

TERMS OF REFERENCE

PROJECT TITLE: STRUCTURAL REPAIR OF THE THIRD FLOOR AND SECOND FLOOR BEAMS AND SLABS OF THE PCED LIBRARY BUILDING

A. Project Description

The four-storey PCED Library Building is located along F. Ma. Guerrero Street, UP Diliman, Quezon City is currently undergoing renovation. During the renovation, structural members such as beams and slabs were exposed and structural damages became visible. Upon completion of the renovation, the building shall be used as both library and classrooms. Ensuring the safety of its current and future tenants is of high priority.

The project aims to repair existing structural damages at the 3rd and 2nd floor of PCED Library building.

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| a. | Project Name | : STRUCTURAL REPAIR OF THE THIRD FLOOR AND SECOND FLOOR BEAMS AND SLABS OF THE PCED LIBRARY |
| b. | Location | : F. Ma. Guerrero Street, UP Diliman, Quezon City |
| c. | Total Floor Area | : 3 rd Floor : 1431.25 m ²
2 nd Floor : 1431.25 m ² |
| d. | Owner | : Philippine Center for Economic Development |
| e. | Implementing | : Philippine Center for Economic Development |
| f. | Approved Budget | : PhP1,990,000.00 |

B. General Objectives of the Project

1. The main objective of this Term of Reference (TOR) is to select a qualified and experienced contracting company to carry out the beam and slab repair works of PCED Library Building.
2. Secondly, is to select a contracting company that can provide a qualified and experienced technical person to execute, oversee the project, and constantly coordinate with PCED Representatives.
3. Third, the capability of the contracting company to supply the technical expertise, use of proper tools, safety materials, and equipment that will provide and achieve the required output.
4. Fourth, the contracting company is qualified on both Technical and Financial aspects required by the TOR.

C. Project Location

The project is located at 2nd and 3rd Floors of PCED Library Building located along F. Ma. Guerrero Street, UP Diliman, Quezon City, Philippines.

D. Project Deliverables

The following shall be the deliverables of the contractor:

1. As built of the structural repair works detailing the materials and methodology used.
2. Repair Warranty (minimum five years) Certificate with contact information
3. Completed structural repair works.

E. Approved Budget of the contract.

- E.1. The approved budget of the contract is at PhP1,990,000.00
- E.2. The Contract price shall be inclusive of all duties, taxes, bonds and insurances.
- E.3. No changes shall be made on the Contract Price by reason of escalation in currency. Any adjustment in Contract Price shall be done in accordance with guidelines provided by law.
- E.4. The payment of escalation costs shall be subject to the unilateral and written approval of PCED and to availability of funds.

F. Project Duration

- F.1. The project duration covering the repair works of beams and slabs, including sealing of all cracks along the beams and slabs shall be for a period of twenty-five (25) days from the issuance of Notice to Proceed.
- F.2. The **CONTRACTOR'S** proposed Work Plan shown in Gantt Chart, which is a mandatory part of the Technical Proposal, should provide a more detailed schedule of activities. Unless approved in writing by PCED on written request of the CONTRACTOR, the coverage – from *mobilization* to *demobilization*, should not extend beyond the deliverable dates as indicated here below:

WORK CLUSTERS	Nth Cal-days from Contractor's Date of Receipt of Notice-to-Proceed	
	Start	Finish
1. Notice to Proceed	1 st	1 st
2. Mobilization of construction materials and consumables; deployment of manpower and equipment; secure necessary permits; provision of safety signage's and paraphernalia; and, submission of shop drawings and project Bar Chart/S-Curve and PERT/CPM Network Diagram for PCED's approval prior to project implementation.	2 nd	4 th
3. Surface preparation and concrete repair.	5 th	20 th

4. Punch-listing, rectification of punch-list items, and Project Turn-Over including submission of as-built plans duly signed and sealed by appropriate professional engineer/s and other contract documents	21 st	25 th
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F.3.Exact dates of delivery and/or completion should be reckoned from the date of **Contractor's** receipt of NTP.

F.4. The liquidated damages shall be imposed for the inability of the **Contractor** to comply with the **Approved Construction Schedule**, unless a written request for time extension been approved in writing by PCED

G. Qualification of the Contractor

G.1. The CONTRACTOR must be competent and experienced in the field of structural repair works with a minimum of five (5) years prior experience on similar projects and should have a valid Philippine Contractors Accreditation Board (PCAB) License, Category "C" or "D" with a classification General Engineering (GE-1).

