclosure 600 x 500 x 240 mm and all dimension tolerance +/- 20mm. 4 mm wall thickness with side hinge and locking arrangement with screw in four corners and provision of mounting plate for fixing contactors and MCCB etc and also comprising of the following in the feeder pillar box:

2) 100 Amps MCCB, 4 Pole, 440 Volt, 25 KA, Breaking capacity 25KA, Both thermal and magnetic setting type.

- 3) 4 pole and 63 Amps contactors without auxiliary contact (NO/NC), Coil operating voltage 230/240 AC.
- 4) Analog timer adjustment for time setting accurate shall be in minute. Summer/Winter time correction (+ / -) shall be one hour. Switching status indication shall be provided. Permanent ON & OFF switch shall be provided.
- 5) 5 Amps toggle switch for manual auto operation for timer circuit shall be provided.
- 6) Power supply connection shall be connected to newly erected feeder pillar box and earthing. total light fittings shall be controlled with two contactors and timers with a delay of 15 Minutes with each ring of light fittings.

14.0. AVIATION OBSTRUCTION LIGHTS

A set of two LED aviation obstruction lights of reliable design and reputed manufacturer shall be provided on top of each mast.

15.0. EARTHING TERMINAL

Earthing terminal using 12mm dia. Stainless steel bolt shall be provided at a convenient locations on the base of the mast, 2 Nos. earth pit shall be provided. One connected to the frame and other to the cable gland. Earth pit shall be provided as per relevant IS standards.

16.0. FOUNDATION WORKS

The soil bearing capacity is 10 tones per sq.m approximately Suitable foundations shall be designed. The Tenderer shall submit detailed drawing of foundation for the approval of the Trust Civil department before commencement of foundation. After getting officials approval foundation work shall be started. Any corrections /modifications required shall be taken into account and carried out accordingly and Chief Mechanical Engineer's decision to be final and binding. The excavation of the earth for the foundation shall be the Tenderer's responsibility.

The excavated materials and unwanted materials shall be cleared then and there and dumped away from the site locations as required by CME's representative without any hindrance to the operation or movement of the Trust's plants and equipments.

Accordingly the R.C.C. concrete foundation shall be provided in the Tenderer's responsibility includes supply of all the materials like blue metal, river sand, steel, cement, chipping, cutting, plastering, etc, and back filling up to the normal ground level of the adjoining area.

The provision of foundation shall be executed well in advance and sufficient curing shall be given after completion of concrete works.

The Tenderer's responsibility includes breaking of old concrete portions and Dewatering if necessitated while excavating.

The top level of the concrete base shall be higher than the near by ground level of not less than 100mm.

17.0. PROVISION OF MAINTENANCE FREE EARTHING

Two Nos Maintenance free earthing along with enclosure and a RCC top cover shall be provided independently at convenient locations nearer to each high mast tower.

Maintenance free earthing shall be carried out in accordance with Indian Electricity Rules and Regulations amended till date and also the Earth electrodes shall be provided in conformity with BIS 3043 / BS 7430 of the latest version expecting the specified values detailed herein.

The earth electrodes shall be of high tensile low carbon steel circular rods, molecularly bonded copper or clad copper on the outer surface 17 mm dia and not less than 3.0 m length and shall be driven to a depth in the ground below the ground level and 3 meters away from any other earth electrodes or as per latest BIS 3043. The premixed power set carbon based backfill compound shall be poured in the bore with water and re- close the bore. The earth pits are to be interconnected 25x3mm Copper flat. The ground enhancing back fill material shall be a compound having a low resistivity. All the materials, terminals and works specified herein and shall be the entire responsibility of the firm.

For body earthing GI flat of 25x3mm thick shall be laid and terminated to the earth electrode and body of the high mast structure. Two runs of earth leads of 8 SWG thick GI wires shall be laid and terminated between the individual earth electrodes and the cable gland.

18.0. FENCING ARRANGEMENTS:

Supply of all materials for providing square fencing arrangements of size 3 M x 3 M around the each high mast tower. 1.5 M length rails / GI pipe shall be grouted with equal interval including all civil materials. GI chain link shall be provided between the rails.

Note : Rail / GI pipe shall be provide by the Trust.

19.0. SUPPLY AND LAYING OF UNDERGROUND CABLE:

- i) Supply of 3 ½ core 70 sq. mm L.T. under ground cable of 1100V galvanized steel strip armoured XLPE cable with stranded Aluminium conductor conforming to IS. 7098 Part I with latest amendments.
- ii) Laying of the above cable from the nearest feeder pillar to the fibre glass feeder pillar through existing trench and reclosing the same.

20.0. TRIALS, TESTING, COMMISSIONING AND HANDING OVER:

After completion of erection of the individual high mast the lowering and hoisting of the lantern carriage with the luminaries lighting installations shall be trialed for smooth and easy operation maintaining a perfect horizontally it throughout the height of the high mast and also for the specified illumination levels. Corrections if needed shall be carried out final testing shall be conducted and the high mast installation shall be commissioned and handed over to the Trust.

21.0. GUARANTEE

The high mast shall give a reliable and guaranteed performance for a minimum period of 12 months from the date of handing over and acceptance by the Trust.

