



Republic of the Philippines  
**CAVITE STATE UNIVERSITY**  
 Don Severino delas Alas Campus  
 Indang, Cavite

ADMN-QF-09

## BILL OF QUANTITIES

<b>PROJECT: IMPROVEMENT OF ELECTRICAL POWER SYSTEM OF ANIMAL SCIENCE BUILDING</b> <b>ABC: ₱ 1,425,451.13</b> <b>COLLEGE/UNIT/CAMPUS: MAIN CAMPUS - College of</b> <b>Agriculture, Food, Environment and Natural Resources</b>					
Item No.	Description	Unit	Quantity	Unit Price (Pesos)	Amount (Pesos)
I	PRELIMINARY WORKS (Pesos _____ _____ and _____ centavos)				
II	EARTH WORKS (Pesos _____ _____ and _____ centavos)				
III	ELECTRICAL WORKS (Pesos _____ _____ and _____ centavos)				
<b>GRAND TOTAL</b>					_____
<b>Write grand total in words</b>			_____ _____ _____		

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Name of Bidder/Bidder's Representative: \_\_\_\_\_  
 Position: \_\_\_\_\_  
 Construction Company/Contractor: \_\_\_\_\_

V01-2018-06-14

## **CAVITE STATE UNIVERSITY**

### **SCOPE OF WORK:**

#### **A. IMPROVEMENT OF ELECTRICAL POWER SYSTEM OF ANIMAL SCIENCE BUILDING**

##### **GENERAL NOTES:**

1. The project should be finished in 60 calendar days.
2. Site inspection is a must. Verify actual site condition.
3. This set of specifications shall govern the methods of construction and the kinds of materials to be used for the proposed project shown in the plans and detailed drawings.
4. All parts of the construction shall be finished with first class workmanship, to the fullest talent and meaning of the plans and these specifications, and to the entire satisfaction of the project inspector and the end-user.

#### **B. Technical Description**

##### **I. Preliminary Works**

Mobilization/Demobilization

Provide the following:

1. Billboard with project information
2. Bunkhouse with office
3. Temporary comfort rooms
4. Site temporary enclosure may be blue sack or any suitable materials that may enclose the workplace.
5. Demobilization includes cleaning up of site, clearing, hauling and disposal of waste and construction debris.
6. The area should be cleared/cleaned before and after construction work at least six meters away from the building line. Notify the end-user regarding the properties that need to be hauled away from the site prior to construction.

##### **II. Earth Works**

1. This work includes excavation for the three units of concrete poles and truss guy support.

##### **III. Electrical Works**

Supply and installation of the following:

1. Supply and installation of 3-50 kVA distribution transformers and primary concrete poles.
  - a. Amorphous distribution transformers 50 kVA, 13.8 kV/230V, 60 Hz, pole mounted (3 units) complete with transformer accessories (fuse cut-out, lightning arresters, fuse links, risers, connectors, etc.).
  - b. 2 sets of 13.5m concrete pole, class 3A, complete with pole dressing, insulators, pole grounding, pole steel band and accessories.
  - c. 1 set of truss guy support.
2. Supply and installation of secondary concrete pole with pole dressing, insulators, pole grounding and guy support.
  - a. 1-9.5m concrete pole, class 3A, complete with pole dressing, insulators, pole grounding.
  - b. 1 set of truss guy support.
3. Supply and installation 1 set of 3-250 sq. mm. THHN and 1-60 sq. mm. THHN as ground wire ( 99.9% copper, fire retardant) from distribution transformers to feeder line of the Animal Science building. Include its messenger wire.
4. Include tapping to primary lines, energization, testing and commissioning of distribution transformers. Provide necessary connectors and equipment for the wiring installation.
5. Consult inspectors for details and extent of work.

##### **NOTE:**

- a. Electrical testing and guarantee, electrical supervision and final electrical inspection report should be signed and sealed by Professional Electrical Engineer with notary public.
- b. The distribution transformers should be brand new. Submit all the certificates, testings and warranty to project inspectors with the signature and seal of a professional electrical engineer.

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- c. Coordinate with the Physical Plant Services office for the de-energization/energization of primary lines. Include the service/rental fees for all equipment and personnel involved in the scope of works.
- C. Contractor of the said project must provide an as-built plan of the project at the end of the contract as a requirement for the release of their final billing.
- D. Contractor's PCAB license should have specialization in electrical works.
- E. For color/types of any fixtures or materials to be used on site, consult the end-user and the inspector for approval. Consult the plan and the scope of work for the extent of tasks of the contract. If possible, let the end-user sign your sample as proof of approval.
- F. The plans, detailed drawings and these specifications shall be considered as complementing each other, so that what is mentioned or shown in one, although not mentioned or shown in the other, shall be considered as appearing on both. **In case of conflict between the two, generally, the scope of work prevails.**
- G. Resident site engineer is a must for the projects to be undertaken by the contractor of the university. In cases where there are electrical works, it is required that an electrical engineer or a master electrician be a part of the contractor's team to supervise all electrical works. Safety engineer is a must as per DOLE requirement. **Note: All key personnel should be included in the list of personnel for submission.**
- H. In cases of participation in two or more projects, the set of workers and foreman shall be different per project, however, the set of engineers and equipment may be reused.
- I. Construction safety and health program as well as construction schedule (PERT/CPM/S-Curve) shall be provided by the winning bidder.
- J. All public utilities used by the winning contractor in the construction of the project, such as electricity, water, telephone, etc., shall be for the sole account of the contractor.
- K. See plans/consult the end-user and project inspector for details and extent of work. The silence of specifications, plans, special provisions and supplementary specifications as to any detail, or the apparent omission therein of detailed description or definition of the quality of materials and workmanship shall be regarded to mean that only materials and workmanship of first class quality are to be used or employed.