



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

BILL OF QUANTITIES

RENOVATION OF ANIMAL SCIENCE BUILDING			Bill of Quantities		
ABC: ₱5,663,628.15					
COLLEGE/UNIT/CAMPUS: MAIN CAMPUS					
Item No.	Description	Unit	Quantity	Unit Price (Pesos)	Amount (Pesos)
I	SITE PREPARATION (Pesos _____ _____ and _____ centavos)				
II	MASONRY WORKS (Pesos _____ _____ and _____ centavos)				
III	TRUSSES & ROOFING WORKS (Pesos _____ _____ and _____ centavos)				
IV	CARPENTRY WORKS (Pesos _____ _____ and _____ centavos)				
V	ELECTRICAL WORKS (Pesos _____ _____ and _____ centavos)				
VI	PAINTING WORKS (Pesos _____ _____ and _____ centavos)				
GRAND TOTAL					_____
Write grand total in words					_____ _____ _____

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

CAVITE STATE UNIVERSITY

SCOPE OF WORK:

A. RENOVATION OF ANIMAL SCIENCE BUILDING

GENERAL NOTES:

1. The project should be finished in 180 calendar days.
2. There is an existing structure and verification of the actual site is a must.
3. The area should be cleared/cleaned before and after the construction work at least ten meters away from the building line. Unusable used formworks, excessive soil fill and all other unwanted debris of construction works should be disposed properly.

B. Technical Description

I. Site Preparation

- A. Site Preparation/ Temporary Enclosure/ Mobilization/ Demobilization/ Office/ Bunkhouses/ Comfort Rooms/etc.

Provide the following:

- Billboard
- Bankhouse with office
- Temporary comfort rooms
- Site temporary enclosure may be blue sack or any suitable materials that may enclose the workplace

B. Dismantling and clearing

1. Dismantling of all existing trusses, roofing, ceiling and concrete wall and parapet.
2. All dismantled items will be subjected to inventory and inspection by the project inspector/end-user and will be hauled by the contractor.

C. Soil poisoning

1. The area of the building should be treated with termite proofing.

II. Masonry Works

1. All areas affected by the chipping works should be retouched/plastered plain cement finished.

III. Trusses and Roofing Works

A. Trusses

1. See plans for sizes of bar and other details for the installation of steel trusses.
2. This work also includes painting of two (2) coats of epoxy primer and two (2) coats of quick dry enamel black.
3. Provide necessary tools and equipment.
4. All joint connections should be fully welded.
5. Use galvanized CEE purlins ga. 16, 2" x 6" @ 0.60 m. on center.
6. Use galvanized CEE purlins ga. 16, 2-2" x 6" for fascia board.
7. Provide 12 mm Ø with nut and washer for sag rod.
8. Provide 16 mm Ø plain bar with standard turnbuckle for horizontal cross bracing
9. Provide 4-16 mm Ø expansion bolts with nut and washer for each support.

B. Roofing

Adopt the following:

1. Gauge 26 (0.5 mm) rib type pre-painted roof sheet.
2. Gauge 26 (0.5 mm) x 18 pre-fabricated and pre-painted ridge roll and fascia cover.
3. Gauge 26 (0.5 mm) x 24 stainless valley gutter.
4. All attachment for roofing sheet and ridge roll shall be 2 1/2" teck screw for metal.
5. Provide water sealant for all attachment (water sealant should be provided for both inside and outside surface of teck screw head).

IV. Carpentry Works

1. Provide necessary form lumber and scaffolding needed for the completion of the project.
2. Supply and installation of two sets of aluminum doors (YP/Buss. Body) complete with all accessories (0.60 m. x 1.20 m.)
3. Supply and installation of double wall partition under the two stairs.
 - a. Use 1/4" cement board.
 - b. Use metal furring as tracks and studs.
4. Provide ceiling for the whole area of the second floor and all comfort rooms.
 - a. Use 3/16" cement board for ceiling board.
 - b. Provide decorative wooden molding (2" x 3") to ceiling perimeter and corners.
 - c. Use metal furring as ceiling runner and ceiling joist at 0.40 m. on center both ways.
 - d. Use pre-painted spandrel 4" for the whole area of eaves.
 - e. Provide ceiling ventilation for every 0.5 meter and all corners of the eaves by using pre-painted spandrel 4" with hole.

V. Electrical Works

Remove and replace all electrical wirings and fixtures.

1. Installation of feeder line and its accessories.
 - Installation of MDP, LPP1, LPP2, ACP1, ACP2 and all other panel boards on the plan and their circuit breakers. See schedule of loads and electrical plans for details and specifications. Bolt-on type Nema Standard should be used.
2. Installation of wiring/conductors and PVC/RSC conduits/junction box/utility box from main/sub-main panel boards to convenience outlet/light outlet/ACU outlet.
 - a. THHN and THW CU. stranded wire, Phelps Dodge or approved equal.
 - Refer to the Schedule of loads for size and color coding of conductor wires.
 - THW type of conductor wires for outdoor installation.
 - b. PVC conduit orange pipe with sizes as indicated on the plan.
 - c. RSC conduit pipe for service wire conductor.
 - d. Utility and junction boxes should be PVC & deep type.
3. Installation of electrical fixtures/switches/outlets and other electrical devices.
 - a. Switches (Bticino, National or approved equal)
 - b. Convenience outlet (Bticino, National or approved equal)
 - c. Outlets for ACU and Emergency light (Bticino, National or approved equal)
 - d. 2-18W LED Fluorescent lamp with diffuser (110 sets)
 - e. 1-9W LED Fluorescent lamp with diffuser (15 sets)
 - f. Rechargeable emergency light (32 units)
 - g. Orbit fan ceiling 16" (37 units)
 - h. CT rated 3 phase KWH electric meter with meter base and accessories
 - i. Outdoor Current Transformer Cabinet.
4. Installation of concrete pedestal, conduit pipes, conductor wires, support brackets and accessories for Electrical Service Entrance.
 - Include chipping works and repair for concrete encasement raceway.
5. Tap to the source including and include testing and commissioning.
6. Consult plan and inspector for details and extent of work.

VI. Painting Works

Painting of the whole structure.

1. Painting of the whole newly installed including ceilings and walls.
 - a. Repair surface imperfections with suitable putty. Let it dry and smothered by sanding.
 - b. Scraping /chipping should be done as needed.
 - c. Apply two coats of flat latex and two coats of semi gloss.
2. Formworks/scaffolding needed for painting works shall be provided by the contractor.
3. Clean/clear all areas affected by the works.

Note: Color of paint will depend upon the preference of the end-user. Paints and its accessories to be used shall be Boysen brand or approved equal.

- 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. 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. **Note: In the event that discrepancies on plans and scope of work occur, generally, the scope of work prevails.**
- E. 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. Likewise, master plumbers must supervise plumbing works. It can be considered when only one person is the master plumber and master electrician at the same time as long as his major duty is supervision of both fields. Safety engineer is a must as per DOLE requirement. **Note: All key personnel should be included in the list of personnel for submission.**
- F. 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.
- G. Construction safety and health program as well as construction schedule (PERT/CPM/S-Curve) shall be provided by the winning bidder.
- H. 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.