22.0. DRAWING

- 1) 2 sets of approved design details calculations along with the horizontal luminance levels achieved and
- 2) 2 sets of approved design details calculations and drawing of foundation for the 30 Mtrs. highmast shall be furnished by the firm.

23.0. POWER TOOL FOR THE WINCH:

A suitable, high-powered, electrically driven, externally mounted power tool, with manual over ride, together with an operating stand shall be supplied for the raising and lowering of the lantern carriage for maintenance purposes. The speed of the power tool may preferably of slow speed, of 1.5 to 1.8 m/minute, so that vibrations associated with high speed operation are avoided. The power tool shall be single speed, provided with a motor of the required rating, suitable for hand/stand operation. The power tool shall be supplied complete with push button type remote control switch, together with 6 (six) meters of power cable, so that the operations can be carried out from a safe distance of 5 (five) meters. The capacity and speed of the electric motor used in the power tool shall be suitable for the lifting of the design load installed on the lantern carriage. The power tool stand shall be so designed that it will not only be self-supporting but also aligns the power tool perfectly with respect to the winch spindle during the operations. Also, a handle for the manual operation of the winches in case of problems with the electrically operated tool shall be provided and shall incorporate a torque-limiting device. A separate torque-limiting device to protect the wire ropes from over stretching shall be provided. It shall be mechanical with suitable load adjusting device. The torque limiter is a requirement as per the relevant standards in view of the overall safety of the system.

24.0. LIGHTNING FINIAL :

Lightning Finial One number heavy-duty hot dip galvanised lightning finial shall be provided for each mast. The lightning finial shall be minimum 1.2 m in length and shall be provided at the centre of the head frame. It shall be bolted solidly to the head frame to get a direct conducting path to the earth through the mast. The lightning finial shall not be provided on the lantern carriage under any circumstances in view of safety of the system.

25.0. DISMANTLING:

Dismantling of 1 No. 30 M high mast tower No.32 including the lantern carriage, light fittings, wire ropes, switch board, feeder pillar and other accessories with care and transporting the removed materials to the proposed new location.

Dismantled feeder pillar box shall be handed over to the Illumination section.

26.0. OTHER TERMS AND CONDITIONS

- i) The Technical Specifications - Schedule 'A' and Schedule 'A1' are to be read in conjunction to make sure of the works involved.

ii) The Tenderer shall not avail themselves of any unintentional errors or omissions in these detailed specifications furnished and shall include provision of all materials, accessories and components tools and tackles step ladders safety belts testing equipments that are required for the successful and satisfactory execution, completion trials, testing, commissioning and handing over whether specifically mentioned herein or not.

iii) Safety and safe custody of all men, material, tools and plants that are required by the Tenderer during site works /erection trials testing, commissioning and till handing over to the Trust shall be entirely the Tenderer's responsibility.

iv) The Trust will not be responsible for any damage or loss of any of the materials and for any damage / accident to the Tenderer's personal.

v) The Tenderer shall plan and commence the works as per the approved programme and shall meet all the requirements of the specification completely and hand over within the scheduled time.

vi) The Tenderer shall carry out the erection of the tower safety with proper procedure employing appropriate tools, power tool and tackles other equipment and shall not damage or displace or cause accident to any of the Trust's equipment or personnel.

vii) **Completion period: The firm shall complete the entire work with in 75 days from the date of handing over of site.**

vii) The Tenderer is advised to inspect the site locations to acquaint themselves of the works involved.

viii) One temporary power supply will be provided by the Trust at works site, but electricity will be charged as per Board's rate in force.

- 1) The Contractor should make Security Deposit as per TNEB norms for Temporary connection.
- 2) The Contractor should pay every month electricity consumption as per the bill.
- 3) The Security deposit will be refunded after the completion of the works.

ix) The clarification, if any and site inspection the firm may contact Dy.CME(ES& CH), 2nd floor of Old Administrative Office Building, Tel. 2531 2542.

**CHIEF MECHANICAL ENGINEER
CHENNAI PORT TRUST**

BUDGETARY OFFER FOR DESIGN, MAUNFACTURE, FABRICATION, SUPPLY, TRANSPORTATION TO SITE INSTALLATION, TESTING, COMMISSIONING OF 5Nos. 30M HIGH MAST TOWER ALONG WITH LUMINARIES AND SHIFTING OF 1 NO. 30M HIGH MAST TOWER AT ONB YARD IN CHENNAI PORT TRUST

SCHEDULE OF PRICES AND QUANTITIES

SCHEDULE – ‘A1’

Sl.No.	DESCRIPTION OF WORK	UNIT	QTY.	RATE	AMOUNT
1.	Dismantling of 1 No. 30 M high mast tower No.32 including the lantern carriage, light fittings, wire ropes, switch board, feeder pillar and other accessories with care and transporting the removed materials to the proposed new location.	L.S.	L.S.		
2	Charges for design, transportation to site and supply 30M high mast tower with lighting arrangement comprising of the High mast structure complete, HPSV SON T Luminaries with lamp and independent control gear, Aviation luminaries, Lightning finial and Local fibre glass feeder panel for high mast with timer panel as detailed in Schedule 'A'.	Set.	5		
3.	Charges for providing foundation for the erection of 30M high mast tower.	No.	6		
4.	Cost of erection over the corresponding foundation of 30M high mast.	No.	6		
5.	Cost of cabling, trials, testing, commissioning, and handing over of 30M high mast.	No.	6		
6.	Supply of 3 ½ core 70 sq. mm L.T under ground cable of 1100V galvanized steel strip armoured XLPE cable with stranded Aluminium conductor conforming to IS. 7098 Part I with latest amendments.	Mtr.	300		

