

JAMIA HAMDARD
(Hamdard University)
HAMDARD NAGAR, NEW DELHI - 110062

TENDER DOCUMENT
FOR
SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF SIX HIGH MASTS OF
16 METERS HEIGHT WITH LED LUMINARIES.

NOTICE INVITING TENDER

Sealed item rate tenders are invited for the following job. The agency having sufficient experience of such works and having TIN/WCT/PAN may only apply.

NAME OF WORK: Supply, Installation, Testing and Commissioning (SITC) of six High Masts of 16 meters height.

Site / Location of Work: Jamia Hamdard Campus, New Delhi-110062.

Time Period for completion of work: - 45 days from the issue of the work order.

Estimated Cost: - 30 Lakhs

EMD :- 60,000.00 in favor of Jamia Hamdard

The BOQ may be downloaded from the website of Jamia Hamdard or collected from the office of the Electrical Department w.e.f. 22-02-2017 to 03-03-2017 from 9:00am to 3:00pm. The tenders should be filled up clearly in digit and words. The sealed tenders be deposited in the tender box kept at Purchase Section of Jamia Hamdard by 3:00pm on or before 03-03-2017. Tenders will be opened on same day at 3:30pm in the office of the Chairman Building Advisory committee. Bidders are also requested to be present at the time of opening of Tenders.

The bids may be submitted by the following categories of parties.

- Specialised firms should have successfully carried out similar type / quantum of works in last 5 years ending 20/02/2017.
- Firm who have successfully carried out Electrical Works in last 5 years ending 21/02/2017 of the following: -
 - Three similar works costing not less than 40% each of the estimated cost i.e. not less than Rs. 12.00Lakhs.
 - Or
 - Two similar works costing not less than 60% each of the estimated cost i.e. not less than Rs. 18.00Lakhs.
 - Or
 - One similar works costing not less than 80% each of the estimated cost i.e. not less than Rs. 24.00 Lakhs.

The firms should submit clear visible attested copies of completion certificates issued by the Officer of the client department of the rank of Executive Engineer or equivalent rank along with the application.

Similar works means “ SITC of High Mast”

The completion certificate must clearly indicate: -

- a- The date of completion of work
- b- Nature of work

- c- That the work has been completed satisfactorily.
- d- Work done amount of completion certificate.

Contractors should have executed **similar nature** of work in prestigious campus / institutional buildings, Universities, Hospitals etc, and produce credentials in support thereof.

The quantities given in the schedule are tentative and the actual quantities to be executed may vary (+ or -). The total works have to be executed within 45 days from award of work. Therefore, contractors with large work force/resources and financially sound need only apply. Delay in execution of works shall attach liquidated damage charges as per CPWD condition of contract.

Last date of submission of bid	:	03.03. 2017	(up to 3pm)
Date of opening of bids	:	03.03. 2017	(at 3:30 pm)
Time for completion	:	45 days	

Requirements to be fulfilled:

- i. Registration with CPWD, DDA, MES, Railways, PSUs.
 - ii. Electrical License of contractor.
 - iii. Registration of D-VAT.
 - iv. Registration with ESI, EPF.
 - v. Latest filed copy of D-VAT.
 - vi. Undertaking that the bidder has never been black listed.
 - vii. No subletting or subcontracting of the work will be permitted.
 - viii. The Company shall give an undertaking that they shall not employ minor workman.
 - ix. The Bidder has not been black listed by any of the Govt. Depts./Govt. Institutions etc. during last three years.
1. The bidders shall attach copy of PAN Card.
 2. Duly sealed tenders shall be dropped in the tender box placed at the Purchase Section, Basement of Administrative Building, Jamia Hamdard.
 3. The conditional bids shall not be considered under any circumstances and rejected without any notice or assigning any reasons thereof.
 4. All bids once submitted shall be the property of Jamia Hamdard, and bidders will lay no claim whatsoever on the same.
 5. Jamia Hamdard, reserves the right to reject any or all the tenders in full or in part without assigning any reasons whatsoever, and the decision of the University in this regard will be

binding on all the bidders. Jamia Hamdard, reserves the right to accept or reject any or all tenders if not found as per norms.

