



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

ADMN-QF-09

BILL OF QUANTITIES

COMPLETION OF FIVE-STOREY CEMDS BUILDING				Bill of Quantities	
ABC: ₱ 5,000,000.00					
COLLEGE/UNIT/CAMPUS: MAIN - College of Economics Management and Development Studies					
Item No.	Description	Unit	Quantity	Unit Price (Pesos)	Amount (Pesos)
I	PRELIMINARY AND DISMANTLING WORKS (Pesos _____ _____ and _____ centavos)				
II	CONCRETE, MASONRY AND TILEWORKS (Pesos _____ _____ and _____ centavos)				
III	MISCELLANEOUS WORKS (Pesos _____ _____ and _____ centavos)				
IV	CARPENTRY WORKS (Pesos _____ _____ and _____ centavos)				
V	MECHANICAL, FIRE PROTECTION AND PLUMBING WORKS (Pesos _____ _____ and _____ centavos)				
VI	ELECTRICAL 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. COMPLETION OF FIVE-STOREY CEMDS BUILDING

GENERAL NOTES:

1. The project should be finished in 90 calendar days.
2. There is an existing structure. Actual site inspection is a must. Verify the actual condition of the site.
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 and Earthworks

A. Mobilization / Demobilization

Provide the following:

1. Billboard with project information
2. Bunkhouse with temporary office
3. Temporary comfort rooms
4. Site temporary enclosure may be blue sack or any suitable materials that may enclose the workplace.
5. It includes cleaning up of site, clearing, hauling and disposal of waste and construction debris before and after the 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. All waste materials shall be disposed of by the contractor at his expense.
6. Any excess materials resulting from all earthwork operations not required or unsuitable for backfill as directed by the project inspector, shall be disposed of by the contractor at his expense.
7. Restoration of any damages shall also be done before exiting the area.

B. Dismantling Works

1. Remove and replace all existing doors at the comfort room cubicle, main door of comfort rooms and Plumbing Rooms.

II. Concrete, Masonry and Tile Works

1. Supply and installation of colored ceramic tiles 0.40m x 0.40m for the comfort rooms.
 - a. Tiles must be installed for the entire floors and walls.
 - b. Walls should be provided with belts using decorative tiles at 4 layers from ceiling line and floor line.
 - c. Tiles must be installed for concrete counters for lavatory and slop sink.
 - d. Consult the end-user for color preference of tiles.
2. Retouching of concrete for the canopy and concrete gutter is included.
 - a. Chipping of exposed rebar of existing concrete gutter and canopy.
 - b. Provide concrete epoxy with gauge # 16 G.I. screen.

III. Miscellaneous Works

A. Doors

1. This work includes fabrication, supply and installation of doors needed to complete the project.
 - a. Pre-painted steel doors and jambs (10 sets) with heavy duty hinges and lever locksets.
 - b. Single panel aluminum frame door complete with all accessories with $\frac{3}{8}$ " thick colored glass on colored powder coated finish aluminum framing (2 sets)
 - c. Double panel aluminum frame door complete with all accessories with $\frac{3}{8}$ " thick colored glass on colored powder coated finish aluminum framing (6 sets)
 - d. PVC partition with door, complete with all accessories including door lock with indicator (3 units)
 - e. Aluminum door (YP/Buss body) for all cubicle of comfort rooms with heavy duty hinges and locks all other heavy duty accessories (35 sets)

- B. Windows
 - 1. This work includes repair and improvement of all W-1 (steel casement windows).
 - 2. The glasses should be cut according to the panel sizes. See plan for the sizes of glasses.
- C. Stainless railing
 - 1. This work includes provision of stainless railing at the stairs beside the elevator shaft.
 - 2. Provide 1.5mm thick x 2" Ø (304) stainless tubing for stair railings complete with all accessories
- D. Waterproofing works
 - 1. Supply and application of two coats of Sealproof flexible cementitious waterproofing (FCW) for all concrete gutters, canopies (ledge) and deck.
- E. Fire escape and ladder
 - 1. Construction of fire escape. See plan for details.
 - 2. Fabrication of ladder for Maintenance and Plumbing Room to roof.
 - 3. Provide 1 & ½" Ø and 1" Ø with 1.5mm thickness stainless tubing (304) for ladder.

