

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

TENDER DOCUMENT
FOR
PROVIDING & FIXING OF DECORATIVE STREET LIGHT POLES
AND
LED LIGHT FITTINGS IN THE JAMIA HAMDARD CAMPUS

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 may only apply.

NAME OF WORK: PROVIDING & FIXING OF DECORATIVE STREET LIGHT POLES & LED LIGHT FITTINGS IN THE JAMIA HAMDARD CAMPUS.

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

Time Period for completion of work: - 105 days from the date of issue of the work order.

Estimated Cost:- Rs.1.46 Cr.

EMD :- : Rs. 2,90,000.00, In favour of "Jamia Hamdard".

The BOQ may be collected from the office of the A.E. (Electrical) from 22-02-2017 to 08-03-2017 from 9:00am to 3:00pm or downloaded from the website of Jamia Hamdard and the sealed tenders be deposited in the tender box kept at Purchase Section by 3:00pm on 08-03-2017. 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.

- Firm who have successfully carried out Electrical Works in last 5 years ending 22/02/2017 of the following: -
- Three similar works costing not less than 40% each of the estimated cost i.e. not less than Rs.58 Lakhs.
- Or
- Two similar works costing not less than 60% each of the estimated cost i.e. not less than Rs.87 Lakhs.
- Or
- One similar works costing not less than 80% each of the estimated cost i.e. not less than Rs.1.16 crore.

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.

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.

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

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 105 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	:	08-03- 2017	(up to 3pm)
Date of opening of bids	:	08-03- 2017	(at 3:30 pm)
Time for completion	:	105 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 in the form of Bank Guarantee as performance guaranty 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 105 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 & C) 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, 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. The work shall be govern by CPWD general conditions of contract and CPWD works manual, besides special conditions herein mentioned.

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’ & ‘C’ 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.

List of approved make for Street Light Work

S. No.	Particulars	Make
1.	5 meter height Decorative Cast Iron Pole	Twinkle Industries/K Lite/Bajaj/Keslec/Mayfair
2.	5 meter height Decorative Classic steel pole	Twinkle Industries/K Lite/Bajaj/Keslec/Mayfair
4.	3 meter height Decorative Classic steel pole	Twinkle Industries/K Lite/Bajaj/Keslec/Mayfair
5.	60 watt Decorative LED fixtures for street light	K-lite/Havells/Philips/Crompton Greaves/Keslec/Wipro/ Twinkle Industries
5.	FR PVC insulated copper conductor single core cable	Havells/ Finolax / Polycab/
6.	700mm Ornamental bracket	K-lite/Bajaj/Keslec/Twinkle Industries
7.	6 watt Decorative LED Bollard	K-lite /Bajaj/Philips/Crompton Greaves /Keslec/ Twinkle Industries /Wipro.
8.	18/20 watt Decorative LED Bollard 2780 mm height	Philips/ Crompton Greaves/ Twinkle Industries/Wipro
9.	20 watt decorative LED fixture for street light.	Twinkle Industries / Crompton Greaves/ Philips/ Halonix/Havells/Wipro
10.	PVC insulated, PVC sheathed armored aluminum conductor cable	Havells / Poly cab/Nicco
11.	Brass compression gland	Comet
12.	Thimbles / Lugs	Dowells /Jainson
13.	MCCB	L&T/Havells /ABB
14.	MCB	ABB/Hager /MDS
15.	Timer	L&T or equivalent

Date: 22/02/2017

ANNEXURE-A

Name of work: Providing & Fixing of Decorative Street Light poles & LED Light Fittings in the Jamia Hamdard Campus:

