

**NATIONAL INSTITUTE OF FASHION TECHNOLOGY
HITECH CITY, HYDERABAD**

Application fee: Rs.1,000/- + 18% GST

Tender No. NIFT/Hyd/Bldg/Flag/2022-2023/3

Date: 27.07.2022

NOTICE INVITING TENDER

Name of Work	:	Supply, Installation, Testing and Commissioning (STTC) of 100ft. Flag Mast capable of withstanding for 180KM/HR wind speed complete for 30ft. x 20ft. size Tri color National Flag at the institute of Hyderabad.
Application fee	:	Rs.1,180/-
Earnest Money	:	Rs.25,000/-
Delivery Period	:	10days from issue of order
Date of release of Tender	:	27.7.2022
Last date & time for submission of Bid	:	05.8.2022 at 2:30PM
Date & time of opening of Technical Bid	:	05.8.2022 at 3:00PM
Date & time of opening of Financial Bid	:	05.8.2022 at 3:00M or inform later

Sealed tenders are invited under two bid system from the companies / firms / individuals for the work of SITC of 100ft. Flag Mast suitable for 30ft. x 20ft. size Tri color National Flag at NIFT Hyderabad. This is a two stage bid system i.e. Technical Bid and Financial Bid should submit separately in two envelopes. The Bids is sealed cover-I contain “**Technical Bid**” and sealed cover –II contains “**Financial Bid**” should be placed in third sealed cover super scribed with “**100ft. Flag Mast at National Institute of Fashion Technology**”.

Detailed bidding documents along with qualification criteria can be obtained from the web site www.nift.ac.in/hyderabad/Tender at the cost of Rs.1,000/- + 18% GST.

Terms and Conditions

1. Pre-qualification criteria: Bidder should be manufacturer or Authorized dealer / contractor of similar kind of work i.e. concrete, structure poles, steel work etc.
2. The bidder should not have abandoned any work under Government of India or Government of Telangana not any contract awarded to them has been rescinded during last five years prior to the date of issue of this tender notice.
3. The bidder should not have any legal case on him or should not have been involved in any litigation / enquiry for similar work under Government of India / State or any Govt. organization.
4. All the bidders shall submit the list of similar works supply, installation, testing and commissioning of works executed.
5. Detailed specifications of all the items have been furnished in the BOQ against which rates are to be quoted by the bidders. Quantities taken in the BOQ are approximate and can be increased or decreased or scope of the work can also be changed. No claim on this account shall be entertained.
6. Earnest money deposit of the unsuccessful bidders shall be refunded after expiry of the final bid validity and latest on or before the 30th day after the award of the contract. Earnest money of the lowest bidder shall be refunded after successful submission of Performance Guarantee.
7. Subletting the work after its award is not permissible.
8. The bids shall be accompanied by Tender Application fee of Rs.1,180/-.
9. The bid shall be accompanied by Earnest Money of Rs.25,000/- (Rupees Twenty five thousand only) in the form of Demand Draft from a nationalized bank in favor of NIFT payable Hyderabad.
10. EMD of successful bidder may be release after submission of Performance Security Deposit or it may be adjusted in Performance Security Deposit on a written request from the party.
- 11. Within 05 days of award of work, the bidder is required to furnish the 8% of the Work Order as a Performance Security of in the form of a Demand Draft of Bank Guarantee (covering the contract period) issued in favor of NIFT payable at Hyderabad.**
12. The Security Deposit shall be refunded to the contractor without any interest after 12(twelve) months of the completion of the contract, subject to the fulfillment of all contractual obligations by the contractor.
13. Performance Security will be forfeited if the bidder fails to deliver / abide by any of the terms and conditions of this contract.
14. The conditional tenders will not be accepted.
15. The quoted rates shall include components related to labor laws. The contractor has to abide by all the labor laws and to deposit due amounts under these laws already covered in the quoted rates.
16. The Tender Allotment Committee reserves the right to accept or reject any or all the tenders without assigning any reason.

