PHILIPPINE BIDDING DOCUMENTS

Repair of Various Facilities at Morong, Cainta and Rodriguez Campus

URS-24-35-052/URS-24-36-052/URS-24-37-062/URS-24-38-052/URS-24-39-052

Government of the Republic of the Philippines

UNIVERSITY OF RIZAL SYSTEM

Sixth Edition
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Preface

These Philippine Bidding Documents (PBDs) for the procurement of Infrastructure Projects (hereinafter referred to also as the "Works") through Competitive Bidding have been prepared by the Government of the Philippines for use by all branches, agencies, departments, bureaus, offices, or instrumentalities of the government, including government-owned and/or -controlled corporations, government financial institutions, state universities and colleges, local government units, and autonomous regional government. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

The PBDs are intended as a model for admeasurements (unit prices or unit rates in a bill of quantities) types of contract, which are the most common in Works contracting.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract; (ii) the eligibility requirements of Bidders; (iii) the expected contract duration; and (iv)the obligations, duties, and/or functions of the winning Bidder.

Care should be taken to check the relevance of the provisions of the PBDs against the requirements of the specific Works to be procured. If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, care must be exercised to avoid contradictions between clauses dealing with the same matter.

Moreover, each section is prepared with notes intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They shall not be included in the final documents. The following general directions should be observed when using the documents:

a. All the documents listed in the Table of Contents are normally required for the procurement of Infrastructure Projects. However, they should be adapted as necessary to the circumstances of the particular Project.

b. Specific details, such as the "*name of the Procuring Entity*" and "*address for bid submission*," should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.

c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, BDS, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, and Bill of Quantities are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.

d. The cover should be modified as required to identify the Bidding Documents as to the names of the Project, Contract, and Procuring Entity, in addition to date of issue.

e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.

f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

TABLE OF CONTENTS

Contents

Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

Contractor – is a natural or juridical entity whose proposal was accepted by the Procuring Entity and to whom the Contract to execute the Work was awarded. Contractor as used in these Bidding Documents may likewise refer to a supplier, distributor, manufacturer, or consultant.

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

Foreign-funded Procurement or Foreign-Assisted Project – Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

GFI – Government Financial Institution.

GOCC – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term "related" or "analogous services" shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

Procurement Project – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

The Invitation to Bid (IB) provides information that enables potential Bidders to decide whether to participate in the procurement at hand. The IB shall be posted in accordance with Section 21.2 of the 2016 revised IRR of RA No. 9184.

Apart from the essential items listed in the Bidding Documents, the IB should also indicate the following:

a. The date of availability of the Bidding Documents, which shall be from the time the IB is first advertised/posted until the deadline for the submission and receipt of bids;

b. The place where the Bidding Documents may be acquired or the website where it may be downloaded;

c. The deadline for the submission and receipt of bids; and

d. Any important bid evaluation criteria.

The IB should be incorporated into the Bidding Documents. The information contained in the IB must conform to the Bidding Documents and in particular to the relevant information in the Bid Data Sheet.

Republic of the Philippines
UNIVERSITY OF RIZAL SYSTEM
Tanay, Rizal
Email: bacsecretariat@urs.edu.ph

Invitation to Bid
for the
Repair of Various Facilities at Morong, Cainta and Rodriguez Campus

1. The **University of Rizal System**, through the **Fund 052 and Fund 062 of 2024** intends to apply the following sum for each lot being the ABC:

Lot & Identification Number	Project Title	ABC
1- URS-24-35-052	Repair of EARTS-Morong Campus	₱938,972.00
2- URS-24-36-052	Repair of Gymnasium-Morong Campus	1,018,386.50
3- URS-24-37-062	Repair of Function Hall-Morong Campus	898,000.00
4- URS-24-38-052	Renovation of Function Hall-Rodriguez Campus	235,041.48
5- URS-24-39-052	Repair of Various Facilities and other Structures-Cainta Campus	1,239,338.81
TOTAL ABC		**₱4,329,738.79**

Bids received in excess of the ABC for each lot shall be automatically rejected at bid opening.

2. The **University of Rizal System** now invites bids for the above Procurement Project. Completion of the Works is required **Forty Calendar Days for Lot 1 and Thirty Calendar Days for Lot 2, Lot 3, Lot 4 and Sixty Calendar Days for Lot 5.** Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).

