



CPDMO10002314

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**U.P. MANILA**

PROJECT TITLE : **PROPOSED THERMAL & MOISTURE PROTECTION
OF SHS PALO ADMINISTRATION BLDG.**
Palo, Leyte
University of the Philippines Manila

SUBJECT : **SCOPE OF WORKS AND SPECIFICATIONS**

Division 1 - General

01000 General Requirements

- The Contractor shall furnish all materials, equipment, tools, apparatus, appliances, accessories, transportation, labor and supervision required for the complete construction of the subject project, as shown on the drawings and called for in these specifications, ready for use.
- All Contractors submitting proposal for this project shall first examine the site. All proposals shall take into consideration all such conditions that may affect the work under this contract. The specifications and plans shall form part as one. Anything mentioned on plans and not mentioned on the scope of work and specifications and vice versa shall be properly consulted to the CPDMO Project Architect/Engineer for clarification. Any work or materials not in accordance with the drawings or specifications shall be replaced with new at the Contractor's expense.
- The Contractor shall coordinate his work with all parties to ensure proper phasing or schedule of works. The Contractor shall engage under him, a registered Engineer or Architect to supervise his work. He shall remain at all times in the construction site.
- A logbook shall be available at the site. It shall contain the daily activities in the site, including weather condition, delivery, manpower and other matter pertaining to the condition of the project. It will also serve as data for Contractor and the Project Inspector.
- Identification Card of construction workers and engineer/representative shall be supplied by CPDMO with corresponding fees; it should be worn at all times while inside the building/campus premises. Those without IDs shall not be allowed to enter the premises for security purposes.

- No alteration or additional work that will result in an additive or deductive cost change from the Contract shall be allowed without the approval of the chancellor.
- Complete specifications with product sample shall be submitted by the contractor to CPDMO and end-user for evaluation. Inspection of the Project Architect/Engineer in-charge shall be required prior to installation of any item/material on the construction.
- Regular coordination meeting shall be conducted with CPDMO, Contractor and End-user for proper project monitoring.
- Existing condition of the work site shall be documented by the contractor and photos shall be taken before commence of work to ensure such status. Any damage on the areas due to the contractor's on-going work shall be refurbished at his expense.
- The Contractor shall provide a complete copy of "As built plans" of the project/unit concerned which shall include all the civil, architectural, plumbing, electrical and other related layouts in 20" x 30" original sheets. It should be properly drawn indicating all the specifications, layouts, tables and necessary data. An initial layout should be submitted in a B4 sheet for checking and approval of Project Architect/Engineer. Final "As built plans" shall be submitted with soft and hard copies.
- The Contractor shall promptly remove from the premises all rubbish, trash, debris, and all superfluous building materials weekly. After the completion of all works, restore all areas that were damaged as affected by the construction works and leave the site clean to the satisfaction of the Project Inspector or his representative and End-user.
- All materials removed from the unit shall be properly documented prior to turn-over to the End-user for proper safe keeping.

01300 Submittals

Shop Drawings, Product Data and Samples

- Submit to the CPDMO of shop drawings, product data and /or samples of all materials for review.
- The CPDMO's review shall be limited to quality and design intent. It shall be the Contractor's responsibility to verify quantities and sizes, and make corrections observed and noted by CPDMO on any returned submissions.
- No work requiring submissions or samples shall be commenced until submission has been reviewed by the End User and or CPDMO.
- Final Acceptance of colors and finishes will be made from samples applied on the job.
- Submit on all materials, products, and samples which are required by the work.
- All submittals shall be channeled from General Contractor to CPDMO, Physical Plant A-E Services, and back to the General Contractor. This

procedure applies to original submittals as well as required resubmittals. Each organization shall keep its required number of copies and/or make necessary copies from the sepias. The Contractor will make all correction noted on check sets, if necessary, and return for review as required by CPDMO.

01510 Temporary Facilities

- Provide Temporary enclosures/canvass on all areas for building protection. Such coverings shall be adequate enough to cover all the building facilities throughout the span of project.
- Charges for restoration or replacement of any damage facility, equipment, material and the like shall be made on the contractor due to his negligence in providing suitable temporary covering.
- Provide the appropriate scaffoldings, board ups, safety nets and related items to ensure proper installation of all framing system and protection of the area, at the expense of the contractor as its basic equipment.

Division 2 – Site Construction

02200 Site Preparation

Mobilization / Demobilization

- This work includes mobilization process, provision for warning signs, including barricades, temporary facilities, temporary fences, warning lights and similar safeguards shall be provided by the Contractor as they are required for protection of his manpower and others during the construction life of this project.
- Demobilization procedure shall include clearing of the affected areas from all rubbish, trash, debris, and all superfluous building materials and restore all areas that were damaged as affected by the works and leave the site clean to the satisfaction of the Project Inspector or his representative and End-user.

02230 Site Clearing

- Clear the area from all obstructions or as affected by the construction works, except those structures indicated on the drawings or designated by the Project Architect/Engineer to be left standing. It shall be properly protected from incidental damage due to construction works by the erection of suitable barriers upon approval of the Project Architect/Engineer.

02290 Site Monitoring

- Site monitoring shall be a must to the contractor for the effective implementation of the project. Any discrepancies on plans and actual site conditions shall be properly coordinated with the Project Architect/Engineer concerned for verification.
- Regular coordination meeting shall be done between the contractor or its representative and the Project Architect/Engineer concerned at CPDMO.