17. The Institute shall be free to get the job done or get the defects rectified through any other agency at the risk and cost of the contractor due to non-compliance of the instructions of the authorities of the institute or delay in completion of the assigned work or non-removal of defects in time.
18. The work shall be completed within 10 days from the date of issue of approved drawings and date of issue of Work Order.
19. Income Tax and other taxes are applicable shall be deducted from the contractor's bill.
20. The contractor shall be responsible for any damage caused to any property of the campus and make good all such damages at his own cost.
21. In the event of any accident during the course of work which may result in any injury to a work man; the responsibility of their medical treatment fully rests with the contractor and the institute shall not be liable in any way to the payment fixed under Minimum Wages Act as amended from time to time. The contractor shall pay not less than the Minimum Wages fixed to the labor engaged by him for execution of the work.
22. Bids not fulfilling all or any of the above conditions or incomplete in any respect are liable for rejection.
23. Firms registered with NSIC are exempted from the payment of EMD on submission of proof of their registration.

DETAILED TECHNICAL SPECIFICATION FOR 100ft. FLAG MAST

1. SCOPE:

The scope of this specification covers the supply, transport, installation, testing and commissioning of the complete Flag system using Raising and Lowering type of Flag mast towers. The institute will only provide the basement, feeder cable of required size up to the base compartment of the high mast.

2. **PRE-QUALIFICATION:** Documents should be enclosed.

3. APPLICABLE STANDARDS:

Code No.

- | | | | |
|----|------------------|---|--|
| 1. | TR No.-7 | : | High Masts for Lighting and DDTV (2000 edition) of ILE, UK |
| 2. | SABS 0225:1991 | : | Height Mast natural frequency calculation |
| 3. | IS 875 Part-3 | : | Wind loading |
| 4. | BS EN 10025:1993 | : | High Tensile steel sheets |
| 5. | IS2062 | : | Mild steel |
| 6. | BS EN ISO 1461 | : | Galvanization |
| 7. | IS 3459 / 2266 | : | Stainless steel wire rope |
| 8. | IS 325 | : | Motor |

4. FLAGMAST:

4.1. Structure: The Flag mast shall be of continuously tapered, polygonal cross section, 20 sided, presenting a good and pleasing appearance and shall be based on proven In-Tension design conforming to the standards referred to above to give an assured performance and reliable service.

4.2. Construction: The mast shaft shall be manufactured from high tensile steel plates confirming to BS EN 10025 having minimum yield strength of 355N/sq. mm. Each mast shaft section shall have only one longitudinal weld and without any circumferential weld joint. Sections with more than one longitudinal weld shall not be accepted. The mast base flange shall be free from any lamination or incursion and provided with supplementary gussets between the bolt-holes to ensure elimination of helical stress concentration.

The minimum A/F dimension of top shall be 150mm and bottom as per the design and safe structure calculation. Design certificates and warranty should be provided for minimum 25 years. The minimum section length except for the top section shall be 10.98mm and top shall depend on the length required to make the specified height. The masts sections shall be joined at site by slip-stress-fit method and minimum overlap distance shall be 1.5 times the diameter at penetration.

A door reinforce with welded steel section, vandal resistant, weather proof with Allen bolts and pad locking facility of minimum dimension 1250mm x 250mm shall be provided at a height 2 times the width of door from the base of mast to provide clear access to base compartment equipment's winch, motor, cable, connector etc.

For the environmental protection of the mast, the entire fabricated mast shall be hot dip galvanized internally and externally in single dip having a uniform average thickness of 85 microns for plates more than 5mm and 70 microns for 5mm or less thickness. Manufacture of Flag Mast, Octagonal poles and Luminaires should preferably be same for easy maintenance.

4.3. Dynamic Loading for the Mast: The mast structure shall be suitable to sustain an assumed maximum reaction arising from a wind speed as per IS 875 (three second gust), and shall be measured at a height of 10meters above ground level. The design life of the mast shall be 25 years. The force co-efficient taken for design of the polygonal structure is to be established from the wind tunnel test data.