S. No	Description		Unit	Rate	Amount
1.	<p>Supplying, Erection and testing of 5.0mtr. (5000mm) height decorative cast iron pole in which the bottom portion 1.0mtr long made of cast iron and the top portion 4.0mtr. long made of galvanized steel tube with CI embellishment duly welded. The bottom CI portion should have round mounting base of not less than 385mm dia and must be provided with service window comprising of 4way, 25Amp connector terminal and a MCB. The top portion should not less than 90mm dia the pole should be duly polyster / Pu painted black colour etc as required.)</p> <p><i>A pictorial view of the pole is given at Annexure-C enclosed. The final selection of the item conforming to above stated specification will be decided by technical committee of the indenter.</i></p> <p>Make: Twinkle Industries/K Lite/Bajaj/Keslec/Mayfair (Model to be selected should be from these makes.)</p>	65	Nos.		
2.	<p>Supplying, Erection & testing of 5.0mtr. (5000mm) height decorative classic steel pole made of mild steel tube with cast Aluminum embellishments, PU painted grey colour, suitable for single/ double/ triple LED street light fittings. The bottom portion (1000mm long) should be with 140mm dia., 4.80mm thick pipe and the top portion (4000mm long) with 90mm dia., 4mm thick pipe & should have arrangement to fixed ornamental brackets. The pole has a service window at the bottom comprising four way 25 Amp. Connector terminal and a MCB, the base plate of pole should be minimum 400mmX400mm duly welded with pole complete etc. as required.</p> <p><i>A pictorial view of the pole is given at Annexure-C enclosed. The final selection of the item conforming to above stated specification will be decided by technical committee of the indenter.</i></p> <p>Make: Twinkle Industries/K Lite/Bajaj/Keslec/Mayfair (Model to be selected should be from these makes.)</p>	135	Nos		
3.	<p>Supplying installation testing and commissioning of 60watt decorative LED fixtures (TSLED-830H) with die cast aluminum housing frosted PMMA / PC diffuser, suitable for drop down mounting with power LEDs fitted with suitable extruded aluminum heat sinks and suitable constant current LED driver extra as required.</p> <p>Technical Particulars</p> <p>i) Total power of light fixture-60Watt</p>	200	Nos.		

	<p>ii) Input voltage-AC 120 to 270volt 50Hz iii) Power factor >0.95 iv) Minimum lumen output of LEDs – 110Lumin per watt (lumen output of 110lumin per watt shall remain guarantee for 5years from the date of handing over) v) Total lumen output of luminaire > 6600 lumen vi) Luminaire protection – IP65 vii) Colour temperature of LED – 6000-7000k viii) LED drive current – 530mA (manufactures specification are acceptable) ix) Junction temperature of LEDs < 650 °C x) Luminaire efficiency minimum 70% (minimum efficiency of 70% shall remain guaranteed for 5 years from the date of handing over.</p> <p>Akin to Catalogue no : IRIS-S (TS LED- 830 H) of Twinkle Industries Make:/K-lite/Havells/Philips/Crompton Greaves/Keslec/Wipro/Twinkle Industries</p>				
4.	<p>Providing & making RCC foundation of 1300mm(H)X600mmX600mm size with 1:1.5:3(1Cement, 1.5 Coarse, 3 Stone aggregate) complete with 12mm dia. M.S. bar for reinforcement along with centering & shuttering i/c supplying & fixing 600mm long , 16mm dia J type G.I. coated foundation bolt/ Anchor bolt with template suitable for 5.0mtr. Pole, 100mm dia 600mm length PVC pipe complete with excavation the soil & refilling, ramming, curing etc. as rqd.</p>	200	Nos.		
5.	<p>Supplying & drawing 3x2.5sq.mm size FR PVC insulated copper conductor single core cable in the existing pipe as rqd. Make: Havells/ finolex / Polycab</p>	1800	Mtr.		
6.	<p>Supplying of following size single ornamental bracket & fixing on the existing pole for mounting LED street light fitting i/c, painting etc. as rqd. a. 700mm size Akin to Catalogue no: TLS-BKT-11, for 1 No 20 Watt LED Fitting of Twinkle Industries. Make : K-lite/Bajaj/Keslec/Twinkle Industries</p>	200	Nos.		
7.	<p>Supplying, Erection, testing & commissioning of decorative 6 Watt LED Bollard , cylindrical shape with opal acrylic complete with foundation, of 300mmx 300mm x 600mm size, 3 nos. bolts, electronic driver, LED etc as required. Akin to Catalogue no: TBLED-1 of Twinkle Industries. Make: /K-lite /Bajaj/Philips/Crompton Greaves /Keslec/ Twinkle Industries /Wipro.</p>	150	Nos.		
8	<p>Supplying, Erection, testing & commissioning of decorative 2780mm height LED Bollard suitable for 18W/20W LED tube complete with foundation, of 400mmx 400mm x 900mm size, 3 nos. bolts, electronic driver, LED etc as required. Akin to Catalogue no : TFAL-311 L of Twinkle Industries Make : Philips/ Crompton Greaves/ Twinkle Industries/Wipro</p>	20	Nos.		
9	<p>Supplying, Erection & testing of 3.0mtr. (3000mm) height decorative classic steel pole made of mild steel tube with cast</p>				