7.	Laying of the above cable from the nearest feeder pillar to the fibre glass feeder pillar through existing trench and reclosing the same.	Mtr.	300		
8.	Provision of Maintenance free earthing for 6 Nos. high mast towers as detailed in Schedule 'A'. a) Supply b) Installation	No. No.	12 12		
9.	Providing square fencing arrangements of size 3 M x 3 M grouting in the ground are as detailed in Schedule 'A'. a) Supply b) Installation Note: Necessary GI Pipes / Rails shall be supplied by the Trust.	No. No.	6 6		
10.	Supply of power tool for winch as detailed in Schedule 'A'.	No.	2		
				Total	
				GST @	%
				Grand Total	

TENDERER's Sign and seal

SPECIAL CONDITIONS OF CONTRACT (SCC)

SCHEDULE - 'B'

1. The Tenderer shall examine carefully the General Rules and Directions, General and Special Conditions of Contract, Technical Specifications and Drawing and Shall inspect the site to acquaint himself with the nature of work local working conditions etc., for the purpose of making his offer on his own responsibility.
2. It shall be open to the Chief Mechanical Engineer to nominate one or more of his representatives to supervise the work and to satisfy about the quality of materials and workmanship as required by the relevant regulation and as mentioned in technical specifications. The decision of the Chief Mechanical Engineer shall be final as regards the quality of materials and workmanship shall be binding on the contractor.
3. The prices shall be firm and not subject to fluctuation at any stage till the completion of the contract. The price bid shall be quoted on line only.
4. The Tenderer shall give clear indication in his tender of the items he does not propose to include in the tender. Where such clear mention is not given it will be construed that the tender covers all parts required for completion of work.
5. The Tenderer shall quote separately for any items which have not been specifically mentioned in the specification but which are found necessary for completion, efficient installation and operation of electrification system other than those items which are not covered under 'works not included'.
6. The tender shall be accompanied by sufficient details of materials included in the offer with catalogue and sketches wherever necessary for comprehensive assessment of its merits and performance.
7. It will be entirely the Tenderer's responsibility to take required steps to adequately safeguard the personnel carrying out the work and to ensure that the work is carried out in such a manner that maximum safety to the personnel is assured.
8. All materials and components included in the contract shall conform to the relevant Indian Standard Specification wherever they exist.
9. The decision of the Chief Mechanical Engineer or his representative regarding the quality of any materials used on the work will be final and binding on the Tenderer. The Tenderer shall remove from the site of work any material rejected as unfit for use on the work at his own cost as soon as he is ordered to do so, failing which the Chief Mechanical Engineer or his representative shall remove such material from the site of work and shall deduct the cost incurred by such removal by the Board from any money due to the Tenderer.

10. The Tenderer shall co-ordinate his work with that of other Tenderers executing other works in the site and plan his work as to minimise inconvenience to others in the work site.
11. The watch and ward and storage of materials will be Tenderer's responsibility and the Board shall not be held responsible for any loss of the material.
12. The Tenderer shall be deemed to have satisfied himself before submitting the tender as to the correctness and sufficiency of his tender for the work and of his price stated in the schedule as to cover his entire obligation under the contract for completion of the work.
13. For Harbour entry pass and direction to site of work for inspection for the purpose of making the offer, the Tenderer shall contact the "Dy.CME (ES&CH) 2nd floor of the Old Admn Building, Chennai Port Trust. Telephone Nos. 25312542.

**CHIEF MECHANICAL ENGINEER
CHENNAI PORT TRUST**

GENERAL CONDITIONS OF CONTRACT (GCC)

SCHEDULE - 'C'

1. DEFINITIONS AND INTERPRETATIONS

In the contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires: -

- (a) "BOARD" means the Board of Trustees of the Port of Chennai as constituted under the Major Port Trusts' Act, 1963 as amended from time to time.
- (b) "CHIEF MECHANICAL ENGINEER" means the Chief Mechanical Engineer of the Chennai Port Trust.
- (c) "CHIEF MECHANICAL ENGINEER'S REPRESENTATIVE" means any Resident Engineer or Assistant of the Chief Mechanical Engineer or any clerk of works detailed from time to time by the Chief Mechanical Engineer to perform the duties as may be specified in the contract.
- (d) "CONSTRUCTIONAL PLANT" means all appliances or things or whatsoever nature required in or about the execution, completion or maintenance of the 'Works' or 'Temporary Works' (as hereinafter defined) but does not include materials or other things intended to form or forming part of the permanent work.
- (e) "CONTRACT" means the General Conditions, Specifications, Drawings, Priced Bill or Quantities, Schedule of Rates, Prices (if any) tender and contract agreement.
- (g) "TENDERER " means the person or persons, firm or company whose tender has been accepted by the Board and Tenderer's permitted assigns.
- (h) "CONTRACT PRICE" means the sum named in the tender subject to such conditions thereto or deductions there from as may be made under provisions hereinafter contained.
- (i) "DRAWINGS" means the drawings referred to in the contract agreement and any modifications of such drawings approved in writing by the Chief Mechanical Engineer and such other drawings as may from to time be furnished or approved in writing by the Chief Mechanical Engineer.
- (j) "SITE" means the lands and other places on/under/in/of, through which the 'work ' are to be executed or carried out and any other lands or places provided by the Board for the purposes of the contract.
- (k) "TEMPORARY WORKS" means temporary works of every kind required in the execution, completion or maintenance of the works and which do not form an item of the 'work' or 'works'.