3. Bidding will be conducted through open competitive bidding procedures using non-discretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

4. Interested bidders may obtain further information from **University of Rizal System** and inspect the Bidding Documents at the address given below from 8:00 AM to 5:00 PM.

5. A complete set of Bidding Documents may be acquired by interested bidders on **November 12, 2024** from given address and website/s below **and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines**

issued by the GPPB, in the amount of **One Thousand Pesos (₱1,000.00) for Lot 1, Two Thousand Pesos (₱2,000.00) for Lot 2, One Thousand Pesos (₱1,000.00) for Lot 3, Five Hundred Pesos (₱500.00) for Lot 4 and Two Thousand Pesos (₱2,000.00) for Lot 5**. The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person.

6. The **University of Rizal System** will hold a Pre-Bid Conference[1] on **November 20, 2024, 3:30 PM at AVEC, URS Morong Campus, J. Sumulong St., Brgy. San Juan, Morong, Rizal**, which shall be open to prospective bidders.

7. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below, on or before **3:00 PM of December 2, 2024**. Late bids shall not be accepted.

8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 16.

9. Bid opening shall be on **3:30 PM of December 2, 2024** at **AVEC, URS Morong Campus, J. Sumulong St., Brgy. San Juan, Morong, Rizal.** Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

10. The **University of Rizal System** reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.

11. For further information, please refer to:

    Mr. Joel Francisco
    Head, BAC Secretariat
    J. Sumulong St., Morong, Rizal
    bacsecretariat@urs.edu.ph
    09189519618

    You may visit the following websites:

    For downloading of Bidding Documents: *http://www.urs.edu.ph/bid-opportunities/*

November 12, 2024

ARIEL M. PLANTILLA, DBA
Chairperson, Bids and Awards Committee

[1] May be deleted in case the ABC is less than One Million Pesos (PhP1,000,000) where the Procuring Entity may not hold a pre-bid conference.

Section II. Instructions to Bidders

Notes on the Instructions to Bidders

This Section on the Instruction to Bidders (ITB) provides the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Entity. It also provides information on bid submission, eligibility check, opening and evaluation of bids, post-qualification, and on the award of contract.

1. Scope of Bid

The Procuring Entity, **University of Rizal System** invites Bids for the **Repair of Various Facilities at Morong, Cainta and Rodriguez Campus**, with Project Identification Number **URS-24-35-052**, **URS-24-36-052, URS-24-37-062, URS-24-38-052 and URS-24-39-052.**

The Procurement Project (referred to herein as "Project") is for the construction of Works, as described in Section VI (Specifications).

2. Funding Information

2.1. The GOP through the source of funding as indicated below for **052 of 2024** in the amount of **₱938,972.00 for Lot 1, ₱1,018,386.50 for Lot 2, ₱235,041.00 for Lot 4, ₱1,239,338.81 and 062 of 2024 in the amount of ₱898,000.00 for Lot 3.**

2.1. The source of funding is:

052, Internally Generated Income and 062, Business Type Fund

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manual and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or invitation to bid by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have inspected the site, determined the general characteristics of the contracted Works and the conditions for this Project, such as the location and the nature of the work; (b) climatic conditions; (c) transportation facilities; (c) nature and condition of the terrain, geological conditions at the site communication facilities, requirements, location and availability of construction aggregates and other materials, labor, water, electric power and access roads; and (d) other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices

The Procuring Entity, as well as the Bidders and Contractors, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.

5.2. The Bidder must have an experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC adjusted, if necessary, by the Bidder to current prices using the PSA's CPI, except under conditions provided for in Section 23.4.2.4 of the 2016 revised IRR of RA No. 9184.

A contract is considered to be "similar" to the contract to be bid if it has the major categories of work stated in the **BDS**.

5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.

5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

There is no restriction on the origin of Goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN.

7. Subcontracts

7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than fifty percent (50%) of the Project.

The Procuring Entity has prescribed that:

Subcontracting is not allowed.

7.1. *[If Procuring Entity has determined that subcontracting is allowed during the bidding, state:]* The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criteria

stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.

7.2. *[If subcontracting is allowed during the contract implementation stage, state:]* The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.

