

Republic of the Philippines

CAVITE STATE UNIVERSITY

Don Severino delas Alas Campus Indang, Cavite

BILL OF QUANTITIES

PROJECT: IMPROVEMENT OF UNIVERSITY PLAZA ABC: ₱ 2,176,791.09 COLLEGE/UNIT/CAMPUS: MAIN CAMPUS - Physic Services			Bill of Quantities		
Item No.	Description	Unit	Quantity	Unit Price (Pesos)	Amount (Pesos)
I	PRELIMINARY WORKS (Pesos			(, 2000)	(, , , , , , , , , , , , , , , , , , ,
	and centavos) EARTH WORKS				
II	(Pesos				
	and centavos)				
III	CONCRETE & MASONRY WORKS (Pesos				
	and centavos)				
IV	STEEL & ROOFING WORKS (Pesos				
	and centavos)				
V	PAINTING WORKS (Pesos				
	andcentavos)				
VI	ELECTRICAL WORKS (Pesos				
	and centavos)				
	GRAND TOTAL			<u> </u>	
	Write grand total in words				
ubmitted by: ame of Bidder/Bidder's Representative:		Date:			
sition: nstruc	tion Company/Contractor:				

CAVITE STATE UNIVERSITY

SCOPE OF WORK:

IMPROVEMENT OF UNIVERSITY PLAZA PHASE 2 Α.

GENERAL NOTES:

- 1. The project should be finished in 120 calendar days.
- 2. Site inspection is a must. Verify actual site condition.
- 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

Preliminary Works
Mobilization/Demobilization

Provide the following:

- Billboard with project information Bunkhouse with office

- Temporary comfort rooms Site temporary enclosure may be blue sack or any suitable materials that may enclose the workplace.
- 5. Demobilization includes cleaning up of site, clearing, hauling and disposal of waste and construction debris.
- The area should be cleared/cleaned before and after 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.

II. **Earth Works**

- This work includes excavation for column/wall footing.
- This work also includes excavation, leveling, filling and compaction of the base of the sidewalk.
 - a. Provide Base course for correction and filling of soft base. Gravel fill = 0.05 m. thick.
- 4. Demolition & chipping of existing flagpole along the path walk.

III. **Concrete & Masonry Works**

- This work includes concreting of Column/wall footing & columns.
- 2. Concreting of sidewalk.

 - Provide Base course for correction and filling of soft base.
 Use 10 mm bar reinforcement for sidewalk at 0.40 m both ways.
 Sidewalk should be installed with a 5" thick CHB on the outer perimeter along its width.
- Strength of concrete to be adapted shall be 3000 psi @ 28 days.
- Provide concrete molding on every column.
 concrete and masonry works should be plain cement finished. Concrete pedestals should be finished with a brick pattern (2" x 8" brick pattern). See existing concrete pedestal.
 Provide necessary tools and equipment needed for concrete and masonry works.
- Supply and installation of the following:
 - a. Concrete pedestal for SL1 17 sets (see E-3 for details).
 b. Concrete pedestal for SL2 3 sets (see E-3 for details).
 Use deformed bar grade 33.
 See plan for details and extent of work.

IV. Steel & Roofing Works

- Roofing Works
 A. Supply, fabrication and installation of the following
 1. 4" & 3" G.I. pipe schedule 40 for post.
 2. 2 1/2" G.I. pipe schedule 40 for rafter.
 3. 2" G.I. pipe schedule 40 for Bracing.
 4. 1" & 3/4" G.I. pipe schedule 40 for lateral fame.
 5. 2" x 2" (2.0) Galvanized tubular for purlins.
 6. Provide 1/4" x 2" angle bar for cleats.
 7. All joint connections should be fully welded.
 8. All attachment for roofing sheets shall be 2 1/2" tek screw.
 9. Curved rib type roofing sheet (0.5mm).
 10. Supply and installation of the following:

 -Fabricated steel post for SL1 17 sets (see E-3 for details).

 -Fabricated steel post for SL2 3 sets (see E-3 for details).

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- 11. 68 pcs. of anchor bolt 12" length, 0.625" Ø and 12 pcs. anchor bolt 20" length, 0.75"Ø for steel post.
- 12. 0.25 x 0.25 base plate 2.8 mm thick for steel post.

V. **Painting Works**

A. FOR METAL:

- Apply epoxy primer with catalyst zin chromate primer by brush or spray . Allow to dry for 24 hrs. Apply suitable putty on imperfections. Sand to a smooth finish.
 Apply at least two coats of QDE in the desired color.

B. FOR CONCRETE:

Treat the surface with concrete neutralizer.

Apply latex flat as a primer. Repair minor surface imperfection with suitable putty.

Apply at least two coats of colored dirt resistant semi gloss latex paint (factory mixed).

VI. **Electrical Works**

- Supply and installation of solar lighting in accordance with the plan. Flaretech, Megalight brand or approved equal.
 - a. Compact/integrated solar street light, 20 Watts, 2,200 lm, IP 65 (17 sets).
 - b. Compact/integrated solar street light, 40 Watts, 4,400 lm, IP 65 (6 sets).
 - c. PX series solar flood light, 200 Watts, 20,000 lm, IP 66 (4 sets).
 - PX series solar flood light, 100 Watts, 10,000 lm, IP 66 (4 sets).

e. Mounting bracket and supports for solar lightings.

- 2. Supply and installation of conduit pipes, conductor wires, junction/utility box from electrical source to lighting devices along the covered walk.
 - a. PVC conduit orange pipe. Neltex or approved equal.
 - b. EMT metal conduit pipe for all exposed conduits.
 - c. PVC utility and junction boxes.
 - d. THHN and THWN 99.9% pure copper conductor wires, fire retardant. Phelps

- dodge, Philflex or approved equal.

 Supply and installation of lighting fixtures along the covered walk.

 a. Bulkhead lamp outdoor fixture, 11 W, IP 64 (11 sets).

 Include tapping to the source, testing and commissioning. Provide necessary connectors, messenger wire, conduit pipes, electrical wires and equipment for the wiring installation.
- 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.
- E. 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.
- F. 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.
- G. 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.
- H. Construction safety and health program as well as construction schedule (PERT/CPM/S-Curve) shall be provided by the winning bidder.
- I. 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.
- J. 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.