6. No T & P shall be supplied by the University.
7. Taxes as applicable shall be deducted from the contractor's bill as per Govt. of India rules.
8. Jamia Hamdard welfare fund charges will be deducted @ 0.25% of the amount of total billed amount.
9. Security shall be deducted @ 5 % of value of work done. The same shall be released after the expiry of defect and liability period of one year.
10. Successful bidders shall deposit an amount equal to 5% of the tendered and accepted value of work as performance guaranty as bank gurantee within 10days of issue of letter of acceptance. This will remain till successful completion of work.
11. The time allowed for completion of work shall be 45 days which shall be reckoned from 3rd (third) day from the date of issue of work order. Time allowed for the work shall be strictly followed and no delay without any genuine reason will be accepted. A penalty of @ 1% per week subject to a 10% of maximum of total value of the project will be imposed against delay. The decision of Engineer-in-charge about the delay shall be final and binding.
12. No escalation in any form either of material or labour shall be payable by the University.
13. All materials brought at site shall be as per schedule of quantities (Annexure-A) and list of specification at (Annexure B) and will be strictly followed. The material shall be got entered in the site book and approved by Engineer-In-charge before being used.
14. Mandatory tests have to be carried out as asked for by the Engineer-In-Charge. Nothing extra shall be paid for such purpose.
15. Any violation of instruction/agreement or suppression of facts will attract cancellation of agreement without any reference or any notice period.
16. The Engineer- in-Charge without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to the Government, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.

17. The tenderer shall be solely responsible for any accident/medical/health related liability/compensation for the personnel deployed by it at Jamia Hamdard. The Jamia Hamdard shall have no liability in this regard.
18. The personnel provided by the agency will not claim to become the employees of Jamia Hamdard and there will be no Employee and Employer relationship between the personnel engaged by the Agency and Jamia Hamdard.
19. No tent or hut shall be allowed to be put up for workers to stay within the campus. The contractor is deemed to have inspected the site and thoroughly acquainted himself with the site conditions, availability of storage space for materials etc.
20. The tenderer should take extra precaution to ensure that there is absolutely no damage to the surrounding structure/existing system etc. If any damage made by agency, it will be got repaired/replaced/rectified by the agency itself at no extra cost.
21. It may here be noted, that the entire staff and labour of the Agency will follow all the security instructions issued by Jamia Hamdard University from time to time and these instructions may include the provisions to make suitable barricades or temporary wall fence to ensure that the labour confines itself to the area of the work ONLY. Serious action will be taken in case any of the contractor's workmen are found to be tampering with the Laboratory equipment and property of the University. Suitable damages will be recovered from the contractor's bills if anyone is found to do so. All decisions of the Engineer-in Charge in respect of the same will be final and binding on the contractor.
22. On completion of all work, Agency shall remove all surplus materials & leave the site in a broom clean condition, failing which the same shall be done at Agency's risk & cost.
23. The Agency shall ensure compliance of all statutory laws & bye laws of the central govt./state govt./Municipal authorities related to the employment of their staff and all obligations under Minimum Wage Act, Workman Compensation Act, Provident Fund & Miscellaneous Provision Act, Bonus Act & Contract Labour Act 1970 etc. Jamia Hamdard University will not be responsible for such purposes in anyway.
24. Any claim, dispute or difference arising out of or in connection with this agreement and which cannot be settled by mutual consultations, shall be referred to sole Arbitration or an Arbitrator to be appointed by the Competent Authority of Jamia Hamdard. The decision of the Arbitrator shall be final and binding between the parties as per the terms & conditions of the Agreement to be executed on award of contract. The Arbitrator proceeding shall be

governed by the Arbitration and Conciliation Ordinance dated 26th March, 1996 and shall be conducted in Delhi. The agreement drawn shall be subjected to the jurisdiction of the courts at Delhi.

25. **Shop Drawing:** - The shop drawing for all works as required by Engineer-in-charge shall be submitted in quadruplicate at no extra cost by the contractor and in the manner so required by them. The contractor shall proceed with the works only after approval by the Engineer-in-charge. Such drawings shall be coordinated with all disciplines of work.

GENERAL CONDITIONS FOR SUBMISSION OF TENDER

1. Submission of Tender:

Tenders should be submitted in sealed envelopes. The tender duly filled in should be sent to above mentioned address either by post or hand delivered in the tender box kept in the Purchase Section, Basement of Administration, Jamia Hamdard. Jamia Hamdard will not be responsible for tenders lost in postal transit or otherwise. It should not be handed over to any employee of the Jamia Hamdard. No tender shall be accepted later than the time schedule specified above. Tender once submitted will remain with the Jamia Hamdard and will not be returned to the bidder. Tender submitted without EMD will not be entertained.

