



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

BILL OF QUANTITIES

RENOVATION OF MARCOS TYPE BUILDING (HEVTED - WEST BUILDING) ABC: ₱ 6,796,972.28 COLLEGE/UNIT/CAMPUS: MAIN CAMPUS					
Bill of Quantities					
Item No.	Description	Unit	Quantity	Unit Price (Pesos)	Amount (Pesos)
I	EARTHWORKS (Pesos _____ _____ and _____ centavos)				
II	CONCRETE WORKS (Pesos _____ _____ and _____ centavos)				
III	MASONRY/TILE WORKS (Pesos _____ _____ and _____ centavos)				
IV	CARPENTRY WORKS (Pesos _____ _____ and _____ centavos)				
V	TRUSSES AND ROOFING (Pesos _____ _____ and _____ centavos)				
VI	MISCELLANEOUS WORKS (Pesos _____ _____ and _____ centavos)				
VII	ELECTRICAL WORKS (Pesos _____ _____ and _____ centavos)				

VIII	PLUMBING WORKS (Pesos _____ _____ and _____ centavos)				
IX	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: _____

SCOPE OF WORK:

A. RENOVATION OF MARCOS TYPE BUILDING (HEVTED - WEST BUILDING)

GENERAL NOTES:

1. The project should be finished in 240 calendar days.
2. Actual site inspection is a must.

B. Technical Description

I. Earthworks

A. Site Preparation/Temporary enclosure/ Mobilization/ Demobilization/ Office/ Bunkhouse/ Billboard/etc.

B. Clearing, Excavation and Backfilling

1. This work includes excavation for storm drainage canal.
2. Dismantling of existing trusses/roofing and ceiling is included.
3. The area should be cleared/cleaned before and after the construction work 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 properly.

II. Concrete Works

A. Cast-in-place concrete

1. Concrete works include columns, stiffener columns, roof beams, open canal and all other concrete components needed to complete the structure.
2. Extension of existing concrete columns is included.
3. Strength of concrete to be adopted shall be **3,500 psi**.
4. Concrete works should be plain cement finished.
5. Provide necessary tools and equipment needed for concrete works.

B. Steel Reinforcement

1. Use deformed bar grade 40.
2. Provide necessary tools and equipment needed for steel works.

III. Masonry and Tile Works

A. CHB Laying

Supply and installation of CHB for end walls and bottom of roof beams.

1. Installation of CHB reinforced with 10mmØ deformed bar spaced at 0.60m on center every three layers.
 - a. CHB 4" for interior/partition walls.
2. Masonry works should be plastered plain cement.

B. Tile Works

Supply and installation of the following:

1. Ceramic tiles (locally made) 0.60m. x 0.60m. for comfort rooms (floor and walls). Tiles must be installed for the entire floors and walls. Accent using decorative tiles shall be provided.
2. Tiles must be installed by using adhesive and finished with appropriate tile grout.
3. Consult the end user for color preference of tiles.

IV. Carpentry Works

1. Provide formworks and scaffolding for the completion of the project.
2. Provide ceiling works for the whole area:
 - a. Use cement board ¼" thick for ceiling board.
 - b. Use metal furring as ceiling joist/runner.
 - c. Provide decorative wooden molding to all ceiling corner.
 - d. Provide 3/16" x 1" flat bar coated with primer and paint for ceiling hanger every 1.20m. both ways.
 - e. Use pre-painted spandrel 4" for the area of eaves with pre-painted end and center molding.
 - f. Provide ceiling ventilation for every 5 meters and all corners of eaves.

V. 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 of 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 CEE purlins ga. 16, 2" x 6" at 0.60m. on center.

6. Provide 16mm. Ø plain bar with standard turnbuckle for horizontal cross bracing.
7. Provide 4-16mm. Ø anchor bolts with nut and washer for each support.
8. Provide 12mm. Ø with nut and washer for sag rod.
9. Use CEE purlins 2" x 6" and 2" x 4" for fascia board.

B. Roofing

1. Adopt gauge 26 (0.5mm.) rib type pre-painted roof sheet.
2. Adopt gauge 26 x 18 (0.5mm.) prefabricated and pre-painted ridge roll.
3. Adopt gauge 26 (0.5mm.) prefabricated and pre-painted fascia cover.
4. Adopt gauge 26 (0.5mm.) prefabricated stainless flushing.
5. Adopt gauge 26 (0.5mm.) stainless gutter (front only).
6. All attachment for roofing sheet and ridge roll shall be 2 & 1/2 " teck screw for metal.
7. Provide water sealant for all attachment (water sealant should be provided for both inside and outside of the teck screw head)

VI. Miscellaneous Works

Supply and installation of the following:

1. Doors
 - 7.0 sets Pre-painted steel flush door with 1/4" thick clear glass view window complete with all accessories
 - 3.0 sets Glass door, complete with all accessories (see existing)
 - 2.0 sets Phenolic door panel, complete with hinges, barrel bolt and all other accessories
2. Windows
 - 32.0 sets Aluminum sliding window with 1/4" thick colored glass on colored powder coated finish aluminum framing
 - 1.0 sets Aluminum awning window with 1/4" thick colored glass on colored powder coated finish aluminum framing

- **Note: All windows shall be provided with 12mm. square bar grills.**

VII. Electrical Works

1. Supply and installation of panel board and circuit breakers. (Bolt-on type, Nema Standard should be used).
2. Supply and installation of conductors and PVC conduit/ junction box/ utility box from main panel to convenience outlet/ lighting outlet.
 - a) PVC conduit orange pipe
 - b) Utility and junction boxes should be PVC and deep type.
3. Supply and installation of electrical fixtures/ switches/ outlets/ and other electrical devices (Bticino, National or its equivalent)
 - a) Switches
 - b) A/C outlets
 - c) Reinstallation of existing lamp
 - d) Pin light LED 11W (5 sets)
 - e) Emergency light (10 sets)
4. Construction of service entrance post.
5. Tap to the source (from building to existing electrical post at CCJ building) including testing.
6. Consult plan for details and extent of works.

VIII. Plumbing Works

A. Removal and Replacement of Water Supply Line

1. Adopt PPR pipes and fittings for water line.
 - a. 1" and 1/2" Ø for water line.
 - b. Provide gate valve for every comfort room.
2. Tapping to 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 fitting (Sanimold type with O-ring or its equivalent) for ventilation and the whole sewer line system including the septic vault fittings
 - Use 4" Ø for downspout and sewer lines.
2. Provide open canal with 1/4" x 2" angle bar frame and 12mm grills at 0.05m. on center (see plan for sizes)

C. Fixtures (All fixtures must be TOTO/HCG/American STD or any approved equal with complete heavy duty fittings and accessories)

1. Provide BRASS floor drains.

2. Adopt colored tank type water closet. (3 sets)
3. Heavy duty hand held spray set for every cubicle and heavy duty faucet for lavatory.

D. Declogging of existing sewer lines is included.

IX. Painting Works

The whole painting should be painted (both exterior and interior) including window grills.

1. Wood/Metal
 - a. Apply epoxy primer by brush or spray. Allow to dry for 24 hours. Apply suitable putty on imperfections, then sand.
 - b. Apply at least two coats of QDE in the desired color.
2. Concrete
 - a. Treat the surface with concrete neutralizer. Mix one part with 16 parts water by volume.
 - b. Apply Latex flat as primer. Repair minor surface imperfections with a suitable putty. Let dry, then sand.
 - c. Apply at least two coats of colored dirt resistant semi gloss latex paint (factory mixed).

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. 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.