7.3. Subcontracting of any portion of the Project does not relieve the Contractor of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Contractor's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address **AVEC URS Morong Campus, J. Sumulong St., Brgy San Juan, Morong, Rizal** as indicated in paragraph 6 of the **IB.**

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents Comprising the Bid: Eligibility and Technical Components

10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.

10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

10.3. A valid special PCAB License in case of Joint Ventures, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.

10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.

10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.

11.2. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.

11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Alternative Bids

Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic technical design as indicated in the drawings and specifications. Unless there is a value engineering clause in the **BDS**, alternative Bids shall not be accepted.

13. Bid Prices

All bid prices for the given scope of work in the Project as awarded shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances as determined by the NEDA and approved by the GPPB pursuant to the revised Guidelines for Contract Price Escalation guidelines.

14. Bid and Payment Currencies

14.1. Bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.

14.2. *Payment of the contract price shall be made in:*

Philippine Pesos.

15. Bid Security

15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.

15.2. The Bid and bid security shall be valid until *[indicate date]*. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission to the given website or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

17. Deadline for Submission of Bids

The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB.**

18. Opening and Preliminary Examination of Bids

18.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

18.2. The preliminary examination of Bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*" using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.

19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 15 shall be submitted for each contract (lot) separately.

19.3. In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

20. Post Qualification

Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS), and other appropriate licenses and permits required by law and stated in the **BDS**.

21. Signing of the Contract

The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

Section III. Bid Data Sheet

Notes on the Bid Data Sheet (BDS)

The Bid Data Sheet (BDS) consists of provisions that supplement, amend, or specify in detail, information, or requirements included in the ITB found in Section II, which are specific to each procurement.

This Section is intended to assist the Procuring Entity in providing the specific information in relation to corresponding clauses in the ITB and has to be prepared for each specific procurement.

The Procuring Entity should specify in the BDS information and requirements specific to the circumstances of the Procuring Entity, the processing of the procurement, and the bid evaluation criteria that will apply to the Bids. In preparing the BDS, the following aspects should be checked:

a. Information that specifies and complements provisions of the ITB must be incorporated.

b. Amendments and/or supplements, if any, to provisions of the ITB as necessitated by the circumstances of the specific procurement, must also be incorporated.

Bid Data Sheet

<table>
<tr><th>ITB Clause</th><th></th></tr>
<tr><td>5.2</td><td>For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:
Building Repair and Maintenance.</td></tr>
<tr><td>7.1</td><td>Subcontracting is not allowed.</td></tr>
<tr><td>10.3</td><td>N/A</td></tr>
<tr><td>10.4</td><td>The key personnel must meet the required minimum years of experience set below:

For Lot 1: Repair of EARTS; Morong Campus
<table>
<tr><th>Key Personnel</th><th>General Experience/Relevant Experience</th></tr>
<tr><td>Project Site Engineer/Architect</td><td>Must be a Registered and Licensed Civil Engineer or Architect with at least five (5) years of relevant experience in the supervision of construction and repair of buildings and its facilities.</td></tr>
<tr><td>Project Safety Officer</td><td>Must be a DOLE certified SO2 practitioner. This role may be filled by the assigned project engineer/architect if suitably qualified.</td></tr>
</table>
For Lot 2: Repair of Gymnasium; Morong Campus
<table>
<tr><th>Key Personnel</th><th>General Experience/Relevant Experience</th></tr>
<tr><td>Project Site Engineer/Architect</td><td>Must be a Registered and Licensed Civil Engineer or Architect with at least five (5) years of relevant experience in the supervision of construction and repair of buildings and its facilities.</td></tr>
<tr><td>Project Safety Officer</td><td>Must be a DOLE certified SO2 practitioner. This role may be filled by the assigned project engineer/architect if suitably qualified.</td></tr>
</table>
For Lot 3: Repair of Function Hall; Morong Campus
<table>
<tr><th>Key Personnel</th><th>General Experience/Relevant Experience</th></tr>
<tr><td>Project Site Engineer/Architect</td><td>Must be a Registered and Licensed Civil Engineer or Architect with at least five (5) years of relevant experience in the supervision of construction and repair of buildings and its facilities.</td></tr>
</table>
</td></tr>
</table>

Project Safety Officer	Must be a DOLE certified SO2 practitioner. This role may be filled by the assigned project engineer/architect if suitably qualified.