2. Price Bid:

In this bid the bidder is required to quote his items rates/prices for the **above said works** “**at JAMIA HAMDARD.**” in the schedule of work attached. Items rates should be filled in both i.e. figure and words. The scope of work & technical specifications are provided at **Annexure – ‘A’ & ‘B’** for your reference. The quoted prices shall be including all the taxes levied by statutory Govt. bodies. It is mandatory on bidder to quote all items rate as asked for in the **BOQ/ Schedule of work**. Failure to adhere to this condition may lead to rejection of tender. The bidders should quote unconditional rates, neatly written without any overwriting and duly signed & stamped in all pages.

2.1 CONTRACTOR TO SATISFY HIMSELF ABOUT SITE CONDITIONS

Before tendering, the Contractor shall visit and examine the site and satisfy himself as to the site conditions, the correct dimensions of the work and facilities. In case of any doubt, may be clarified from the office of the Assistant Engineer (Electrical).

SCOPE OF WORK

3.1 SCOPE

The general character and the scope of work is illustrated and defined by the Schedule of Quantities, drawings and Specifications herewith attached.

3.2 EXTENT

The Contractor shall carryout and complete the said work in all respect in accordance with the contract, and with the directions to the satisfaction of the Engineer-in-charge.

4. TYPE OF CONTRACT

The Contract shall be an item rate contract. The Contractor shall be paid at the contract rates, for the actual quantity of work carried out by him in accordance with the Contract documents as measured.

5. SCHEDULE OF QUANTITIES

The quantities given in the Schedule of Quantities are provisional and are meant to indicate the intent of the work and provide a uniform basis for tendering. The Contractor shall be paid for the actual quantity of work executed by him in accordance with Contract Documents at the contract rates. The quantities given in the Schedule of Quantities are provisional and are meant to indicate the intent of the work and provide a uniform basis for tendering. The Contractor shall be paid for the actual quantity of work executed by him in accordance with Contract Documents at the contract rates.

6. PAYMENT OF CONTRACTORS BILL

Subject to any provision in the contract, payments to the contractor will be made as per CPWD norms.

7. SCHEDULE OF RATES TO COVER ROYALTIES, RENTS, WAGES, PROVIDEND FUND, AND CLAIMS.

The schedule of rates shall be deemed to include and cover the cost of all royalties and fees for all articles process protected by letters, patent or otherwise in corporate in or used in connection with the works, also all royalties, rents and other payments in connection with obtaining materials of whatsoever kind for the works and shall includes an indemnity to Jamia Hamdard which the contractor hereby give against all actions proceedings claims, damages cost an expenses arising from the incorporation for the use on the works of any such articles processes or materials. Octoroi or other municipal or local board charge, if levied on materials, equipment or machineries to be brought to site and removed from site for use on work or after completion of work, shall be borne by the contractor. The contractor should be Registered for provident form and would be require to make the deductions on the salaries pay to the workers and deposit the same to the concerned department.

8. SCHEDULE OF RATES TO COVER TAXES AND DUES.

No exemption or reduction of custom duties, excise duties sales tax, VAT or any part duties, transport carriages, stamp duties or Central or State Government or other bodies including one company or dues, Taxes or charges (from or of any body including the company) whatsoever will be granted or obtained all of which expenses shall be deemed to included in and cover by the schedule of rates. The contractor shall also obtain and pay for all permits or other privileges necessary to complete work. In case where Jamia Hamdard. Wishes to avail Tax /duty exemptions as applicable to the contractors shall comply with the instructions from Jamia Hamdard.

Final Bill:- Within one (1) months of submission of the Bill with the final satisfactory completion certificate and as per the terms and conditions of the Contract.

Note: All Bills are required to be supported by Detailed Measurement Sheet and Analysis of Rates for Extra Items and its approval along with the Bill. The Bills shall be submitted in specified format which should indicate quantities executed in all RA Bills and cumulative Quantities besides current bill quantities along with tendered quantity/unit/rates. There may occur deviations from the above noted schedule of payments in exigent circumstances.