G.2. The **Contractor** is required to submit a company profile, list of present and previous client for the past five (5) years, financial statements and certifications issued by past/present clients indicating the Contractor's satisfactory performance.

G.3. The Project-in-Charge who will administer the structural repair works must be well trained and experienced retrofit applicator with at least three (3) years' experience.

H. GENERAL REQUIREMENTS

H.1. The CONTRACTOR will provide technical supervision, skilled manpower, tools, equipment and suitable highest quality materials within the specified period to complete the project.

H.2. As-built Drawings is to be done and submitted by CONTRACTOR.

H.3. Provide coordination and collaborative works with PCED to complete respective works in accordance with approved drawings, specifications and method of installation.

H.4. Provide all materials necessary to complete the works although not specifically mentioned in the Specifications, working drawings or in on other contract documents without extra cost to the PCED.

H.5. Comply with all applicable Environmental, Health and Safety regulations required by law.

H.6. Secure and submit all necessary bonds, permits and insurances required in the contract.

- H.7. Submit on time, the required work schedule, delivery schedule, table of organization, manpower schedule, samples product data, safety plan, methodology and other requirements deemed necessary.
- H.8. Ensure the quality of materials and workmanship needed to complete and render ready for acceptance by the owner.
- H.9. Responsible for the safety requirements (safety shoes, vest, hard hat, safety harness, lifeline) and provision of fire extinguishers and all other fire protection provisions in working areas.
- H.10. Compliance to provisions of safety provisions for warehousing/storage of their materials and equipment.
- H.11. Medical Requirements of CONTRACTOR workers will be part of preliminaries of CONTRACTORS.
- H.12. Hauling and disposal of garbage inside the building perimeter.
- H.13. Protect and maintain in the required acceptable conditions of all structural repair works and accessories during construction until hand over.
- H.14. Ensure that the performance, appearance and proper functioning of the works are not affected by any movements, settlement or deflection in the building structure. Also take into account the construction accuracy of works by others to which the structural repair works are attached.
- H.15. Coverage of the structural repair works is approximately 2900 SQ.M

I. Scope of Work

The Contractor is required to perform the following Scope of Work:

- I.1. The CONTRACTOR shall undertake the works implementation of the “Structural Repair of the Third Floor and Second Floor Beams and Slabs of PCED Library Building.
- I.2. Mobilization and Provision of Temporary Facilities
 - 1. The CONTRACTOR shall provide the necessary permits/ licenses as well as applicable insurance coverage for the scope of work to be executed.
 - 2. The CONTRACTOR shall provide safety signage/early warning signs visible at the job site.
 - 3. The CONTRACTOR shall make available Protective gear for the workers.
 - 4. Temporary Facilities shall be of design and materials acceptable to PCED.
 - 5. The CONTRACTOR shall be guided and directed on where to go and use suitable toilet facilities as approved by the PCED. Should not use any part of the common area/s for toilet purposes.

6. PCED shall provide a temporary power facility required for the entire phase of structural repair works and re-sealant of windows. The CONTRACTOR shall provide conduits, wires, connections, accessories, and labor.
7. PCED shall provide a temporary water facility that will be used during the entire stage of structural repair work and re-sealant of windows.
8. The CONTRACTOR shall install, operate, and maintain an adequate number of temporary hoists, scaffolds, runaways, ladders, and the like as required for the proper execution of the work. Safety precautions shall always be observed.
9. The CONTRACTOR shall identify location for access to areas needed structural repair and window sealant. All hooks shall be properly located and approved by PCED's consultants prior to installation.
10. All temporary services and facilities installed by the CONTRACTOR shall be removed by the CONTRACTOR on completion of this contract or as directed by PCED. The CONTRACTOR shall restore any damage and alteration caused by such removal and during the project implementation.
11. CONTRACTOR shall provide for any movable platforms (gondola or trestle scaffolds) to be used in the structural repair works. Design of the hoists for the Gondola system shall be submitted together with the proposal.