4.4. Raising and Lowering mechanism:

4.4.1 Winch: The double drum winch shall be completely self-sustaining without the need for brake shoe, springs or clutches and self-lubricating type by means of an oil bath. The worm gear ratio shall be 53:1 and safe working load 750kgss. The drums are to be grooved to provide perfect seat for stable and tidy rope lay and arrangement of distortion free rope end termination.

The winch shall have provision to operate manually by a handle or electrically through power tool. The capacity, operating speed, safe working load, recommended lubrication and serial number of the winch shall be marked on each winch.

The winch shall be type tested through reputed institutions like IIT as consultants and the type test report shall be submitted along with bid. A test certificate is to be submitted along with supplies.

4.4.2 Head Frame: The hot dip galvanized head arrangement is to be designed as a receiving the flag rope and addition to this to stand by rope for flag and additional safety rope for man rider (not part of supply and to be ordered separately). The LM6 Aluminum pulleys with bush bearing mounted through stainless steel shaft shall be suitable to accommodate wire ropes to be provided.

4.4.3 Wire Ropes: The galvanized wire ropes shall be in 7/19 construction with central core in the same material of 6mm diameter. The breaking load of each rope shall not be less than 2350kgs. giving a factor of safety of over 5 for the system at full load as per the TR-7. The end construction of rope for the winch drum shall be fitted with tellurite and for two continuous ropes the end termination in luminary's

carriage shall be with stainless steel thimble and copper splicing and for other with stainless steel thimble and bull dog grips.

4.5 Electrical System, Cable and Cable Connections: The power cable from base compartment to junction box at the top shall be 1.1 KV grade PVC insulated, PVC sheathed copper conductor of size minimum 3 core x 1.5 sq. mm. Wiring from junction box to Aviation Light is to be done using 3 core 1.5 sq. mm PVC insulated, PVC sheathed, copper conductor flexible cable.

Suitable arrangement is to be provided in the base compartment to receive and terminate incoming power cable and MCB in a box for isolation of incoming power supply.

4.6 Power Tool for the Winch: Three phase, single speed, motor of rating suitable to hoist the flag mounted on adjustable plate to the length of winch motor coupling chain is to be provided in base compartment.

Mechanical torque limiter is to be mounted on motor shaft to stop transmission of motion from motor to winch in case of excess load and thus prevent the damage to winch and breakage of rope.

4.7 Decorative Finial: One number of FRP ornamental finial (DOME) shall be provided for each Flag mast on the head arrangement is to be provided.

4.8 Aviation Obstruction Light: Supply of single dome aviation obstruction lights of type LED AOL, make shall be BINAY or equivalent.

4.9 Earthling Terminals: Earth terminal using 12mm diameter hot dip galvanised bolts shall be provided on the door stiffener of the mast for lightning and electrical earthling of the mast.

4.10 Control box: Each mast shall be provided with a control box with 32A TPN MCB incomer, power tool control with 2nos. 9A contractors and raise lower push button, incoming 16sq. mmm. and outgoing 4sq.mm. terminals.

4.11 Incoming Power Cable: Power cable of suitable size up to the feeder pillar from supply point shall be provided by the institute.

5. Luminaries: The flood light luminaries 300-350Watt LED type having more than 100 Lumen / W output. This flood light shall be installed on 5mtr. galvanized octagonal poles with supply and laying of 3core x 2.5sq.mm. copper cable for the individual wiring of the luminaire.

5.1 Octagonal Poles: 5mtrs. high hot dip galvanized octagonal poles for installing the floor light to illuminate the flag in dark.

6. **PU Painting:** Flag mast shall be finished with polyurethane (PU) paint over the galvanized surface after application of Etch Primer coat. PU paint should be done at manufacturer's works and certificate from manufacturer for same should be enclosed in the bid.
7. **Flag:** Supply of National Flag of size 20' x 30' in 100% knitted polyester (140 / 160gsm) with reinforced super strong nylon webbing on all 3 sides and ropes / toggle sleeve.