- (k) "WORKS" means the works to be executed in accordance with the contract under the relevant schedules.
- (l) "TRUST'S STORES" means the storage yards for materials of the Trust anywhere in the Harbour premises.

2. EXTENT OF CONTRACT

The contract comprises, the construction, completion and maintenance of the 'works' and the provision of all labour, materials constructional plant, temporary works and every thing whether of a temporary or permanent nature required in and for such construction, completion and maintenance so far as the necessity for providing the same is specified in or reasonably to be inferred from the contract.

3. COMPLETION PERIOD

The entire work shall be completed within 75 days from the date of handing over of site.

- a) In case of delay in the progress of work, the Chief Mechanical Engineer shall issue to the contractor a memo in writing pointing out the delay in the progress and calling upon the contractor to explain the causes for the delay within three days of the receipt of the memo. If the Chief Mechanical Engineer is not satisfied with the explanation offered, he may forfeit the security deposit and/or withhold payment of pending bills in whole or in part. The contractor may appeal to the Chairman against the order of the Chief Mechanical Engineer forfeiting the Security Deposit and withholding of bills within a week of the said order and the decision of the Chairman shall be final and binding on the contractor.
- b) If the security deposit or any part thereof is forfeited by an order of the Chief Mechanical Engineer and such order become final, the Tenderer shall make good the security deposit or part of such deposit so forfeited within a fortnight thereafter or such further time as the Chief Mechanical Engineer may grant failing which the Chief Mechanical Engineer may determine the Contract.

4. GUARANTEE PERIOD:

- (a) The supply / works shall be guaranteed for a period of 12 months from the date of acceptance of the work. Any defect observed during the guarantee period, the same shall be rectified by the firm free of cost.
- (b) The contractor shall ensure no damage to the any Trust Properties during contract period. If any, the same shall be rectified and / or replaced at free of cost by the Tenderer.
- (c) If during this twelve months guarantee period any defects are noticed, which in the opinion of the Chief Mechanical Engineer are due to bad materials used and/or defective workmanship the Tenderer shall be required to carryout at the Tenderer's cost, such repairs, as the Chief Mechanical Engineer considers necessary or in the event of the

Tenderer failing to do this within a notified time the Chief Mechanical Engineer may arrange for such repairs to be carried out and deduct the cost of such rectification of the defects from the amount retained, without prejudice to the recovery of any amount that may have been spent in excess of the deposit. For purposes, the period of 12 months shall count from the date of handing over of the completed part or whole of works by the Tenderer to the Chief Mechanical Engineer.

5. CONTRACTOR'S SUPERINTENDENCE

- (a) The Chief Mechanical Engineer reserves to himself the right to cancel the contract for unsatisfactory progress in the work at any stage.
- (b) The Tenderer shall give or provide all necessary superintendence to the complete satisfaction of the Chief Mechanical Engineer during the execution of the works and as long thereafter as the Chief Mechanical Engineer may consider necessary. The Tenderer or a competent and authorised agent or representative approved in writing by the Chief Mechanical Engineer which approval may at any time be withdrawn is to be constantly on the work and shall give his whole time to the superintendence of the same. Such authorised agent or representative shall receive on behalf of the Tenderer directions and instructions from the Chief Mechanical Engineer the Chief Mechanical Engineer's representative.

6. PROGRAMME TO BE FURNISHED

As soon as practicable, after the acceptance of his tender, the Contractor shall, if required, submit to the Chief Mechanical Engineer for his approval a detailed programme showing the order of procedure and method in which he proposes to carry out the works and shall whenever required by the Chief Mechanical Engineer furnish for his information particulars in writing of the Contractor's arrangements for carrying out the works and of the constructional plant and temporary works which the Contractor intends to supply, use or construct, as the case may be. Submission to and approval by the Chief Mechanical Engineer of such programme or furnishing of such particulars shall not relieve the Contractor of any of his duties or responsibilities under the contract.

- 7. If the progress of work is held up owing to circumstances which, in the opinion of the Chief Mechanical Engineer are beyond the control of the Tenderer, such as war, stormy weather etc., the Chief Mechanical Engineer may at his discretion, grant to the Tenderer such extension of time as he considers reasonable for the completion of the works. The grant of such extension of time shall not bestow on them for any claim or compensation/extra payment at a future date whatsoever.
- 8. The materials used on the work must be of first class variety corresponding to relevant ISS and other specifications laid in the contract. The work must be carried out in a workmanlike and expeditious manner and quality of work at each stage shall be subject to approval of the Chief Mechanical Engineer. The Chief Mechanical Engineer's decision as to the quality of such materials and work shall be final and binding on the Tenderer.

