

Republic of the Philippines

CAVITE STATE UNIVERSITY

Don Severino delas Alas Campus Indang, Cavite

BILL OF QUANTITIES

COMPLETION OF STUDENTS' DORMITORY ABC: ₱20,000,000.00 COLLEGE/UNIT/CAMPUS: MAIN CAMPUS		Bill of Quantities				
Item No.	Description	Unit	Quantity	Unit Price (Pesos)	Amount (Pesos)	
1	EARTHWORKS (Pesos and centavos)			(. 3333)	(. 3333)	
II	CONCRETE WORKS (Pesos andcentavos)					
III	MASONRY/TILE WORKS (Pesos and centavos)					
IV	CARPENTRY WORKS (Pesos and centavos)					
V	ELECTRICAL WORKS (Pesos and centavos)					
VI	PLUMBING WORKS (Pesos					
GRAND TOTAL						
Write grand total in words						
Submitted by: Name of Bidder/Bidder's Representative: Position: Construction Company/Contractor:			Date:			

CAVITE STATE UNIVERSITY

SCOPE OF WORK:

A. COMPLETION OF STUDENTS' DORMITORY

GENERAL NOTES:

- 1. The project should be finished in 240 calendar days.
- There is an existing structure and verification of the actual site is a must.
- This works will be from Grid 5 to 10 and Grid A to L (from Foundation to Second Floor Level)

B. Technical Description

Earthworks

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

Provide the following:

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

B. Clearing, Excavation and Backfilling

- 1. This work includes excavation for all footings, columns, wall footings, tie beams and septic tank.
- The area should be cleared/ cleaned before and after the construction works at least six meters away from the building line. Unusable used formworks, excessive soil fill and all other unwanted debris of construction works should be disposed of properly.
- C. Additional Fill and Soil Poisoning
 - 1. Provide additional fill.
 - 2. The area within the specified grid of the proposed building should be treated with termite proofing.
 - 3. Gravel fill = 0.05 m. thick.

II. **Concrete Works**

- A. Cast-in-place concrete
 - 1. Concrete works include footings, columns, slabs, beams, stairs and all other components needed to complete the structure.
 - Provide one meter extension of concrete beams.
 - 3. Strength of concrete to be adopted shall be 3,500 psi.
 - 4. Concrete works should be plain cement finish.
 - 5. Provide necessary tools and equipment needed for concrete works.
- Steel reinforcement
 - 1. Use deformed bar grade 40.
 - Provide necessary tools and equipment needed for steel works.

Masonry and Tile Works III.

- A. CHB Laying
 - 1. Installation of CHB reinforced with 10mm Ø deformed bar spaced at 0.60m on center every three layers.
 - a. CHB 6" for the perimeter/exterior walls and septic tank.b. CHB 4" for interior/partition walls.

 - c. Provide counter lavatory with ceramic tiles in the comfort rooms.
 - 2. Masonry works should be plastered plain cement.

B. Tile Works

Supply and installation of the following:

- 1. Ceramic colored tiles 0.40m X 0.40m for comfort/shower rooms (floors) and counter lavatory. Decorative glazed colored tiles 0.40m X 0.40m for the entire wall (from floor to beam).
- Tiles must be installed by using tile adhesive and finished with appropriate tile grout.
 Consult the end user for color preference of tiles.

IV. Carpentry Works

1. Provide necessary form lumber and scaffolding needed for the completion of the project.

V. Electrical Works

- Supply and installation of panel boards LPP2 and ACP2 and its circuit breakers. Refer to electrical plans for specification and rating of panel boards and circuit breakers. NOTE:Bolt-on type, Nema Standard should be used.
- 2. Supply and installation of copper conductors wires, PVC conduit, junction and utility box from panel boards to convenience outlets, light outlets and ACU power outlets.

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a. PVC conduit orange pipe

- b. Utility and junction boxes should be PVC and deep type.c. THHN and THW stranded copper conductor wires. Phelp dodge or approved equal. See schedule of load for the proper color coding of conductor wires.
- 3. Supply and installation of electrical fixtures/ switches/ outlets and other electrical devices.

a. Switches (Bticino, National or its equivalent)

b. Convenience and emergency outlets (Bticino, National or its equivalent)

c. ACU power outlets (Bticino, National or its equivalent)d. 2-18W LED fluorescent lamp with diffuser

e. Pin light (7W LED bulb)

- Energization of circuit breakers including test and commissioning.
 - a. Phase sequence test, Continuity test, Insulation test and Load test.

Note: Electrical testing and guarantee, electrical supervision and final electrical inspection report should be signed and sealed by Professional Electrical Engineer with notary public. 5. Consult plan for details and extent of works.

VI.

Plumbing Works
A. Water Supply Line

1. Adopt PPR pipes and fittings for water line

a. 1" and ½" Ø for water line.

b. Provide gate valve for every comfort room.

Tapping to the source is included.

3. No pipe should be embedded without testing it to leak.

B. Sewer Line

- 1. Adopt PVC heavy duty orange pipes and fittings.
- Provide open canal for shower room.

1. Provide the following for the comfort/ shower rooms:

a. Brass floor drain

- b. Colored tank type water closets Note: All fixtures must be HCG, American Std., Toto or approved equivalent.
- c. Heavy duty hand held spray set for every cubicle and heavy duty faucet for lavatory.
- d. Heavy duty shower and valve for every cubicle at shower room

e. Heavy duty faucets

- 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.
- 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. Moreover, it is always whichever is advantageous to the government.
- 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.