IV. Carpentry Works

- A. Formworks
 - 1. Provide necessary form lumber and scaffolding needed for the completion of the project.
- B. Ceiling Works
 - 1. Provide ceiling works for the five comfort rooms.
 - 2. Use 3/16" thick fiber cement board for ceiling board.
 - 3. Use metal furring as ceiling runner and ceiling joist at 0.40m on center both ways.
 - 4. Use wall angle on the perimeter walls.
 - 5. Use rivet or black screw for connections.

V. Mechanical, Fire Protection and Plumbing Works

- A. Mechanical and Fire Protection Works
 - 1. Supply and installation of the following including fittings and accessories:
 - a. Fire pump 30HP (1 unit)
 - b. Jockey pump 5.0 HP (1 unit)
 - c. Water pump 2.5HP (1 unit)
 - d. Pendant type sprinkler at 5th Floor (46 units)
- B. Plumbing Works
 - 1. Supply and installation of the following fixtures:
 - a. Gate valve 1" PPR (12 pcs)
 - b. Water closet (14 sets)
 - c. Heavy duty faucets (26 units)
 - d. Brass floor drain (12 units)
 - e. Re-installation of one unit urinal for every comfort room for male.
 - 2. Adopt PPR pipes and fittings (PN 20) for water line
 - a. Supply and installation of 50mm PPR pipes with 2 pieces stop valve from cistern tank to water tank.
 - b. Use 25mm Ø from water tank to comfort rooms.
 - c. Provide gate valve for every comfort rooms.
 - 3. Construction of one unit septic tank (6.0m x 2.0m x 1.8m)
 - 4. Repair and improvement of two units stainless tank at roof deck.
 - 5. Tapping to the source is included.
 - 6. No pipes should be embedded without testing it to leak.

VI. Electrical Works

- 1. Chipping of concrete walls for conduit pipe raceway.
- 2. Supply and installation of panel enclosure and circuit breakers. G.E., Himel, Schneider or approved equal;. Refer to the Schedule of Load for rating and specifications.
 - a. 30 AT, 2P, 230V Circuit breaker with NEMA 3r panel enclosure 49 sets for ACU. **Note:** Bolt-on type, NEMA standard should be used.
- 3. Supply and installation of C.U. conductor wires, PVC orange conduit pipes, conduit

V01-2018-06-14

fittings and PVC electrical box with cover in accordance with the plan. **Note:** Conduit pipes should be embedded all throughout.

- a. From lighting panels to lighting fixtures, emergency lights and switches in accordance with the plan
 - b. From power panels to convenience outlets/ power outlets in accordance with the plan.
 - c. From airconditioning panels to ACU power outlets in accordance with the plan.
 4. Specifications of materials to be used:
 - a. THHN/THWN copper wire 99.99% pure copper conductor, fire retardant, Phelps dodge, Philflex or approved equal. Refer for Schedule of Loads for proper color coding of wires.
 - b. PVC orange conduit pipes.
 - c. PVC electrical utility/ square/ junction box with cover.
 - d. Support brackets/ hangers, clamps and rods should be galvanized steel.
 5. Supply and installation of electrical fixtures/ switches/ outlets and other electrical components in accordance with the plans. Specifications of materials to be used:
 - a. 2 - 18W LED tube light with diffuser (242 sets) Philips, firefly or approved equal.
 - b. 1 - 18W LED tube light with diffuser (110 sets) Philips, firefly or approved equal.
 - c. 2 - 9W LED tube light with diffuser (1 set) Philips, firefly or approved equal.
 - d. 1 - 9W LED tube light with diffuser (77 sets) Philips, firefly or approved equal.
 - e. 12W LED downlight with 6" surface type round casing (20 sets)
 - f. Emergency light twin head with 1 gang power outlet (85 sets) Philips or approved equal.
 - g. Wide series switches. Panasonic, Omni or approved equal.
 - h. 2-gang convenience outlet, universal type with ground (229 sets). Panasonic or approved equal.
 - i. Exhaust fan (ceiling mounted) with 4" PVC pipe (1 unit)
 6. Restoration, repair and repainting of walls to be chipped.
 7. Include tapping to the source, electrical testing and commissioning.
 - a. Phase sequence test
 - b. Continuity Test
 - c. Insulation Test
- Note:** Electrical testing and guarantee, electrical supervision and final electrical inspection report should be signed and sealed by Electrical Engineer with notary public.
8. Consult inspectors for details and extent of work.
- C. 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.
- D. 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.**
- 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. 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.
- I. 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.