



**CAMPUS PLANNING, DEVELOPMENT & MAINTENANCE OFFICE
UNIVERSITY OF THE PHILIPPINES MANILA**

The Health Sciences Center

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PROJECT TITLE : **PROPOSED REHABILITATION AND RENOVATION OF
REMAINING BASIC SCIENCE LABORATORIES**
Salcedo Hall, College of Medicine
University of the Philippines Manila



CPDMO10004293

SUBJECT : **TECHNICAL SPECIFICATIONS**

Division 1 - General

01000 General Requirements

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. Regular coordination meeting shall be conducted with CPDMO, Contractor and End-user for proper project monitoring.
9. 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.

10. 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.
11. 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.
12. 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 area 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.
- No submittal shall receive by the CPDMO without transmittal letter.
- Samples must have Manufacturer's Data Sheet/Specification and must come together with transmittal sheet with section for approval/disapproval and recommendation of CPDMO and/or END USER.

01500 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.
- Transfer of all existing furniture and equipment to the designated area or temporary office.

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.
- The contractor's site engineer/architect and/or its representative must coordinate/update the status of the project at least once a week with the CPDMO's project architect/engineer.

02500 Utility Services

- 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 4 – Masonry

Scope of Work

- The work covered by this Item shall consist of furnishing all masonry work requirements in accordance with Plan and/or standard detail and as herein specified.

Material Requirements

- Use Portland cement which conforms to the requirements of ASTM C-150 Type for normal Portland cement.
- Use fine aggregates which shall be free from injurious amount of clay loam and deleterious materials and shall conform to ASTM C-33 or C-330.
- Concrete hollow blocks, 4" and 6", shall be standard manufacture, machine vibrated, and shall have fine and even texture, and well defined edges. Mortar, filler and plastering shall be Class "A" mixture.
- Deformed steel bars shall conform to ASTM A-305. It shall be clean and free from loose, rust, scales and any coatings that will reduce bond.
- #16 tie wire shall be used for reinforcing bars connections.

Construction Requirements

- Provide CHB wall with 10 mm dia. deformed round bars at 0.60 m on centers both ways. Verify actual location.
- All cells shall be solidly filled with grout.
- Concrete mixture shall be class "A".
- Provide the plastering at 16 mm thick using class "A" mixture.
- Follow plan for details.

Division 6 – Wood and Plastics

Section 06100 Rough Carpentry

Scaffoldings

- Provide sample for approval. Appropriate scaffoldings and related framing system shall be the contractor's account.

Section 06200 Finish Carpentry

Description

- Work of this Section, as shown or specified, shall be provided by the Interior Contractor and shall be in accordance with the requirements of the Contract Documents and in accordance with the General Conditions of this Document.
- Works include coordination, Fabrication, and Installation of all Interior Exposed wood members shown on drawings and specified herein, including but not necessarily limited to the following:
 - Wood Shelving
 - Fabricated Cabinets
 - Platform
 - Miscellaneous Items
- See approved plans for detail.

Submittals

- All Submittals shall be made according to Section 1300 and as described herein.
- *Submit all the following for each item of Finish Carpentry:*
 - Shop Drawings, indicating fabrication and installation methods, to include plans and elevations at not less than (1:20) scale and details

at not less than 1'-0" (1:5) scale. Indicate required anchorage and blocking, accessory items, field dimensions, materials and finishes. Indicate compliance with specification requirements. Indicate weight of any materials or systems to be suspended or which require support from structure.

- o Manufacturer's Product Data for all specialty items not manufactured by the carpentry fabricator.
- o Where required by the End user or Consultant the contractor shall provide full size mock-up of panel or wood assembly
- o Contractor shall submit to the Consultant three samples 20" (500mm) minimum length of all mouldings or moulding assemblies to be used for the Project. These shall be full size and finished as specified in the Contract Documents.

Quality Assurance

- All work of this Section shall be performed by skilled mechanics of the trade and shall be of the highest quality. Comply with applicable Industry Standards for all work and materials as specified. Such Industry Standards are to include but not be limited to the applicable provisions or standards of the following:
 - o American Society for Testing and Materials (ASTM)
 - o PNS 196:2000
- The Contractor shall be responsible for obtaining and complying with all code and regulatory agency requirements for materials and methods.
- The Interior Contractor shall be responsible for accurately obtaining all field dimensions related to his work prior to fabrication. Where discrepancies are found, he shall notify the Consultant immediately in writing.
- All Finish Carpentry materials shall be stored in a dry ventilated place, protected from the weather and complying with the temperature and humidity.
- Protect sanded and finished surfaces from soiling and damages during handling and installation.

Products

- All woodwork materials shall be new and conform to premium grade requirements
- All solid wood elements shall be clear, straight-grain lumber of the best grade of specified species. Lumber shall be free of any defects which might impair serviceability, aesthetics, and/or finish. Solid wood elements shall also be according to the following, unless indicated otherwise on drawings and/or specifications.