For **Lot 4**: Repair/Renovation of Function Hall; Rodriguez Campus

Key Personnel	General Experience/Relevant Experience
Project Site Engineer/Architect	Must be a Registered and Licensed Civil Engineer or Architect with at least five (5) years of relevant experience in the supervision of construction and repair of buildings and its facilities.
Project Safety Officer	Must be a DOLE certified SO2 practitioner. This role may be filled by the assigned project engineer/architect if suitably qualified.

For **Lot 5**: Repair of facilities and other Structures; Cainta Campus

Key Personnel	General Experience/Relevant Experience
Project Site Engineer/Architect	Must be a Registered and Licensed Civil Engineer or Architect with at least five (5) years of relevant experience in the supervision of construction and repair of buildings and its facilities.
Project Safety Officer	Must be a DOLE certified SO2 practitioner. This role may be filled by the assigned project engineer/architect if suitably qualified.

10.5 The minimum major equipment requirements are the following:

For **Lot 1**; Repair of EARTS; Morong Campus

Equipment	Capacity	Number of Units
Hauling Truck	3.0 cu.m. (minimum)	At least 1 unit

For **Lot 2**: Repair of Gymnasium; Morong Campus

Equipment	Capacity	Number of Units
Hauling Truck	3.0 cu.m. (minimum)	At least 1 unit
Demolition Hammer/Chipping Gun	1000 watts(minimum)	At least 1 unit

For **Lot 3**: Repair of Function Hall; Morong Campus

	<table><tr><th>Equipment</th><th>Capacity</th><th>Number of Units</th></tr><tr><td>Hauling Truck</td><td>3.0 cu.m. (minimum)</td><td>At least 1 unit</td></tr></table> For **Lot 4**: Repair/Renovation of Function Hall; Rodriguez Campus <table><tr><th>Equipment</th><th>Capacity</th><th>Number of Units</th></tr><tr><td>Hauling Truck</td><td>3.0 cu.m. (minimum)</td><td>At least 1 unit</td></tr></table> For **Lot 5**: Repair of facilities and other Structures; Cainta Campus <table><tr><th>Equipment</th><th>Capacity</th><th>Number of Units</th></tr><tr><td>Hauling Truck</td><td>3.0 cu.m. (minimum)</td><td>At least 1 unit</td></tr><tr><td>Demolition Hammer/Chipping Gun</td><td>1000 watts(minimum)</td><td>At least 1 unit</td></tr></table>
12	N/A
15.1	The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts: a. The amount of not less than **₱18,779.44**, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit for Lot 1; b. The amount of not less than **₱20,367.73**, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit for Lot 2; c. The amount of not less than **₱17,960.00**, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit for Lot 3; or d. The amount of not less than **₱4,700.83**, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit for Lot 4; e. The amount of not less than **₱24,786.78**, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit for Lot 5; or f. The amount of not less than **₱46,948.60** if bid security is in Surety Bond for Lot 1; g. The amount of not less than **₱50,919.33** if bid security is in Surety Bond for Lot 2; and h. The amount of not less than **₱ 44,900.00** if bid security is in Surety Bond for Lot 3.

	i. The amount of not less than **₱11,752.01** if bid security is in Surety Bond for Lot 4; and j. The amount of not less than **₱ 61,966.94** if bid security is in Surety Bond for Lot 5;
19.2	Partial bids are allowed, as follows: **Lot 1- Nine Hundred Thirty-Eight Thousand Nine Hundred Seventy-Two Pesos Only (₱938,972.00) for Repair of EARTS at Morong Campus.** **Lot 2 - One Million Eighteen Thousand Three Hundred Eighty-Six Pesos and 50/100 Only (₱1,018,386.50) for Repair of Gymnasium at Morong Campus.** **Lot 3- Eight Hundred Ninety-Eight Thousand Pesos Only (₱898,000.00) for Repair of Function Hall at Morong Campus.** **Lot 4- Two Hundred Thirty-Five Thousand, Forty-One Pesos and 48/100 Only (₱235,041.48) for Renovation of Function Hall at Rodriguez Campus.** **Lot 5- One Million Two Hundred Thirty Nine Thousand, Three Hundred Thirty-Eight Pesos and 81/100 Only (₱1,239,338.81) for Repair of Various Facilities and other Structures at Cainta Campus.**
20	N/A
21	• Construction Schedule with Bar Chart and S-curve • Manpower Schedule • Repair Methodology • Occupational Safety and Health Program

Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

The General Conditions of Contract (GCC) in this Section, read in conjunction with the Special Conditions of Contract in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

Matters governing performance of the Contractor, payments under the contract, or matters affecting the risks, rights, and obligations of the parties under the contract are included in the GCC and Special Conditions of Contract.

