



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

## BILL OF QUANTITIES

REPAIR AND IMPROVEMENT OF KITCHEN AND FOOD DELIVERY AREA AT HOSTEL TROPICANA					
ABC: ₱1,729,594.21					
COLLEGE/UNIT/CAMPUS: MAIN CAMPUS					
<b>Bill of Quantities</b>					
Item No.	Description	Unit	Quantity	Unit Price (Pesos)	Amount (Pesos)
I	EARTHWORKS (Pesos _____ _____ and _____ centavos)				
II	FORMWORKS (Pesos _____ _____ and _____ centavos)				
III	CONCRETE AND MASONRY WORKS (Pesos _____ _____ and _____ centavos)				
IV	TILEWORKS (Pesos _____ _____ and _____ centavos)				
V	CARPENTRY WORKS (Pesos _____ _____ and _____ centavos)				
VI	PLUMBING WORKS (Pesos _____ _____ and _____ centavos)				
VII	ELECTRICAL WORKS (Pesos _____ _____ and _____ centavos)				

VIII	STEEL, TRUSSES AND ROOFING WORKS (Pesos _____ _____ and _____ centavos)				
IX	PAINTING WORKS (Pesos _____ _____ and _____ centavos)				
X	DOORS AND WINDOWS (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: \_\_\_\_\_

## **CAVITE STATE UNIVERSITY**

### SCOPE OF WORK:

#### **A. REPAIR AND IMPROVEMENT OF KITCHEN AND FOOD DELIVERY AREA AT HOSTEL TROPICANA**

##### GENERAL NOTES:

1. The project should be finished for 105 calendar days.
2. Site inspection is a must to verify its existing condition.
3. Provide the following:
  - Billboard
  - Bunk house with office
  - Temporary comfort rooms
  - Site temporary enclosure may be blue sack or any suitable materials that may enclose the workplace.
4. 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. Earthworks**

###### A. This work includes:

1. Clearing and grubbing
2. Excavation and backfill
3. Excavation of footing, wall footing and floor slab
  - a. Total volume of excavation : 10.444 cu.m.
4. Backfill, levelling and tampering of additional fill

##### **II. Formworks**

1. Provide necessary forms and scaffolding for the completion of the project.

##### **III. Concrete and Masonry Works**

###### A. Concrete Works

###### 1. Cast-in-place concrete

- a. Concrete works include all columns, footings, wall footings, beams, floor slab and all concrete components to complete the structure.
- b. Adopt Class A concrete mixture.
- c. Provide 50mm aggregates.
- d. Concrete works should be free from honeycomb upon turn-over.
- e. Concrete works should be plain cement finish.
- f. See plans for the details, specifications of concrete and extent of works.
- g. Provide necessary tools and equipment needed for the completion of work.

###### 2. Masonry Works

- a. Adopt Class B concrete mixture for mortar and plaster mixture to all masonry works.
- b. All masonry works must be plain cement finish.
- c. Masonry wall height is 2 feet.

###### 3. Reinforcement

- a. Provide 12mm Ø RSB as transverse bar for footing.
- b. Provide 2-10mm Ø RSB as transverse bar for wall footing.
- c. Provide 4-10mm Ø RSB as vertical reinforcement for column
- d. Use 10mm Ø RSB for dowels and stirrups.
- e. Provide 10mm Ø RSB as vertical reinforcement spaced at every 800mm and horizontal reinforcement at every 600mm.
- f. Provide 10mm Ø deformed steel bar as reinforcement to floor slab, spaced at every 400mm on center.
- g. Use deformed bars grade 40 for steel works.
- h. See plan for details and extent of work.

#### **IV. Tile Works**

1. Supply and installation of the following:
  - a. Use 40cm x 40 cm ceramic floor tiles (locally made) for dirty kitchen
  - b. Use 40cm x 40cm ceramic floor tiles (locally made) for Food Preparation Room
  - c. Use 40cm x 40cm ceramic floor tiles (locally made) for Food Handling Area
  - d. Use tile adhesive for tiling.
  - e. Clean residue prior to accomplishment of the project.
  - f. Consult the end-user for the color preferences of tiles.

#### **V. Carpentry Works**

1. Dismantling of existing ceiling including ceiling joist, ceiling eaves and fascia boards at Storage Room, Stock Room, Laundry Area and Washing Area.
2. Installation of new ceiling at Dirty Kitchen, Food Preparation area and Food Handling Area:
  - a. Use 0.60mm thick x 25mm x 25mm wall angle
  - b. Use 1" concrete nail for fastening wall angle at concrete walls
  - c. Use 0.60mm x 19mm x 50mm x 0.60mm thick J-furring as ceiling joist, parallel to the longer sides of the room spaced at 400mm middle on center
  - d. Use 1mm x 12mm x 38mm x 1.0mm thick C-Channle as ceiling joist, parallel to the shorter side of the room spaced at 400mm middle on center
  - e. Use ¼" thick x 1.20m x 2.40m fiber cement board for ceiling boards
  - f. Use 1" x 2" KD cornice on all perimeter and ceiling corners
3. Installation of 12mm x 300mm x 2400mm fiber cement fascia board.