9. The Tenderer shall maintain at the site or work an Inspection Register, which must be produced by the Tenderer or his agent whenever called upon to do so by the Chief Mechanical Engineer or his representative during their inspection of the work. If the rectifications ordered to be done are not carried out within the time specified by the Chief Mechanical Engineer, the Chief Mechanical Engineer shall have the right to get such work done by any other agency and to recover the cost thereof from the Tenderer. This inspection register shall be the duplicate copying type so that one copy of the entries get recorded in the Chief Mechanical Engineer's Office. The Tenderer shall not make any entry of any kind in this register.

10. **CHIEF MECHANICAL ENGINEER'S REPRESENTATIVE**

The duties of the Chief Mechanical Engineer's Representative are to watch and supervise the works and to test and examine any materials to be used or workmanship employed in connection with the works. He shall have no authority to relieve the Contractor of any of his duties or obligations under the contract or except as expressly provided hereunder to order any work involving delay or any extra payment by the Board or to make any variation or of in the works.

11. **WORK TO BE TO THE SATISFACTION OF THE CHIEF MECHANICAL ENGINEER:**

The Tenderer shall execute, complete and maintain the works strictly in accordance with the contract to the satisfaction of the Chief Mechanical Engineer and shall comply with and adhere strictly to the Chief Mechanical Engineer's instructions and directions on any matter (whether mentioned in the contract or not). The Tenderer shall take instructions and directions only from the Chief Mechanical Engineer or his representatives.

12. **LIQUIDATED DAMAGES/LATE DELIVERY CHARGES:**

The Liquidated Damages/Late Delivery Charges shall be deducted from any amount payable to or to be payable to the contractor/supplier including encashment of Bank Guarantee or any securities/guarantees, if any available with the Port Trust.

The maximum amount of Liquidated Damages/Late Delivery Charges shall be worked out based on the total contract/supply order value inclusive of all taxes and duties thereon.

In case of part/portions of the contract work/supply order completed and taken possession by the Trust and the Trust operates/can be made for operation of the part portion/supply order, the calculation of Liquidated Damages will be restricted to the uncompleted/undelivered value of the work/supply order subject to the amount of the maximum percentage prescribed for the Liquidated Damages/Late Delivery Charges of the total value of the contract/supply.

The Liquidated Damages/Late Delivery Charges shall be ½% of the contract value per week or part thereof (a week is defined as 7 days inclusive of holidays) subject to a maximum of 10% of the total contract value.

If the contract/supply order is delayed after giving due notice, the contract/supply order may be cancelled by the competent authority with the condition that any additional expenditure incurred by the Port Trust in completing the work/supply order will be recovered from the contractor/supplier of the cancelled contract/supply order for non-performance/delay in the execution of the contract/supply.

13. SUPPLY OF MATERIALS AND LABOUR

Except where otherwise specified in the contract the Tenderer shall at his own expense supply and provide all the temporary works, materials both for temporary and for works under the contract, labour (including the supervision thereof) transport to or from the site and in and about the works and other things of every kind required for the construction, completion and maintenance of the works. The Tenderer shall not hire out any item or equipment brought by him in connection with the execution of the work under the contract to any other party in connection with any work of the latter in the Port, without the written permission of the Chairman. Such permission may or may not be granted by the Chairman.

- 14.** The Tenderer shall at his own cost make due arrangements for the proper watch and safety of all materials and supplied to him by the Board for the use on this work. He shall not remove such constructional or materials from the site without the permission of the Chief Mechanical Engineer. If any of these materials are lost or damaged in any way due to negligence or carelessness on the part of the Tenderers or any of his employees, the cost for the materials lost or damaged and penalty for such negligence or carelessness of the Tenderer as determined by the Chief Mechanical Engineer shall be recovered from the Tenderer from any moneys due to him or to become due to him.

15. ASSIGNMENT AND SUB-LETTING

The Tenderer shall not assign the contract or any part thereof or any benefit or interest therein or there under without the written consent of the Board. The Tenderer shall not sublet the whole of the works. The Tenderer shall not sublet any part of the works without the written consent of the Board and such consent if given shall not relieve the Tenderer of any liability or obligation under the contract and he shall be responsible for the acts, defaults and neglects of any Sub-Tenderer and his agents, servants or workmen as if they were the acts, defaults, or neglects of the Tenderer, his agents, servants or workmen provided always that the provision of labour on a piece work basis shall not be deemed to be a subletting of assignment of benefit or interest under this clause.

- 16.** The Tenderer shall be solely responsible for any accident, damage or injury caused to any of his employees or the Board's employees in the execution of the works and shall hold the Board blameless in respect thereof and also in respect of any claims made by any person in the employment of the Tenderer for any reason whatsoever.

- 17.** (a) The Tenderer shall be responsible for all structural or decorative damage to Board's or his own property and injury caused by the works or workmen in his employment to persons, animals or things and shall indemnify the Board against any claims or actions arising there from. He shall also be responsible for any injuries or damage caused to the

works by inclemency of weather outbreak of fire and shall rectify at his own cost all such damage and thoroughly complete the works.

