

Validate

Print

Help

Item Rate BoQ

Tender Inviting Authority: Superintending Engineer, P.W.D., North Bengal Electrical Circle

Name of Work: S.I.T.C of Solar Photovoltaic street light from V.I.P More, Changrabandha to Mekhliganj, Cooch Behar---Phase I--- "Changrabandha by-pass more to Zero point, Changrabandha Cooch Behar".

Contract No: WBPWD/SENBE/NIT-01/2023-2024

Bidder Name :						
PRICE SCHEDULE						
(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT With Taxes	TOTAL AMOUNT In Words
1	2	4	5	13	54	55
1.00	Supply and fixing of All In One Solar LED Street Light of required wattage (Lumen output not less than 10500 lumens) having following specifications:- Solar Panel: 1. Solar panel should be made from Monocrystalline cells . 2. The Solar Module Power shall be ≥ 90 Wp. 3. Cell efficiency should be $\geq 21\%$. 4. Module efficiency should be $\geq 17\%$. 5. Glass should be Borosilicate only . 6. Manufacturer should comply to IEC 61215, IEC 61730 & IEC 61701 standards.	228.00	Set		0.00	INR Zero Only
1.01	Lighting Luminaries: 1. The Lumens Output of the Fitting shall be of Minimum 10500 Lumens. 2. LED should be of Osram/Lumiled/Cree/Seoul/Nichia/Bridgelux 3. LED Type: High power SMD LED, Gen 5 4. LED Efficacy: ≥ 160 lm/W 5. CRI should be >70 6. CCT should be $5700K \pm 500K$ 7. System Efficacy ≥ 140 lm/W 8. Aluminium heat-sink to be used 9. LEDs shall have optical grade polycarbonate lens to provide streetlight distribution. LED optical lens should be mechanically fixed to MCPCB and should not be fixed by glue. Individual or cluster of LEDs should be provided with Optical Grade Polycarbonate lens with streetlight (Type II) optical distribution 10. The LED shall be compliant with LM80-08 standard. 11. Useful L70 life of 50000 Hrs with 70% lumen maintenance at 35 deg C ambient temperature. (Complete LM 80 test report for LED should be submitted) 12. Product should be IP 65 at component level.					
1.02	Battery: 1. Battery pack should be of LiFePO4 type cells 2. Life of battery should be ≥ 2000 cycles @ 80% DoD 3. Battery backup: ≥ 10 hours in full power mode ≥ 30 hours in saving mode (30% light output throughout) (Battery fully charged condition) 4. Battery size: $\geq 12.8V, \geq 30Ah$ 5. Battery should have wide operating temperature range (0 to ≥ 45 degree celcius) to work in higher ambient 6. Cells used in battery pack should have BIS/IEC certification as per IS 16046/IEC 62133. BIS certificate to be provided for cell. 7. Battery BMS should have over temperature, over voltage, under voltage & short circuit protection 8. Battery pack should have a FR sheet packing with HS sleeve 9. Battery pack should have IP66 protection.					