I.3. Structural Repair Installation:

1. **Structural repair of beams:**

- a) Repair/seal all cracks and crevices found along the surface of beams
 - a. For thin hairline cracks, cracks (0.25mm or under) shall not be opened or cut but the cracks shall be cleaned and sealed with epoxy grout by using a stiff brush, trowel, or putty knife.
 - b. For large cracks and voids, cracks shall be grooved out along the entire length to a depth not less than 6.35mm and a width of 9.5mm. Clean the groove by vacuuming or blowing off all dust and loose particles and prime with epoxy-resin binder adhesive to ensure well bonding. After which, epoxy mortar shall be applied with a trowel or putty knife flush with the adjoining surface.
 - c. In case of deep cracks and crevices, where the size of the opening permits, the cracks shall be filled with epoxy grout by pumping epoxy resin mix under pressure into cracks, allowed to harden, and then coat the surface with epoxy mortar.
- b) **Apply vertical and diagonal Carbon Fiber Laminated Plates.** Refer to attached drawings.
- c) Install Carbon Fiber along the beam 1m in length where structural cracks are found.

2. **Structural repair of slab:**

- a) Repair/seal all cracks and crevices found along the surface of beams

- a. For thin hairline cracks, cracks (0.25mm or under) shall not be opened or cut but the cracks shall be cleaned and sealed with epoxy grout by using a stiff brush, trowel, or putty knife.
 - b. For large cracks and voids, cracks shall be grooved out along the entire length to a depth not less than 6.35mm and a width of 9.5mm. Clean the groove by vacuuming or blowing off all dust and loose particles and prime with epoxy-resin binder adhesive to ensure well bonding. After which, epoxy mortar shall be applied with a trowel or putty knife flush with the adjoining surface.
 - c. In case of deep cracks and crevices, where the size of the opening permits, the cracks shall be filled with epoxy grout by pumping epoxy resin mix under pressure into cracks, allowed to harden, and then coat the surface with epoxy mortar.
- b) Put up formworks at areas where there are holes along the slab. Apply bonding agent along the exposed surface of the concrete slab. Ensure that the existing reinforcements are not damaged. Pour 3000 psi of concrete. Let the concrete cure and trowel finish ready to receive tile topping.

I.4. Inspection and Test

1. The CONTRACTOR shall permit and facilitate inspection of the work by PCED or its authorized representative, and the public authorities having jurisdiction at all times during the progress of the work.
2. The CONTRACTOR will be responsible for all the test and engineering services required by the specifications. The cost for inspection or tests not required by the specifications but which PCED requires will be subject to mutual negotiation of both parties.
3. The CONTRACTOR shall provide safe access to the areas to be inspected.
4. All tests shall be performed by the CONTRACTOR and shall furnish PCED with 2 copies of the test procedures conducted.

J. Specification & Methodology

Attached with this Terms of Reference are product specifications with their detailed application methodology.

K. Schedule of Works

1. The contract period for the detailed services enumerated in this Terms of Reference shall be within the duration of twenty-five (25) calendar days reckoned from the release of Notice to Proceed:
2. The contractor shall include their technical proposal their timeline including methodology.

L. Terms of Payment

1. 1st Release: Twenty (20%) of the project cost representing mobilization upon submission of list of construction materials and consumables, securing necessary permits, safety signages

and paraphernalia, shop drawings and project Bar Chart/S-Curve and PERT/CPM Network Diagram.

2. 2nd Release: Percentage accomplishment must be at least 20% Progress Billing. The contractor shall submit the following:
 - *Statement of work accomplishment (SWA) indicating the percentage of work progress signed by the contractor.*
 - *Pictures of the project together with color coded plans showing actual progress.*
 - *Billing cost.*
 - *Updated Work Schedule (target vs accomplishment); and*
3. *Percentage progress billing shall be allowed for every 20% completed work. The contractor shall submit the following:*
 - *Statement of work accomplishment (SWA) indicating the percentage of work progress signed by the contractor.*
 - *Pictures of the project together with color coded plans showing actual progress.*
 - *Billing cost.*
 - *Updated Work Schedule (target vs accomplishment); and*
 - *Certification issued by the contractor and approved by the Construction Management, stating that the Project has been completed in accordance with the approved plans.*
 - *Contractors shall also submit their proposed terms of payment as part of their financial proposal.*
4. *10% Retention Fee: To be deducted from every progress billing until works equivalent to fifty percent (50%) of the value of works, as determined by Construction Management, is accomplished. If, after fifty percent (50%) completion, the work is satisfactorily done and on schedule, no additional retention shall be made; otherwise, the ten percent (10%) retention shall continue to be imposed. To be released upon issuance end of Warranty Period.*

M. Deviations/Changes in the Plans and Contract

In the event that there will be changes on the approved plans and contract, the contractor shall secure the approval of the Project Management Team and the Client Representatives prior to revision and implementation.