SPECIAL TERMS AND CONDITIONS

1. **COMPLETION PERIOD :** 10 days from the date of issue of approved Drawing and Work Order
2. **DEFECT LIABILITY PERIOD:**
 - i. Pole: 12 months warranty on Flag Mast shaft and accessories from the date of commissioning
 - ii. LED lights and aviation light will be comprehensive for 03 years
 - iii. Successful bidder will also supply design certificate for 30.5mtrs. flag mast pole for minimum 25 years
3. **WATER:** Water will be provided by the institute
4. **POWER:** Will be provided by institute
5. **CEMENT:**
 - i. Cement required for construction under the scope of the vendor shall be arranged by the contractor at his own cost.
 - ii. For all computation purposes, the theoretical cement consumption shall be considered as per CPWD standards
 - iii. The penal rate for any under consumption of cement shall be Rs.12,000/- per MT
6. **LABOUR:** Labour camp will not be permitted inside the campus. The contractor has to make necessary arrangements elsewhere for the same.
7. **TIME EXTENSION:** Time extension, if required on any account will have to be brought to the notice of the institute at least 15 days in advance from the date of scheduled job completion with proper details and justifications.
8. All statutory registrations / licenses shall be obtained and submitted to the Engineer in charge prior to commencement of the works.
9. **REPORT OF ACCIDENT:** In case of any accidents, the contractor shall report the incident as required by rules to the concerned authorities. He will be fully responsible for the same including any expenses for medical treatment or compensation or any other charges required to be borne.

- 10. TENDER QUANTITIES:** Tender quantities appearing in the scheduled of rates are only indicative quantities, exact quantities of each item shall be ascertained by the contractor only such ascertained quantities shall be procured.

INSTRUCTIONS TO BIDDERS

1. Kindly stamp and sign all pages on the tender.
2. Deviations if any shall be highlighted on a separate sheet on the tenderer's letter head. The envelope containing the technical bid shall be marked as "TECHNICAL BID".
3. If there are no deviations, the tenderer shall advise the same on his letter head and enclosed it with the Technical Bid.
4. The financial bid shall be submitted in a separate sealed envelope marked "FINANCIAL BID".
5. Both Technical and Financial bids are to be kept in a cover and shall be marked as "Tender for SITC of 100ft. flag mast pole".
6. If there is any contradiction between various sections of the tender booklet, the Schedule of Quantities shall hold over the Special Terms & Conditions which shall hold over the General Terms & Conditions.
7. For any clarification regarding this job, the bidders can contact Ph. No.

GENERAL

1. All materials required for the job will have to be arranged by the contractor meeting the relevant codes and specifications.
2. The contractor will have to make his own arrangements to transport the required materials outside and inside the working place and leaving the premises in a neat and tidy condition after the completion of the job to the satisfaction of the institute.
3. The contractor will have to arrange for safe keeping of his materials and should provide necessary security arrangements for safe guarding the materials. National Institute of Fashion Technology, Hyderabad will not be responsible for any claims with regard to this.
4. **The tenderers are advised to visit the site and get acquainted with the site conditions. The tenderer has to make their own arrangements for transportation of material and movement of heavy equipment at site.**
5. **The tenderers should note the site conditions before submission of bids. The site will be offered as AS IS WHERE IS for the execution of this job and it will be sole responsibility of the tenderer to ensure that they abide by the various rules, regulations, bye-laws and other statutory requirements etc. imposed by the Government / Semi-Government and / or other local authorities governing execution of this job.**
6. When the person signing the tenders is not sole proprietor, the necessary Power of Attorney authorizing the person to act on behalf of the Proprietor or Organisation should be produced / attached with the tender in the Technical Bid.