	<p>Aluminum embellishments, PU painted silver/grey colour, suitable for single/ double LED street light fittings. The bottom portion (1000mm long) should be with 140mm dia., 4.80mm thick pipe and the top portion (2000mm long) with 90mm dia., 4mm thick pipe & should have arrangement to fixed ornamental brackets. The pole has a service window at the bottom comprising four way 25 Amp. Connector terminal and a MCB, the base plate of pole should be minimum 300mmX300mm duly welded with pole complete etc. as required.</p> <p><i>A pictorial view of the pole is given at Annexure-C enclosed. The final selection of the item conforming to above stated specification will be decided by technical committee of the indenter.</i></p> <p>Make: Twinkle Industries /K Lite/Bajaj/Keslec/Mayfair (Model to be selected should be from these makes.)</p>	50	Nos.		
10	<p>Supplying, installation, testing & commissioning of LED based 20 watt Street Light Fittings with high efficiency CNC controlled designed optical reflector/ street light lenses for each LED for proper light distribution, having single piece pressure die cast aluminum housing with built in heat sinks. The housing shall have two compartments, one for LED Trays & other for LED driver & mains cable entry. The optical & electrical compartments, should be sealed with silicon Gasket, toughened Glass and shall confirm to IP 66 protection with following requirement.</p> <p>Technical Requirements:-</p> <p>I. Total power of light fixture = 20 watt II. Input voltage = AC 110 to 270 volts, 50Hz III. Power factor = > 0.95 IV. Minimum Lumen Output of LED = 90 lumen/ Watt. (Lumen output of 90 lumen / watt shall remain guaranteed for 5 years from the date of handing over). V. Total lumen output of luminaire = > 1800 lumens VI. Luminaire Protection = IP 66 VII. Colour temperature of LEDs = 6000 to 7000K VIII. LED drive current = 500 mA maximum IX. Junction temperature of LEDs = <65 deg. C X. Luminaire efficiency = minimum 75% (Minimum efficiency of 75% shall remain guaranteed for 5 years from the date of handing over).</p> <p>(Make Twinkle Industries / Crompton Greaves/ Philips/ Halonix/Havells/Wipro</p>	50	Nos.		
11	<p>Providing & making RCC foundation of 1000mm(H)X400mmX400mm size with 1:1.5:3(1Cement, 1.5 Coarse, 3 Stone aggregate) complete with 12mm dia. M.S. bar for reinforcement along with centering & shuttering i/c supplying & fixing 500mm long , 16mm dia J type G.I, coated foundation bolt/ Anchor bolt with template suitable for 3.0mtr. Pole, 80mm (3'') dia 600mm length PVC pipe complete with excavation the soil & refilling, ramming, curring etc. as reqd.</p>	50	Nos.		