Any complementary information, which may be needed, shall be introduced only through the Special Conditions of Contract.

1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

2. Sectional Completion of Works

If sectional completion is specified in the **Special Conditions of Contract (SCC)**, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date shall apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

3. Possession of Site

3.1 The Procuring Entity shall give possession of all or parts of the Site to the Contractor based on the schedule of delivery indicated in the **SCC,** which corresponds to the execution of the Works. If the Contractor suffers delay or incurs cost from failure on the part of the Procuring Entity to give possession in accordance with the terms of this clause, the Procuring Entity's Representative shall give the Contractor a Contract Time Extension and certify such sum as fair to cover the cost incurred, which sum shall be paid by Procuring Entity.

3.2 If possession of a portion is not given by the above date, the Procuring Entity will be deemed to have delayed the start of the relevant activities. The resulting adjustments in contract time to address such delay may be addressed through contract extension provided under Annex "E" of the 2016 revised IRR of RA No. 9184.

4. The Contractor's Obligations

The Contractor shall employ the key personnel named in the Schedule of Key Personnel indicating their designation, in accordance with **ITB** Clause 10.3 and specified in the **BDS**, to carry out the supervision of the Works.

The Procuring Entity will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are equal to or better than those of the personnel listed in the Schedule.

5. Performance Security

5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.

5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

6. Site Investigation Reports

The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the **SCC** supplemented by any information obtained by the Contractor.

7. Warranty

7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, the Procuring Entity shall forfeit its performance security, subject its property (ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.

7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the **SCC**.

8. Liability of the Contractor

Subject to additional provisions, if any, set forth in the **SCC**, the Contractor's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Contractor is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

9. Termination for Other Causes

Contract termination shall be initiated in case it is determined *prima facie* by the Procuring Entity that the Contractor has engaged, before, or during the implementation of the contract, in unlawful deeds and behaviors relative to contract acquisition and implementation, such as, but not limited to corrupt, fraudulent, collusive, coercive, and obstructive practices as stated in **ITB** Clause 4.

10. Dayworks

Subject to the guidelines on Variation Order in Annex "E" of the 2016 revised IRR of RA No. 9184, and if applicable as indicated in the **SCC**, the Dayworks rates in the Contractor's Bid shall be used for small additional amounts of work only when the Procuring Entity's Representative has given written instructions in advance for additional work to be paid for in that way.

11. Program of Work

11.1. The Contractor shall submit to the Procuring Entity's Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the **SCC.**

11.2. The Contractor shall submit to the Procuring Entity's Representative for approval an updated Program of Work at intervals no longer than the period stated in the **SCC.** If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity's Representative may withhold the amount stated in the **SCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

12. Instructions, Inspections and Audits

The Contractor shall permit the GOP or the Procuring Entity to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors of the GOP or the Procuring Entity, as may be required.

13. Advance Payment

The Procuring Entity shall, upon a written request of the Contractor which shall be submitted as a Contract document, make an advance payment to the Contractor in an amount not exceeding fifteen percent (15%) of the total contract price, to be made in lump sum, or at the most two installments according to a schedule specified in the **SCC**, subject to the requirements in Annex "E" of the 2016 revised IRR of RA No. 9184.

14. Progress Payments

The Contractor may submit a request for payment for Work accomplished. Such requests for payment shall be verified and certified by the Procuring Entity's Representative/Project Engineer. Except as otherwise stipulated in the **SCC**, materials and equipment delivered on the site but not completely put in place shall not be included for payment.

15. Operating and Maintenance Manuals

15.1. If required, the Contractor will provide "as built" Drawings and/or operating and maintenance manuals as specified in the **SCC.**

15.2. If the Contractor does not provide the Drawings and/or manuals by the dates stated above, or they do not receive the Procuring Entity's Representative's approval, the Procuring Entity's Representative may withhold the amount stated in the **SCC** from payments due to the Contractor.

Section V. Special Conditions of Contract

Notes on the Special Conditions of Contract

Similar to the BDS, the clauses in this Section are intended to assist the Procuring Entity in providing contract-specific information in relation to corresponding clauses in the GCC found in Section IV.