7. The tenderers should study the various tender conditions / document etc. carefully before submitting their bid. If there are any doubts, they should get clarifications from the institute in writing, but this shall not be a justification for submission of the late tenders or extension of due date of the tender.
8. All entries and rates in the tender form must be written in ink or typewritten. Erasures, overwriting or corrections, if any, should be attested under the full signatures give both in figures and words in the Financial Bid. In case of any difference, the rate expressed in words will be taken as authentic.
9. As far as possible the tenderers should endeavour not to stipulate any counter terms / conditions or modifications of tender clauses and should quote strictly as per the tender conditions. This will assist in proper evaluation of each offer. However, should there be any specific comments in respect of any clauses; the same may be highlighted in a separate deviation schedule in the Technical Bid.
10. National Institute of Fashion Technology reserves the right to reject offers not meeting its technical requirements and commercial conditions.
11. National Institute of Fashion Technology shall not be bound to accept the lowest tender and reserves right to accept any tenders. Decision of National Institute of Fashion Technology in this connection shall be final.
12. National Institute of Fashion Technology reserves the right to accept any tender in whole or in part or reject any or all tenders without assigning any reason.
13. Disputes and Arbitration:
 - 13.1 That any dispute arising out of this contract shall be referred to the Institute and if either of the parties hereto is dissatisfied with the decision, the dispute shall be referred to the decision of the Arbitrator, who should be acceptable to both the parties, to be appointed by the Director of the Institute. The decision of such Arbitrator shall be final and binding on both the parties.
 - 13.2 All disputes are to be settled within the jurisdiction of the Hyderabad courts.
14. In general, payment of final bill shall be made to the Supplier / Contractor within 30 (Thirty) days of the submission of bill after satisfaction / completion of all the obligations under the contract.
15. All Taxes, if applicable should be quoted separately, otherwise it would be presumed that the quoted prices are inclusive of taxes.
16. Prices quoted should be FOR Institute inclusive of all charges required to make the equipment functional to the satisfaction of the Institute, otherwise it would be presumed that the quoted prices are inclusive of all charge (i.e. Transportation charges) if applicable.
17. The suppliers will undertake warranty of equipment for the date of installation and shall have to mention clearly the period of warranty in Technical Bid.

**TECHNICAL DATA SHEET FOR 30.5MTR. FLAG MAST
FM 30.5 @ 50 m/s**

HIGHT MAST SYSTEM

Make	:	Bajaj Electrical, CHM Industries IMC, Shredder or Equivalent only)
Height of Mast	:	30.5mtrs.
No. of sections	:	Three
Material construction	:	S 355 grade as per BS-EN10 025
Base dia. and top diameter (A/F)	:	Top : 150mm Bottom: 540mm
Plate thickness	:	Top : 3mm Middle: 4mm Bottom: 4mm
Cross section of Mast	:	20side polygon
Standard for galvanisation	:	As per BS EN ISO 1461
Size of opening and door at base	:	1200mm x 250mm
Diameter of base	:	730mm plate
Thickness of base plate	:	30mm
Lightning protection	:	GI single spike of length 1200mm finial
Max. Wind speed	:	50 m/s
No. of foundation bolts	:	12nos.
PCD of foundation bolts	:	650mm
Type / diameter / length of foundation bolts	:	TS 600 / 30 dia / 850mm long

WINCH / POWER TOOL

Type /SWL of winch	:	Double drum, SWL 750kg.
Method of operation	:	Integral Motor
Motor capacity	:	2HP
No. of Speeds	:	4 Pole, Single speed

Torque limiter : with mechanical tripping facility

TECHNICAL DATA SHEET FOR 30.5 MTR. HIGH / FLAG MAST & COMPONENTS
(TO BE FILLED BY THE VENDORS)

1. HIGH MAST STRUCTURE : VENDOR'S CONFIRMATION /
REMARKS Height of mast (mtr.) 30.5mtr.

Permissible Projected area :

Makes :

Material construction : BS-EN 10025 (old BS 4360)