ANNEXURE-A

Sr. No.	Description of Work	Qty	Unit	Rate	Amount in (Rs.)
1	<p>Supply installation, testing and commissioning of following high mast system including foundation consisting of Mast shaft in two sections, hot dip galvanized inside and outside in single dip, suitable for wind velocity as per IS 875 part III. There shall be only one longitudinal seam weld per section and no circumferential weld permissible. it shall also include accessories for high mast including head frame, 3-point suspension system with stainless steel wire rope 6mm dia (7/19 construction) double drum winch, Galvanised head frame carriage arrangement suitable for up to 8 luminaires & its control Gear Boxes, symmetrical lighting arrangement. The Mast shall have the integral power tool for Raising & Lowering at the base compartment for its operation including design and construction of suitable RCC shallow foundation with M20 grade concrete, considering the safe soil bearing capacity as 10MT/SQM at a depth of 2.00 meter below the ground, grouting the foundation bolts manufactured from special steel alloy with nuts, washers, anchor plates, suitable sized HDPE pipe & templates and wiring of luminaires with all wiring materials i.e. with trailing cable from control panel, control gear box etc. as required as per direction of Engineer-in-Charge.</p> <p>(Make – Utkarsh/Bajaj/Crompton Greaves)</p>				
a	<p>16 meters' Height High Mast pole having head frame carriage of suitable size complete with having arrangement for fixing 6 to 9 LED flood lights fittings as per the technical detail in Annexure- 'B'.</p>	6	SET		
2	<p>Supply of High Power LED flood lights fitting with lens 200 watt Halonix Cat, No. HLFLD -01-200-CWL or equivalent among the said makes.</p> <p>Make – Halonix/Philips/Havells</p>	36	No.		
3	<p>Installation, testing & Commissioning of 200Watt LED flood lights on existing high mast.</p>	36	No.		
4	<p>Supply, installation, Testing and Commissioning of twin aviation obstruction light with LED aviation light as required as per direction of Engineer-in- Charge.</p> <p>(Make – Surya/Bajaj/ Crompton Greaves)</p>	6	EACH		
5	<p>Supply, Installation, Testing and Commissioning of outdoor stand mounted feeder pillar with IP-65,</p>	6	SET		

	fabricated out of 2mm thick CRCA metal sheet, duly painted, with 32Amps, 4 pole MCB as incomer, single dial timer switch, 32 Amps, 3 pole, contractor for the automatic switching of luminaries, power tool control with 2 Nos. 9Amps, contractors and raising, lowering push buttons etc. complete as required as per direction of Engineer-in-Charge. As per CPRI norms.				
6	Supply of following sizes of XLPE insulated, PVC sheathed, armored cable of 1.1kv grade Confirming to IS: 7098 with up to date amendments complete as required.				
a	4X16sqmm aluminum conductor cable.	560	RMT		
b	3 ½ X 95sqmm aluminum conductor cable.	85	RMT		
7	Making trench less underground hole across the roads/cement concrete pathway at a depth of but 1mtr. By means of manual augor and connecting pipes to suit the pipe/cable of size up to 100mm dia., i/c making excavation on both side of road/pathway for making trenchless hole and refilling the same with excavated soil after laying pipe & cable through trenchless hole, watering, dressing complete as required as per instruction of Engineer-in-Charge.	16	RMT		
8	Supplying and laying 75mm dia heavy duty PVC corrugated pipe across the existing trenchless hole including cutting the pipe in required length with all accessories as required.	16	RMT		
9	Supplying and laying 75mm dia heavy duty PVC corrugated pipe with all accessories in ground including excavation and refilling the trench, cutting the pipe in required length etc. as required.	175	RMT		
10	Supplying, installation, testing and commissioning of outdoor feeder pillar of overall size not less than 1.7 Mtr. Deep fabricated out of 2mm thick CRCA sheet, Compartmentalized with copper conductor, bus-bar, complete with indication lamps duly powder coated as per approved shade, earth stud, double door with lockable arrangement, sloping roof, including making suitable masonry foundation and also providing and fixing the following accessories in the same, connection etc. as required. (As per CPRI norms)				
	i) 125 amp, 415 volt, fP, 25 KV, MCCB = 1No				
	ii) Voltmeter (0 - 500 V), Digital type with selector switch = 1 set				