#### **VI. Plumbing Works**

##### **A. Water Supply Line**

1. Adopt PPR pipes and fittings for water line.
2. 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 (Sanimold type with O-ring or its equivalent) for ventilation, downspout, and the whole sewer line system.
  - a. Use 4" Ø for drainage and downspout.
  - b. Use 2" Ø for lavatory
2. See plan for details and extent of work.

##### **C. Provide separate gate valve for Dirty Kitchen and Food Preparation Area**

#### **VII. Electrical Works**

##### **A. Dismantling of existing lighting fixtures at Storage Room, Stock Room, Laundry Area and Washing Area.**

##### **B. Installation of new lighting fixtures**

1. 6-30W IP65 LED surface-type downlight/ lighting fixture for each corner of the ceiling eaves
2. 2-36W LED panel light at the ceiling eaves between Kitchen and Hostel Tropicana
3. 2-36W LED panel light at Storage Room
4. 2-36W LED panel light at Stock Room
5. 2-36W LED panel light at Laundry Area
6. 2-36W LED panel light at Washing Area
7. 2-36W LED panel light at Dirty Kitchen
8. 4-36W LED panel light at Food Preparation Area
9. 4-36W LED panel light at Food Handling Area

##### **C. Installation of new wiring devices/ switches and convenience outlets at Dirty Kitchen, Food Preparation Area, and Food Handling Area. (Use Bticino, National, or its equivalent)**

##### **D. Testing and commissioning is included.**

##### **E. Tap to the main panel board.**

#### **VIII. Steel, Trusses and Roofing Works**

- A. Steel post
  - 1. Erection of G.I. post as vertical support for roofing.
  - 2. Painting of G.I. post
    - a. Wipe the surface with rag soaked in paint thinner to remove dust, dirt, grease, oil, wax, and other foreign matter. For new G.I. sheets, etch the surface by applying 10% metal etching solution (dilute 1 part of B-71 to 9 parts water).
    - b. Prime bare metal with epoxy primer. Let dry for 8 hours before re-coating.
- B. Steel Trusses
  - 1. See plans for sizes of bar and other details in the installation of steel trusses.
  - 2. This work also includes painting of two coats of epoxy primer.
  - 3. Provide necessary tools and equipment.
  - 4. All joint connections must be fully welded.
- C. Roofing Works
  - 1. Adopt gauge 26 (0.6mm) rib type pre-painted roof sheet.
  - 2. Adopt gauge 26 (0.6mm) pre-fabricated and pre-painted end flashing and fascia board.
  - 3. All attachment for roofing sheets and end flashing shall be 2 ½" teck screw for metal.
  - 4. Provide water sealant for all attachment (water sealant should be provided for both inside and outside the surface of the teck screw head).
  - 5. See plan for details and extent of work.

**IX. Painting Works** (Painting of the whole new structures both interior and exterior)

- A. Wood
  - 1. Apply one coat of flatwall enamel white. Allow to dry overnight.
  - 2. Repair minor surface imperfection with glazing putty. Let dry for 3-4 hours then sand.
  - 3. Apply two coats of semi-gloss enamel in the desired color. Allow an overnight inter coating interval.
- B. Metal
  - 1. Apply zinc chromate primer by brush or spray. Allow to dry for 24 hours. Apply suitable putty on imperfections. Sand to a smooth finish.
  - 2. Apply two coats of Quick Dry Enamel in the desired color.
- C. Concrete
  - 1. Treat the surface with concrete neutralizer. Mix one part with 16 parts water by volume.
  - 2. Repair minor surface imperfections with a suitable putty. Let dry, then sand. Spot coat with top coat color.
  - 3. Apply two coats of colored elastomeric paint or factory mixed dirt resistant semi-gloss latex. Apply with brush or roller.
- D. Repainting of existing roof of kitchen
  - 1. For corroded G.I. sheets, remove rust by wire brushing and use a metal etching solution. Let it stay for 10-15 minutes. Be sure to wash off surface thoroughly with water or paint thinner and let dry. Apply primer a few hours after application of solution and before rust sets in.
  - 2. Apply red oxide primer.
  - 3. Apply 3 coats of gloss acrylic water-based roofing paint.

**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.**

**X. Doors and Windows**

- A. Supply and installation of doors
  - 1. 2 sets (D-1) 1.60m x 2.10m double stainless door with 5/32" thick clear glass, door jamb, heavy lockset complete with all accessories
  - 2. 6 sets (D-2) 0.90m x 2.10m steel door with double rabbet steel door jamb, heavy lockset complete with all accessories
  - 3. 1 set (D-3) 1.60m x 2.10m double steel door with double rabbet steel door jamb, heavy lockset complete with all accessories

B. Installation of Windows

1. 2 sets (W-1) 2.0m x 1.0m sliding window with ¼" thick clear glass on powder coated finish aluminum frame complete with all accessories

- 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. 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.