- (b) The Tenderer shall be solely responsible for reporting the Board and Police Department immediately any serious or fatal accidents at any place belonging to the Board including premises leased to the Board to any of his employees/ workmen engaged by him.
- 18.** The Tenderer shall not house any of his workmen at or near the site. He shall not construct any structure even of a temporary nature for any other purpose on Board's premises except with the written permission of the Chief Mechanical Engineer and any such construction so put up shall be removed by the Tenderer whenever the Chief Mechanical Engineer calls upon the Tenderer to remove.
- 19.** The Tenderer shall not operate the workshop at the site for the purpose of this contract beyond what is absolutely necessary for the execution of this contract, the necessity for and extent of which the Chief Mechanical Engineer's decision shall be final. Such necessary structures shall be non-inflammable materials as approved by the Chief Mechanical Engineer.
Only vehicles licensed by the Board will be allowed inside the Harbour premises.
- 20.** Measurements taken by the person authorised by the Chief Mechanical Engineer to take them will be binding on the Tenderer who will always be given the opportunity of witnessing the measurements. The contractor should submit a bill in the Trust's prescribed billing format.
- 21. PAYMENT TERMS:**
- i) 100% payment will be made within 30 days acceptance of the work through e-payment.

Income tax @ 2% shall be levied U/S 194 (c) of Income Tax Act 1961. Similarly Tamil Nadu Value Added Tax as per Section 13 of T.N.VAT Act 2006 shall also be deducted. In case of exemption from the above levy necessary non-deduction certificate shall be produced by the tenderer from Income Tax / Commercial Tax office respectively.

The tenderer shall quote the Bank Account details for the payment through ECS along with PAN. A copy of the Pan Card, ESI registration and Service Tax Regn. No. shall be furnished

- (ii) Half of the amount deposited (5 %) by the contractor as security deposit under the agreement will be refunded to the contractor after satisfactory completion of the entire work and acceptance by the Trust and the balance (5%) will be refunded after the satisfactory completion of the guarantee period or extended guarantee period.

22. GST REGISTRATION NUMBER AND PAN CARD NUMBER:

The Contractor should submit the GST Registration Number and Pan Card Number along with the offer failing which your offer will not be considered for evaluation.

23. TAXES AND DUTIES

All prices shall be firm inclusive of Taxes and duties.

Any new and variation in Taxes & Duties shall be applicable only during the scheduled completion period and new/variation in Taxes & Duties will not be allowed during the extended delivery/ completion period.

Any penal interest, penalty or fine payable / paid by the contractor to the Tax Authorities on the Taxes & duties shall not be paid / reimbursed by the Trust under any circumstances.

In the event, the Contractor not indicating the rate of Taxes and Duties included in the price separately in the Bid, the port shall not pay any change in the rate of Taxes and Duties including any newly levied Taxes and Duties during the entire currency of the contract under any circumstances.

- 24.** In the event of the death, insanity or insolvency of the Tenderer or in the case of the Tenderer being a partnership on a dissolution of the firm of Tenderer or in the case of the Tenderer being a company governed by Companies' Act 1956, the winding up of the company the contract shall be terminated on the happening of the event above said and all accepted and acceptable work shall be measured up and paid for, to the person or persons legally entitled to receive payment for work done and on his or their executing a bond indemnifying the Board against all claims that may be made in respect of payments made by the Board by persons claiming from the Tenderer or others, in respect of work done by the Tenderer prior to the termination of the contract.
- 25.** In the event of the contract being terminated at any stage due to unsatisfactory progress of work as per Tender Specification, the Chief Mechanical Engineer shall have the right to execute the portions of works left incomplete using the Board's labour or any other agency and the Tenderer shall be liable to make good any loss incurred by the Board on this account. Such amounts shall be recovered from any moneys due to or to become due to the Tenderer.
- 26. (i)** If the Tenderer claims that the decisions or the instructions of the Chief Mechanical Engineer are unjustified and that accordingly he is entitled to extra payments on account thereof, he shall forthwith notify this to the Chief Mechanical Engineer to record his decisions and the reasons therefore in writing and shall within two weeks state his claims in writing to the Chief Mechanical Engineer thereafter. The Chief Mechanical Engineer shall thereafter within four weeks of the receipt of the claim reply negotiations or discussions immediately thereafter within a further four weeks, the question of liability for such payments will be treated as one of disputes.

- (ii) In the Contract whenever there is a discretion or exercise or will by the Chief Mechanical Engineer during the progress of work, the mode or manner of the exercise or discretion shall not be a matter of legal adjudication.
- (iii) Wherever the Board is given discretion to do any act under the contract, the exercise of the discretion by the Board shall be final, conclusive and binding on all parties and the manner of exercise of such discretion shall not be called in question and the matter cannot be referred to court of law.
- (iv) The decision of the Chief Mechanical Engineer shall be final, conclusive and binding on all parties to the contract upon all questions relating to the meaning of the specifications, designs, drawings and instructions and as to the quality of workmanship or material used on the work or any matter arising out of or relating to the specifications, designs and drawings and instructions concerning the works or the execution of or failure to execute the same arising during the course of works. The above shall not be the subject or Legal adjudication and in no case shall the work be stopped consequent on such a dispute arising and the work shall also be carried out by the Tenderer strictly in accordance with the instructions of the Chief Mechanical Engineer.
- (v) Any litigation arising out of this agreement, shall only be adjudicated before the competent court of law within the jurisdiction of the Hon'ble High Court of Madras.