Thickness (in mm) : Top
: Middle
: Bottom

Cross section of Mast in Polygon :

Length of individual sections (in m) : Top
: Middle
: Bottom

Base dia and top diameter : Base diameter (in mm) –
: Top diameter (in mm)

Type of joint : Stress fit side joint length of overlap (Mtr.):

Metal protection treatment for Mast section : Hot dipped galvanised

Thickness : Micron: Top
: Micron: Middle
: Micron: Bottom

Type of locking arrangement and door panel

Size material & thickness of: _____ Amps TPN MCB + ELCB cable termination box

Size of base plate : Dia ____mm

Diameter and thickness : Thick ____mm

Size of anchor plate & thickness : _____mm (approx.)

Details of Template :

Weight in kgs. of 30mtr. Mast including:
(base plate door, head frame)

Lightning protection :

2. DYNAMIC LOADING AS PER PREVAILING AT SITE

Max. wind speed: 50mtr. / sec but not less than location required (As per IS;875;1987)

Height of above ground level these

Two factors are measured :

Factor of safety for wind load :

Factor of safety for other load :

Factor of safety for tower :

3. WINCH

Make of winch :

Number of drums / winch :

Gear Ratio :

Capacity :

Operating speed :

Individual drum rotation :

Method of operation :

Lubrication arrangement :

Type of Lubricant :

Gear Material :

Tested load per drum (kg) factor safety:

4. STAINLESS STEEL WIRE ROPE

Make :

Grade :

Number of ropes :

Construction :
Centre core material :
Diameter (mm) :
Thimbles & Terminals :
Breaking load capacity :

Factor safety (specified not less than 5):

5. POWER TOOL

Model (portable external / integral type):

Input supply :
Wattage / HP :
Number of speeds :
Reversible / non-reversible :
Operating speed :
Remote control switch
i) Type :
ii) Length of control cable :

Max. time taken for
i) Raising :
ii) Lowering :

6. TORQUE LIMITER

Model :
Lifting capacity :
Adjustable / Non-adjustable :

FINANCIAL BID

S. No	Description	Unit	Qty.	Rate	Amount
1	Supply, Installation, Testing & Commissioning of 30.5mtr. Flag Mast. Mast shaft shall be in three sections, hot dip galvanised and suitable for wind velocity as per IS 875. It includes a special type of Dome and including PU Painting of flag mast shaft with a coating of each primer, primer and PU paint	Each	1		
2	Supply, Installation, Testing & Commissioning of system for Raising, Lowering of Flag. It shall have double drum winch, 6mm dia. galvanised wire rope and integral power tool for the raising and lowering of flag. Suitable control panel shall be provided for reversing operation of power tool motor	Each	1		
3	Supply, Installation, Testing & commissioning of LED single dome system and Aviation obstruction light with 3C x 2.5sq.mm. Cu. armoured cable	Each	1		
4	Supply, Installation, Testing & Commissioning of LED 300 to 350watt flood light IP 65 or suitable for illumination of flag mast	Each	2		
5	Supply, installation, Testing & Commissioning of 5M high hot dip galvanised octagonal pole suitable to mount 1no. non-integral floor light fittings at top and control gear box mounting arrangement at bottom	Each	2		
6	Supply, Installation, Testing & Commissioning of foundation bolts manufactured from special steel along with nuts, washers etc. (for 5M Pole)	Set	2		
7 (a)	Supply, Installation, Testing & Commissioning of National Flag size 20' x 30' made with shiny knitted polyester, 160GSM (C)	Each	2		
(b)	Supply, Installation, Testing & Commissioning of National Flag size 20' x 30' made with shiny knitted polyester, 140GSM (C)	Each	Rate only		
8	Supply, Installation, Testing & Commissioning of GI pipe earthing of flag mast with 205M long 40mm dia. GI pipe including connection of High mast earth terminal with 25 x 3mm GI flats with all materials and labour (2nos. per mast required)	Each	2		
	Sub Total				
	Taxes				
	Total				