1.03	<p>Electronics:</p> <ol style="list-style-type: none"> Should have MPPT algorithm for charging. MPPT tracking efficiency: $\geq 90\%$ MPPT Conversion efficiency: $\geq 90\%$ LED driver efficiency: $> 90\%$ Reverse Polarity, Short circuit, LED open, LED short circuit, open circuit protection Reverse current flow protection Standby current consumption Should be $< 20\text{mA}$ Should have indications for Charging, LVD, Status of system Electronics should comply with IEC/BIS standards Product should be IP 65 on component level Wide operating temperature range: 0 to 55 degrees MPPT, Driver & PIR sensor should be potted Status indications to be provided for Charging, Battery full, Product status, Battery low, Over temperature. 					
1.04	<p>Mechanical:</p> <ol style="list-style-type: none"> Housing material should be made up of Aluminium Extrusion/sheet Manufacturer Logo to be embossed on housing Metallic silver powder coating with thickness of ≥ 70 micron $\geq 5\text{mm}$ thick, Hot dip galvanised & powder coated hardware for pole mounting Robust pole mounting clamps to handle high wind pressure All screws and nuts should be SS 304 grade IP 67 -Soft switch for ON/OFF operation Fixed 5-degree tilt to be provided to Solar panel for optimum charging. 					
1.05	<p>Warranty: Warranty and maintenance assurance certificate for atleast 5 (Five) years. Make: WIPRO/BAJAJ/PHILIPS/CROMPTON.</p>					
2.00	<p>Supply of 8 M height dip galvanised octagonal pole made of HT steel of grade S355 of BSEN 10025 with 135 mm bottom A/F & 70 mm top A/F made up of 3 mm thick G.I Sheet along with base plate of size 225 x 225 x 16 mm thick inclusive of Supply of 04 nos "J" type Foundation bolt (size- 4-M20 X 600) with bolt as per EN-8 grade manufactured from special steel along with nuts, washers, and templates PCD 210 mm incl necessary arrangement for suitable bracket/header with required OD and capable of taking weight of fittings considering wind pressure of two nos all in one solar street light facing each towards road side as per direction and approved drawing & design by EIC. (MAKE-BAJAJ/ TRANSRAIL/VALMONT)</p>	114.00	Each		0.00	INR Zero Only
3.00	<p>Errection of MS octagonal poles by construction of suitable Shallow foundation with M-20 grade concrete for octagonal pole considering soil bearing capacity (SBC) 10T/sq. mtr. at 2 Mtr. depth with all materials including earth work in excavation of foundation pit, making R.C.C foundation and also including supply of all materials e.g anchoring bolts and nuts, washers , sands , cement, coars aggregate , reinforcement roads etc. and refilling of pit duly rammed and finished complete as per PWD civil schedule & as per direction of EIC and fixing of foundation bolts, anchor plate etc. with necessary arrangement.</p>	114.00	Each		0.00	INR Zero Only
4.00	<p>Excavation of soil for installation of Earth Electrode and filling & ramming. For soft soil.</p>	171.00	Cu. Mtr.		0.00	INR Zero Only
5.00	<p>Earthing with 50 mm dia GI pipe 3.64 mm thick x 3.04 Mts. long and 1 x 4 SWG GI (Hot Dip) wire (4 Mts. long), 13 mm dia x 80 mm long GI bolts, double nuts, double washers incl. S & F 15 mm dia GI pipe protection (1 Mts. long) to be filled with bitumen partly under the ground level and partly above ground level driven to an average depth of 3.65 Mts. below the ground level as below: By ISI-Medium GI pipe.</p>	114.00	Set		0.00	INR Zero Only
6.00	<p>Connecting the equipments body to earth electrode including S&F 20 mm x 3 mm galvanised (Hot Dip) MS flat on wall/floor with GI saddles as required and connection to equipments incl. drilling holes, with bolts, nuts, washers etc.</p>	171.00	Mtr.		0.00	INR Zero Only

7.00	<p>TERMS & CONDITIONS: -</p> <p>a) Rate should be quoted inclusive of all applicable taxes and Duty etc.</p> <p>b) The Agency must procure the materials from the Manufacturer / OEM or from their authorized sales channel so that the standard warranty / support of the Manufacturer / OEM becomes applicable to the products to be delivered and installed by them.</p> <p>c) Documents that authenticates such procurement from the Manufacturer / OEM or from their authorized sales channel and standard warranty / support should be sent from the e-mail of the Manufacturer / OEM / authorized sales channel to the e-mail of Engineer-in-Charge and hard copy of it to be submitted during execution, of work/submission of bill.</p>					
7.01	<p>d) The Agency must have to upload Drawing, Design and Model Number of fittings received from the Manufacturer/OEM regarding fittings & fixtures chosen by them at the time of dropping Tender considering Central Verge lighting of Group A1 type road, average width of Road 1 = 8 meter & average width of Road 2 = 8 meter, average width of Median = 2 meter & spacing between poles not less than 25 meter.</p> <p>e) The Agency need to verify all provided data by visiting the site before dropping Tender. If any rectification required they need to furnish the rectified data at the time of pre-bid meeting to be held in the chamber of TIA.</p> <p>f) If any refurbished material is supplied and installed, penal action will be taken as per existing rules.</p> <p>g) Before execution of the work it is to arrange Factory / Material inspection at OEM end as per accepted schedule.</p>					
Total in Figures					0.00	INR Zero Only
Quoted Rate in Words		INR Zero Only				