N. Selection of the Eligible Contractor

The selection of the Eligible Contractor shall undergo the eligibility procedure of PCED.

O. Guidelines for Bid Submission

O.1. Omissions and Discrepancies

1. Should the bidders find discrepancies, omissions or be in doubt as to the meaning or interpretation of the Plans, Scope of Works, Specifications and other Bid Documents, he should notify PCED for proper clarification and interpretation.

2. No claim for extra compensation by the contractor shall be entertained by PCED as a result of the Contractor's negligence in obtaining the necessary and pertinent data and clarifications

O.2. Signature of Bidders

- The signatory must provide the following:
 - Full Name of Bidder
 - Address of the Bidder
 - Signature of Authorized Representative
- Signatory's initial must appear on every sheet of the Proposal Form, Scope of Works and Corresponding Values

O.3. Site Visit

Whereas all Contractor bidding for the project is duly expected to have visited the site, examined and assessed the constraints, and conditions of the project, reviewed all Plans, Scope of Works and Specifications contained in the Contract Documents. Failure to execute such pre-requisites prior to submission of his proposal shall be deemed as his own risk and thereby allowing him no further adjustment in cost after his proposal has been accepted and duly confirmed. A Certificate of Inspection will be issued by PCED signed by both parties, serving that CONTRACTOR have conducted a thorough ocular inspection of the project.

P. Submission of Bids

All Proposals must be submitted, at the minimum, with the following information:

1. PhilGEPs registration Platinum membership
 2. Company Profile;
 3. Company Registration Documents (SEC or DTI Registration);
 4. Mayor's Permit;
 5. BIR Registration, SSS, DOLE, PhilHealth Registration and latest Clearances;
 6. List of Major Suppliers;
 7. List of Projects and References with Contact Person/s and Numbers;
 8. List of Pending or On-going Works;
 9. Audited Financial Statement Filed with BIR (Last three (3) years).
 10. Site Inspection Certification - to confirm that the Bidder/Proposer has conducted its site-inspection, evaluation, and that it has the expertise, experience, manpower and materials to perform the Scope of Work. And as a result of the actual inspection and evaluation, confirming in detail the above Scope of Work, Methodology, timelines, and other details of work;
 11. Detailed Scope of Work, Material Specifications, Methodology and Timelines.
 12. CD or Flash Disk containing electronic file copies of the aforementioned items.
- FINANCIAL PROPOSAL:**
1. Financial Proposal, in a lump sum, for the above Scope of Work, inclusive of all taxes, permits, and all other incidental cost.

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2. All Proposal must be on a LUMP SUM Basis and must complete based on the specified scope of works. Quotes must be inclusive of all TAXES, permits and other incidental cost.
No bid, in part or in whole, shall be transmitted electronically prior to the opening of bids.
PCED reserves the right to disqualify any contractor who will submit electronically.

Q. Acceptance of Bids

Bids will be accepted depending on the completeness of all documents required. PCED reserves the right to accept/reject any and all proposal or bid.

R. Award of Contract

A notice of award shall be issued by PCED to the qualified contractor upon approval by the Head of Procuring Entity followed by the contract and Notice to Proceed.

S. Warranty Coverage

Product Warranty. The Contractor shall guarantee the work done to be free from defects for a period of five years (5) year reckoned from acceptance of the project.

T. Liquidated Damages

Failure to comply with the terms and conditions of the contract will result in the payment of corresponding penalties/liquidated damages in the amount to 1/10 of 1% of the cost of the unperformed portion for every day of delay or any violation against the PCED. Once the cumulative amount of liquidated damages reaches 10% of the contract, PCED shall rescind the contract, without prejudice to other courses of action and remedies open to it.

U. Pre-termination of contract

1. The contract may be pre-terminated by PCED upon notice of any violation of the terms of the contract. In case of pre-termination, the contractor shall be informed seven (7) days prior to such termination.
2. In case of pre-termination, the contractor shall be liable to additional damages equivalent to 5% of the contract price.
3. PCED have the right to blacklist the contractor in case of pre-termination