The Special Conditions of Contract (SCC) complement the GCC, specifying contractual requirements linked to the special circumstances of the Procuring Entity, the Procuring Entity's country, the sector, and the Works procured. In preparing this Section, the following aspects should be checked:

a. Information that complements provisions of the GCC must be incorporated.

b. Amendments and/or supplements to provisions of the GCC as necessitated by the circumstances of the specific purchase, must also be incorporated.

However, no special condition which defeats or negates the general intent and purpose of the provisions of the GCC should be incorporated herein.

Special Conditions of Contract

GCC Clause	
2	*[If different dates are specified for completion of the Works by section, i.e. "sectional completion," these dates should be listed here.]*
4.1	*[Specify the schedule of delivery of the possession of the site to the Contractor, whether full or in part.]*
6	The site investigation reports are: *[list here the required site investigation reports.]*
7.2	*[Select one, delete the other.]* *[In case of permanent structures, such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures:]* Fifteen (15) years. *[In case of semi-permanent structures, such as buildings of types 1, 2, and 3 as classified under the National Building Code of the Philippines, concrete/asphalt roads, concrete river control, drainage, irrigation lined canals, river landing, deep wells, rock causeway, pedestrian overpass, and other similar semi-permanent structures:]* Five (5) years. *[In case of other structures, such as bailey and wooden bridges, shallow wells, spring developments, and other similar structures:]* Two (2) years.
10	*[Select one, delete the other:]* a. Dayworks are applicable at the rate shown in the Contractor's original Bid. b. No dayworks are applicable to the contract.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within *[insert number]* days of delivery of the Notice of Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is [*insert amount*].
13	The amount of the advance payment is *[insert amount as percentage of the contract price that shall not exceed 15% of the total contract price and schedule of payment]*.
14	*[If allowed by the Procuring Entity, state:]* Materials and equipment delivered on the site but not completely put in place shall be included for payment.

15.1	The date by which operating and maintenance manuals are required is *[date]*. The date by which "as built" drawings are required is *[date]*.
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is *[amount in local currency]*.

Section VI. Specifications

Notes on Specifications

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying or conditioning their Bids. In the context of international competitive bidding, the specifications must be drafted to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of economy, efficiency, and fairness in procurement be realized, responsiveness of Bids be ensured, and the subsequent task of bid evaluation facilitated. The specifications should require that all goods and materials to be incorporated in the Works be new, unused, of the most recent or current models, and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.

Samples of specifications from previous similar projects are useful in this respect. The use of metric units is mandatory. Most specifications are normally written specially by the Procuring Entity or its representative to suit the Works at hand. There is no standard set of Specifications for universal application in all sectors in all regions, but there are established principles and practices, which are reflected in these PBDs.

There are considerable advantages in standardizing General Specifications for repetitive Works in recognized public sectors, such as highways, ports, railways, urban housing, irrigation, and water supply, in the same country or region where similar conditions prevail. The General Specifications should cover all classes of workmanship, materials, and equipment commonly involved in construction, although not necessarily to be used in a particular Works Contract. Deletions or addenda should then adapt the General Specifications to the particular Works.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for goods, materials, and workmanship, recognized international standards should be used as much as possible. Where other particular standards are used, whether national standards or other standards, the specifications should state that goods, materials, and workmanship that meet other authoritative standards, and which ensure substantially equal or higher quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the SCC.

Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are

national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted subject to the Procuring Entity's Representative's prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Procuring Entity's Representative at least twenty-eight (28) days prior to the date when the Contractor desires the Procuring Entity's Representative's consent. In the event the Procuring Entity's Representative determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

These notes are intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They should not be included in the final Bidding Documents.

MINIMUM PERFORMANCE STANDARDS AND SPECIFICATIONS for the

REPAIR OF EULOGIO AMANG RODRIGUEZ TANGHALANG SINING (EARTS-LOT 1

URS MORONG CAMPUS

I. PROJECT BACKGROUND:

The Eulogio Amang Rodriguez Tanghalang Sining (EARTS) at the University of Rizal System (URS) Morong Campus is an essential facility used for a variety of academic and cultural events. Over time, the building has experienced wear and damage to its structural elements, including the roof panels and ceiling systems. The existing roof panels have shown signs of deterioration, including leaks and potential structural weaknesses, which have contributed to damage in the ceiling area. Consequently, the ceiling boards and frames are also compromised and require replacement.

