**SCOPE OF WORK AND TECHNICAL SPECIFICATIONS**

**SCOPE OF WORK**

The location of this project is Thlaba Primary School, Bazza, Michika LGA, Adamawa State (Lat 10°33’ 53.26” Long 13°19’ 33.14”). The vendor is required to supply and install 2 Nos 5VA Inverter Solar System as detailed in the BOQ to power electrical fittings in the 21 classrooms and offices of the school recently rehabilitated by UNDP. Materials to be supplied and installed are as follows:

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| 5KVA/48V Sine-wave Inverter PROCOMBI or its equivalent |
| 200AH/12V deep circle battery unilite or it equivalent |
| Angle Iron battery rack |
| 200Watts/24V Polycrystalline solar panel |
| 60A/48V solar charge controller |
| 16mm2 x 1core flexible cable |
| 10mm2 x 2core flexible cable |
| Solar panel rack (2'' angle iron fabricated): |
| PV connect/disconnect/protect device: |
| Trunking pipe or flexible hose:  |
| Complete earthing system with thunder Arrestor: |
| Additional cables for interconnection items and interconnection of all UNDP blocks: |
| Installation of all equipment with including testing, commissioning of equipment and all necessary civil works for proper functioning of the equipment |

Upon completion, vendor shall ensure end user is trained in the safe and proper operation of the system to prolong lifespan.

**PROJECT DURATION :** 4 weeks

**TECHNICAL SPECIFICATIONS**

*This document shall be read and understood in conjunction with the BOQ and design drawings provided. The vendor shall consult the supervising Civil Engineer for directives/clarification in the event of a conflict.*

1. All works and processes shall be carried out using equipment, tools and methods that comply with applicable construction **HSE** regulations, standards and policies. The use of PPE, safety caution tapes and symbols are mandatory. Safety first!
2. The works shall follow a sequence and employ methods that will have the least negative impact on the natural environment, public and private property, pedestrian and vehicular traffic
3. The vendor will ensure proper insulation of all wiring and take all necessary measures to conceal/secure installation from tampering or theft
4. For electrical wiring shall be full conduit, all blocks of classrooms must be inter-connected, and a main distribution board and changeover switch provided at designated location.
5. Ceiling fan hooks must be properly anchored on roof noggins
6. All lamps must be energy saver type of approved quality not exceeding 20W rating.
7. All sockets outlets for General A.C supplies shall be 13AMP 3-pin type and shall comply fully with B.S.S 1362 and 1363 and supplements as applicable.
8. All electrical installations must be earthed, and fittings must be tested and commissioned prior to handover of project.
9. The vendor shall be responsible for the safety and security of all materials and installations until formal handover to end user

**CONDITIONS AND SCHEDULE OF PAYMENT**

95% upon satisfactory completion of the project and certification. Retention of 5% shall be paid 6 months after practical completion and repairs of any defective works. 6 months warranty is required on company’s letterhead.

**DURATION : 4 weeks**