02500 Utility Services

Utility Service/Consumption

- Provision of electric and water meter shall be included in the quotation to be charged to the contractor's overhead. All utility consumption shall be provided with meters to limit the usage of such during working period. Payments of bills shall be made thru the Cashiers Office after the renovation period presenting the statement of account issued by Accounting upon recommendation of the Chief of CPDMO.

Division 3 – Concrete

Section 03050 Basic Materials & Methods

- The work to which this refers includes all operations necessary for the supply and delivery of all materials, labor, equipment and all associated activities. This shall conform in the recommendations of the "National Structural Code for Buildings" published by the Association of the Structural Engineers of the Philippines, together with the latest editions including all revisions of the following standards:
 - ASTM C-31 Method of making and Curing Concrete Compression and Flexure Test Specimen in the Field.
 - ASTM C-33 Concrete Aggregate
 - ASTM C- 39 Method of the test for Compressive Strength of Molded Concrete Cylinders.
 - ASTM C- 94 Ready Mixed Concrete
 - ASTM C-143 Test of Slump for Portland cement Concrete.
 - ASTM C-140 Portland cement
 - ASTM A-615 Deformed and Plain Steel Bars for Concrete Reinforcement.

Material Requirements:

- Cement to be used shall be Type I conforming the ASTM C-150.
- Fine and coarse aggregates shall be obtained from the approved source as determined by DPWH and shall conform to ASTM C-33.
- Water shall be potable and free from deleterious amounts of acids, alkalis, oils or organic matters.
- Admixtures shall only be used with the prior written consent to the Resident Engineer. Admixtures shall not contain calcium chloride. The amount of admixture shall not change the required quantities of cement specified and quantity of admixture used and method of mixing shall be in accordance with the manufacturer's instruction as the case may be.
- Reinforcement steel shall be deformed steel bars conforming to Structural Grade (Grade 33) and High Strength (Grade 60) as specified on the structural plans and

as specified in Section 5.07 of the National Structural Code for Buildings. Shapes and dimensions shall be in accordance to the above mentioned standards.

Quality of Concrete:

- The quality of concrete shall comply with Section 5.04 of the National Structural Code of the Buildings and with the specific requirements outlined in the various sections of these specifications
- Testing of samples from concrete pours shall be as required by Section 5.05 of the National Structural Code of Buildings
- Test of specimen shall be deemed acceptable provided they meet the requirements of Section by 5.04 clauses (e) of the National Structural Code of Buildings
- Should further testing of the finished concrete be necessary due to non-compliance of test specimens, as required by the Resident Engineer, it shall be carried out in accordance with the approved procedures laid down in National Structural Code of Buildings. Section 5.04 clause (e)
- Hardened concrete that is deemed not to comply with the specifications above, but which the Resident Engineer permits to be further tested, shall be tested for compressive strength
- Any concrete will be rejected under the specifications above if the results fail to meet the requirements Section 5.03 of National Structural Code of Buildings
- Hardened concrete may also be rejected for any one of the following conditions:
 - a. It is porous, segregated or honeycombed.
 - b. Its placing has been so interrupted that there is a construction or similar joint not in accordance with Section 5.03, clause (d) of the National Structural Code of Buildings.
 - c. The reinforcing steel it incorporates has been displaced.
 - d. Construction tolerances have not been met.
 - e. The required surface finish has not been met.
 - f. The concrete can be shown to be otherwise defective.
- When the above things happened, the Resident Engineer has the option to let the Contractor to demolish the rejected portion.

Division 7 – Thermal and Moisture Protection

07100 Waterproofing System

Scope of Work

- The work covered by this item shall consist of application of waterproofing in accordance with Plan and/or shop drawings and as herein specified.

Material Specification

Tensile Strength	-	122.12kgf/mm2	(ASTM D-2370-98)
Recovery	-	247.46	
Viscosity	-	63.80 KU	(ASTM D562-81)
%Non-Volatile	-	33.34	(ASTM D2369-98)
Crack Bridging Ability	-	4.18mm	
Integrated Strength	-	101.242	
Accelerated Weathering Test	-	Gray Scale Rating (5)	
Maximum Force, N	-	30.7	
Median Tear Strength	-	14.1 kN/m	

Application

- Remove the existing waterproofing and other foreign materials to the surface before the application of the waterproofing.
- Apply the waterproofing as per proper application method of the product (consult the supplier if necessary).
- Submit material sample to CPDMO for approval.

Division 15 – Mechanical

15400 Plumbing System

Material Requirements

- Use 3" Scupper Drain gray Cast Iron body with back outlet, brass oblique type strainer with 90 deg. combination frame and flashing clamp.

NOTE

The foregoing list of item of works does not in anyway limit the responsibility of the Contractor to perform all other works necessary for the completion of the project, **PROPOSED THERMAL & MOISTURE PROTECTION OF SHS PALO ADMINISTRATION BLDG.**

GUARANTEE

The Contractor shall guarantee all works under this contract to be free from any technical, material, workmanship and/or factory defects and shall replace and repair to the satisfaction of the Project Architect / Engineer and/or to the Chief of CPDMO on any part or portion of the work which may fail within **a period of one (1) year after the final acceptance of the system.**

COMPLETION PERIOD


The Contractor is given **Thirty (30) calendar days** to execute the renovation works including the installation all system requirements. The Contractor shall coordinate to the CPDMO Inspector and End-users for the schedule of testing of systems and other related job.

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