	iii) Ampere Meter (0 - 125 Amp), Digital type with selector switch = 1 set				
	iv) CT's 125/5 Amps = 1 Set				
	v) Set of RYB indication lamps with suitable protection = 1Set				
	vi) Connectors of suitable rating for out going cable connections = 1 Set				
	vii) 200 Amps. 4 bars Copper Bus Bars = Set				
	Out Going				
	i) 100 Amp, 415 volt, TP, 25 KA, MCCB = 2 Nos.				
	ii) 63 Amp, 415 volt, TP&N, MCB, 10KA "C" series = 8 Nos	1	EACH		
11	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required.				
a	4X 16sqmm	12	EACH		
b	3 ½ X 95sqmm	2	EACH		
12	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface /recessed conduit/sub-main wiring/ cable as required.	1200	RMT		
13	Laying of one number PVC insulated and PVC sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
a	Up to 35sqmm	200	RMT		
b	above 35sqmm and up to 95sqmm	20	RMT		
14	Laying of one number additional PVC insulated and PVC sheathed /XLPE power cable of 1.1 KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc, as required.				
a	Up to 35 sq mm	185	RMT		
15	Laying and fixing of one number PVC insulated and PVC sheathed /XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
a	Up to 35 sq. mm Above 35 sq. mm and upto 95 sq. mm (clamped with 25X3mm MS flat clamp)	45	RMT		

16	Earthing with G.I. earth pipe 4.5 meter long, 40 mm dia including accessories, and proving, masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/coke and salt as required.	12	EACH		
17	Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire 15 mm dia G.I. pipe from earth electrode including connection with G. I. thimble excavation and re-filling as required.	35	RMT		
				Total	

Chairman, BAC

Signature with Seal by Contractor

SPECIFICATIONS OF HIGH MAST

S. No.	Particulars	Specification /Make
1.	Height of Mast	16Meter
2.	Design Standard	As per IS 875 and ILE TR 7
3.	Material of Construction	(a)For High Mast sections equivalent to BS EN 10025, Gr S355 JO. (b) For base plate equivalent to IS 2062, Gr E250, A
4.	No. of Sections	Two
5.	Thickness of Mast Sections	¾ (Top/Bottom)
6.	Cross Section of Mast	20 sided regular polygon
7.	Length of Sections	8250mm each (Top/Bottom)
8.	Top / Bottom Dia	150/360mm
9	Type of joints	Slip stress
10	Length of overlap	500mm
11	Galvanisation of Mast Sections	As per IS 2629 or equivalent
12	Size of Door Opening	250X1000mm
13	Type of locking on Door panel	Allen Key
14	Size of Base plate	540(Dia) x 25mm (thk)
15	PCD of Base plate	460mm

Dynamic Loading as prevailing at Site

S. No.	Particulars	Specification /Make
1.	Maximum Gust Speed Time	3 Secs
2.	Height above GL Where wind	10Mtr
3.	Factor of safety for wind load	1.25
4.	Factor of safety for other load	1.15
5.	Number of Foundation Bolts	8
6.	PCD of Foundation Bolts	460mm
7.	Length of foundation board	750 mm
8.	Dia of Foundation Bolts	25 mm

Lantern Carriage

S. No.	Particulars	Specification /Make
1.	Material of construction	40NB ERW pipe
2.	Inner Dia of Lantern Carriage	600 mm
3.	Number of joints	2
4.	Buffer between Carriage & Mast	PVC Buffer
5.	Load carrying capacity	500kg
6.	No. of fittings	6 No LED Fittings

Winch

S. No.	Particulars	Specification /Make
1.	Number of Drums per winch	2
2.	Gear Ratio	50:1 (Self – sustaining type)
3.	Capacity	500Kg
4.	Method of operation	Motorized and manual
5.	Lubrication arrangement	Self lubrication
6.	Type of lubricant	SAE 90/140
7.	Tested Load per drum	500 kg

Stainless Steel Wire Rope

S. No.	Particulars	Specification /Make
1.	Grade	AISI 316
2.	MAKE	Asahi/ Bharat Wire Rope
3.	Diameter of SS Rope	6 mm
4.	Construction of SS Rope	7/19
5.	Central Core Material	SS
6.	Number of SS Rope	2 + 3
7.	Safety factor	>5
8.	Breaking Load Capacity	2350 (KG per Rope)

Trailing Cable

S. No.	Particulars	Specification /Make
1.	Make	cennturion, Polycab or equivalent
2.	Type	Round 2.5sq mm x 5core copper
3.	Material	EPR coated PCP sheathed
4.	Number of cables	1

Power Tool

S. No.	Particulars	Specification /Make
1.	Model	Integral
2.	Make	Kirloskar / CGL

3.	Rating	1.1/1.5 (KW/HP)
4.	Number of speeds	Single
5.	Reversible /non-reversible	Reversible
6.	Torque limiter	Mechanical
7.	Input supply	415 volts