27. REMOVAL OF WORKMEN

The Tenderer shall employ in and about the execution of the works only such persons as are careful, skilled and experience, in their several trades and callings to the approval of the Chief Mechanical Engineer. The Chief Mechanical Engineer shall be at liberty to object to and require the Tenderer to remove from the works any persons employed by the Tenderer in or about the execution of the works who in the opinion of the Chief Mechanical Engineer, misconducts himself or incompetent or negligent in the proper performance of his duties and such persons shall not be again employed upon the works without the written permission of the Chief Mechanical Engineer.

- 28. (i) The Tenderer shall confirm to and comply with the regulations and byelaws of the State or Central Government or of the Board and of all other local authorities such as Corporation of Madras, the Tamil Nadu Electricity System, the Chief Electrical Inspector to the Government of Tamil Nadu, the Government Customs and Police Departments, Fire Services, the provisions contained in the various Labour Acts enacted by the State Legislature and Central Parliament in force and the rules made thereunder including those under Minimum Wages Act, Factories Act, the Indian Electricity Act and rules framed under it, Workmen Compensation Act, Provident Fund Regulations Act, Employees Provident Fund Act, 1961 and scheme made under the said Act, Health and Sanitary arrangements for workers etc. and Contract Labour (Regulation and Abolition) Act, 1970 and the Contract (Regulation and Abolition) Central Rules, 1971 etc. for welfare and protection of works, workers or for the safety of the public and other insurance provisions.

- (ii) The Board shall not be liable for the failure of the contractor in confirming to the provision of the Acts, Rules and regulations etc., referred to in the above para and in case of any contravention of the provisions of the Acts, Rules regulations etc. the contractor shall keep the Board indemnified against any loss, cost and damage in the event of any action being taken for contravention.
- (iii) If any enhancement in the rates of wages becomes payable as a result of the implementation of the Chief Labour Commissioner's interpretation of the Contract Labour (Regulation and Abolition) Central Rules, 1971 upto and including an increase of 10% of the wages shall be borne by the Tenderer and enhancement in excess of 10% would be borne by the Port Trust.

(iv) **ESI CLAUSE:**

The details of employees proposed to be engaged shall be furnished to this office before the commencement of the work.

(a) As per the Govt. Notification dated 20.07.2009, Chennai Port Trust has registered under the ESI Act on 26.09.2012 with ESI Corporation and provision of ESI Act, 1948 are applicable to Chennai Port Trust, a Social Security Act, is applicable to Factories using power and employing 10 or more personnel and establishment employing 20 or more persons and drawing wages/salary upto Rs.15,000/- per month. Workers covered under ESI Act, are entitled for full medical care for self and family. Besides, cash benefit in the event of sickness, maternity and employment injury. Accordingly, the contractual/casual employees drawing wages upto Rs.15,000/- per month employed either directly by Port Trust or through contractor are covered under ESI Act, 1948. It is obligatory on the part of the employer to calculate and remit ESI contribution comprising of employers' share of 4.75% plus employees' share of 1.75% which is payable on or before 21st of the following month, to which the salary relates.

(b) In case of Contractor employs more than 20 employees, they should register their name with ESI as per ESI Act, 1948 and obtain ESI Code. Both Employers share of 4.75% and Employees contribution of 1.75% (recovered from employees), totally 6.5% to be paid as contribution to ESI in their Code on or before 21st of following month to which the salary relates and acknowledgement for the same shall be submitted to the Port while claiming the bill. The bill without the acknowledgment of ESI contribution will not be entertained. In case the contractor has not paid the ESI contribution same will be recovered in the running bill and paid to the ESI Corporation in contractor's code. The delay in payment of contribution payable under the Act may be recovered as an arrear of Land Revenue.

(c) In case the contractor employs less than 20 employees, the list of employees' names, their father's name, identification proof, one passport photo shall be submitted to the Port Trust. The contribution of ESI amount, both Employers share of 4.75% and Employees contribution of 1.75% (recovered from Employees salary), totally 6.5% shall be paid by the Contractor in the Chennai Port Trust Code on or before 21st of the following month to which the salary relates or otherwise payment to the contractor will be withheld. If the contractor fails to comply with the above instruction, then the Principal Employer (Chennai Port Trust) will make payment to the ESI

Corporation. Such amount will be deducted from any amount due to the contractor. The delay in payment of contribution payable under the Act may be recovered as an arrear of Land Revenue.