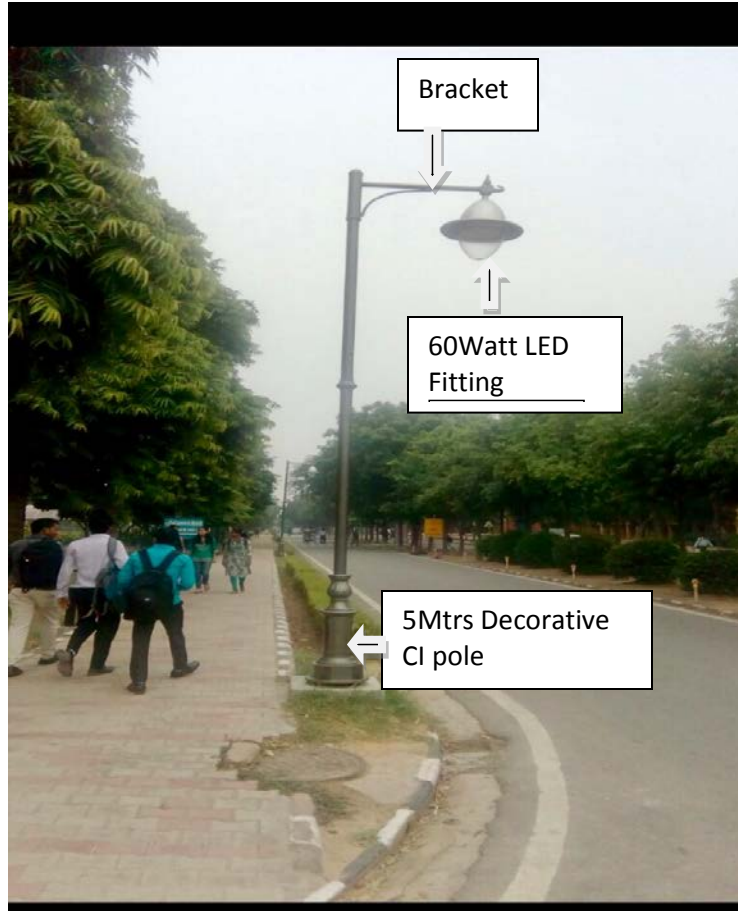
12	Supplying of following size PVC insulated, PVC sheathed Aluminium conductor cable for rated voltage of 1100 volts grade conforming to IS :7098 (part-1)/88 with amendment no. 1 armored with galvanized steel strip (ISI mark) Make – Havells / Poly cab/Nicco				
12.1	4×10sq.mm.	3000	Mtr.		
12.2	4×25 sq mm.	775	Mtr.		
12.3	4×16 sq mm.	2800	Mtr.		
13	Laying of one number PVC insulated & PVC sheathed/ XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering & refilling the trench etc. as reqd.				
13.1	Up to 35 sq.mm	5000	Mtr.		
14.	Laying of one number PVC insulated & PVC sheathed/ XLPE power cable of 1.1 KV grade of following size direct in the existing RCC / HUME/ G.I pipe /pole /METAL pipe as reqd. up to 35 sq.mm.	700	Mtr.		
15	Providing & laying 80mm dia G.I. pipe in ground complete including excavation & refilling the trench etc as required.	50	Mtr.		
16	Providing & fixing/Laying 6 SWG dia. G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as reqd.	6575	Mtr.		
17	Supplying & making indoor end termination with brass compression gland & Aluminum lugs for following size of PVC insulated & PVC sheathed/ XLPE Aluminum conductor cable of 1.1 KV grade as reqd..				
17.1	4×25 sq. mm.	20	Sets.		
17.2	4×16 sq. mm.	55	Sets.		
17.3	4×10 sq. mm.	60	Sets.		
18	Fabrication, supply, installation, testing & commissioning of outdoor type compartmentalized feeder pillar tapered (hut type) made out of 2mm thick CRCA sheet having separate cable and bus bar alley double door arrangement with two leaf door on front side and single door with double leaf on rear side with locking arrangement, having 100 amp TPN Aluminum bus bar of full length with base frame made out of 50x50x6mm thick angle iron having 150 mm legs duly erection in ground with construction of cement concrete complete with connection and interconnection with copper conductor PVC insulated cables / insulated copper conductor strip of appropriate size and terminals blocks (on outgoing) including supplying and fixing following switch gears & accessories there in powder coating, labeling, earthing etc. complete as required . 1. Having minimum size = 850mm x600mm x300mm deep. a) 100Amps, 415V, 25KA, TPN MCCB with earth fault protection (Incomer) (Cat No- SL986050000, DH – 100, L & T Make) = 1 No b) 100 Amps. 415V, 3 phase AC, TP power contactor = 1 No. (MNX type, Cat No. ST – 19003, L & T Make) c) Astronomical digital time setting switch for 24 hours cycles – 1 No. (ET-100,415v, 3-10seconds)	08	Nos.		

	d) 63 Amps. DP MCB having short circuit, earth leakage and overload protection = 3 Nos. e) Earthing studs - 2 Nos. f) Danger plate – 2 Nos. (Make – As per CPRI norms)				
19	Dismantle of old cement concrete poles/ G.I. poles of (6m to 8m) height.	120	Nos.		
20	Dismantle of old 2-3 Mtr. height G.I. poles.	30	Nos.		
	Total Amount				

Chairman, BAC

Signature with Seal by Contractor

ANNEXURE-C





3Mtrs CS Pole
Single Bracket