- (d) As per the above government Notification i) All intending tenderer at the time of Tender shall disclose all necessary documents as to whether they are covered under ESI Act or not.
- ii) In case they are covered under ESI Act, they have to furnish the details of registration.
- iii) In case the tenderer does not possess ESI Registration at the time of participation in the Tender, then they should obtain registration under ESI Regulations before award of the work by Chennai Port Trust and submit the same within 30 days from the date of issue of work order. Any payment towards the work order will be made only after the ESI registration.
- iv) The Tenderer shall submit his first bill together with evidence of having obtained registration under ESI regulations and only then the bill will be processed for payment. Subsequently, the Tenderer should periodically submit to Chennai Port the Form 6 prescribed under ESI Regulations along with the proof for having remitted his dues under ESI Regulations in respect of the workers / labours employed for the work awarded by Chennai Port to facilitate making payment for the bills of the Contractor.
- v) In case, the Tenderer is not covered under ESI Act or exempted, they would furnish necessary documents along with an affidavit in original affirming before a first class Judicial Magistrate in a Non Judicial Stamp Paper worth Rs.20.00 to that effect.
- vi) In case they are not covered under ESI Act, they must additionally indemnify ChPT against all damages & accident occurring to his labour in a Non – Judicial Stamp paper worth Rs.100/-.

29. FORECLOSURE OF CONTRACT

I. Notwithstanding anything in the contract agreement the contractor agrees that the Trust (on its own or acting on behalf of the Government of India) or the Government of India shall be entitled to foreclose the contract on occurrence of the following events:

- i. In the event of breach of contract by the Contractor
- ii. An emergency or
- iii. for national security and /or national interest and /or public reasons.

II. Upon the occurrence of the events specified in the above I (i),(ii) and (iii) above the Trust or Government of India reserve the right to fore close the contract at any point of time during the contract period on the issue of the termination notice under provision of the termination clause , the Trust shall not be liable to compensate the contractor or any other person for any losses or estimated loss of profits during such period.

- 30.** The Chief Mechanical Engineer reserves to himself the right to alter the specification or design of the works at any stage of the work and also to make additions or omissions or alterations.

31. FURTHER INSTRUCTIONS

- The Chief Mechanical Engineer shall have full power and authority to supply to the Contractor from time to time during the progress of the works such instructions as necessary for the purpose of the proper and adequate execution and maintenance of the works and the Contractor shall carry out and be bound by the same.
- 32.** Any notice to the Tenderer shall be deemed to be sufficiently served if given or left in writing at his usual or last known place of abode or business or at site.
- 33.** All payments made by the Board to the Tenderer under this contract shall be rounded off to the nearest paise.
- 34.** (i) The contract is liable for cancellation if either the Tenderer himself or any of his employee is found to be a person who has held a Class I post under the Board immediately before retirement and has, within two years of such retirements, accepted without obtaining the previous permission of the Board of the Chairman as the case may be an employment as Tenderer for, or in connection with the execution of public works, as an employee of such Tenderer.
- (ii) If any contract is terminated on account of the failure of the Tenderer to comply with the above clause the Board shall be entitled to recover from him such damages as may be determined by the Chief Mechanical Engineer with due regard to the inconvenience caused to the Trust on account of such termination without prejudice to the Trust's right to proceed against such officer.
- 35.** It must be clearly understood that the rates mentioned in Schedule `A1' are inclusive of everything required to be done by the conditions of the contract and specifications or by the drawings therein referred to and also all such work as is necessary for the proper completion of the Tenderer although special mention thereof may have been omitted in the specification or drawings.
- 36.** In these conditions unless there is something in this subject or context inconsistent therewith words importing the singular shall include the plural and vice versa words importing the masculine gender shall include feminine and words importing persons shall include bodies corporate.
- 37.** The technical specification – “Schedule-A” and Price Schedule – A1” to be read in conjunction to make sure of the supply and works involved.
- 38.** The contractor is required to offer rates as per Trust’s format “Schedule- A1” without fail and mention taxes and duties.
- 39.** Necessary paid entry passes to be obtained by the contractor at their own cost.
- 40.** The contractor is advised to visit the site.
- 41.** The Trust will not be responsible for any loss or damage of Men/materials/plants engaged during the work.

42. The Contractor shall arrange their own tools and plants and other materials and components required for the above work.
43. All transport required for the work shall be arranged by the contractor at their own cost.

44. **TERMINATION:**

- a) The employer, without prejudice to any other remedy for breach of contract, by written notice of default sent to the contractor, may terminate the contract in whole.
- i) If the contractor fails to deliver any or all of the Goods within the period specified in the contract, or within any extension thereof granted by the Employer.
- ii) If the contractor fails to perform any other obligation under the contract (or)
- iii) If the contractor, in the judgement of the Employer has engaged in fraud and corruption.
- b) In the event the Employer terminates the Contract in whole or in part, the Employer may procure, upon such terms and in such manner as it deems appropriate, goods or related services similar to those undelivered or not performed, and the contractor shall be liable to the Employer for any additional cost for such similar goods or related services. However, the contractor shall continue performance of the contract to the extent not terminated. In such terminations Security deposit will be forfeited.

45. **VARIATION:**

Variation means variation in quantities of items i.e. Where there is increase of quantities of items of work in the agreement. On other words, the nomenclature of work remains the same, but the quantity of variation is maximum 30 % against the Tender cost shown in the agreement. The said variation shall be executed after approval of the competent authority.

**CHIEF MECHANICAL ENGINEER
CHENNAI PORT TRUST**