The project aims to address these issues comprehensively by replacing both the roof panels and the ceiling components to restore the building's functionality, safety, and appearance. The new installations will include 3.5mm thick fiber cement boards for the ceiling, new ceiling frames, and appropriate roofing materials.

II. PROJECT OBJECTIVE:

The primary objective of this project is to:

- Replace Roof Panels: Remove and replace all roof panels with new panels to address leaks, structural issues, and enhance the roof's overall performance.
- Replace Ceiling Boards and Frames: Remove the existing ceiling boards and damaged frames, then install new 3.5mm thick fiber cement boards and robust ceiling frames to ensure structural integrity and safety.
- Repaint Ceiling: Repaint the newly installed ceiling boards to achieve a uniform and high- quality finish, protecting the ceiling from environmental factors and improving the aesthetic appeal.
- Ensure Safety and Compliance: Implement stringent safety measures and quality control throughout the project, particularly when working at height, to meet all relevant standards and ensure the safety of workers and occupants.
- Enhance Facility Functionality: Improve the overall functionality and appearance of the EARTS facility, ensuring it meets the needs of students, faculty, and the community effectively.

III. PROJECT SITE:

1. **Location:**

The project site is located at the Eulogio Amang Rodriguez Tanghalang Sining (EARTS), University of Rizal System (URS), Morong Campus, situated in Morong, Rizal, Philippines. The building is a key part of the campus infrastructure, hosting various events and activities.

2. **Site Description:**

Building Type: Auditorium and multipurpose function space.

Current Condition: The roof panels are deteriorated, causing leaks and damage to the ceiling. The ceiling boards and frames also exhibit signs of wear and damage.

Access: The work will be conducted indoors and, on the roof, requiring proper scaffolding and safety measures to access these areas.

IV. PROJECT SPECIFICATIONS AND WORK METHODOLOGIES:

The Contractor is required to perform the following scope of work:

1. Project Billboard/ Sign Board:

a. Material: The billboard/sign board shall be constructed using approved materials that are durable and weather-resistant. All materials must be of high-quality and suitable for outdoor use.

b. Dimensions: The billboard/sign board should have standard dimensions as required by local regulations or as specified by the project owner. Typically, the dimensions might range around 4 feet by 8 feet, or as per project specifications.

c. Content: The content on the billboard/sign board must include the project name, location, owner, contractor, project duration, start and end dates, and any other pertinent information. The text should be clearly legible, using a professional font and color scheme that contrasts with the background for maximum visibility.

d. Placement: The billboard/sign board must be installed in a conspicuous location at the project site, easily visible to the public and project stakeholders. It should be securely mounted and maintained in good condition throughout the entire duration of the project.

e. Duration: The billboard/sign board should remain in place and be well-maintained from the start of the project until its completion and final acceptance by the owner.

2. Mobilization/Demobilization:

a. Mobilization: The general contractor is responsible for the efficient and timely setup of all necessary project facilities, equipment, and temporary utilities required for the execution of the project. This includes but is not limited to site offices, storage areas, worker accommodations (if applicable), safety barriers, and temporary power and water supplies. All setup activities must comply with relevant safety and environmental regulations.

b. Demobilization: Upon completion of the project, the general contractor is responsible for the orderly dismantling and removal of all temporary facilities, equipment, and materials brought onto the site for the project. The contractor must ensure that the site is restored to its original condition or as specified in the contract. This includes the removal of debris, temporary structures, and any hazardous materials. Final site cleanup must be performed to the satisfaction of the project owner.

c. Timeline: Mobilization should be completed before the commencement of construction activities and within the timeline specified in the project schedule. Demobilization should occur immediately following project completion and acceptance, ensuring no unnecessary delays.

3. Permits and Clearances:

a. Responsibility: The general contractor shall be solely responsible for obtaining all necessary permits and clearances required for the execution of the project. This includes, but is not limited to, building permits, environmental clearances, safety certifications, and any other approvals mandated by local and national statutory laws and regulations.

b. Compliance: The contractor must ensure full compliance with all relevant laws, ordinances, and regulations throughout the project duration. This includes adhering to the requirements set forth by local government units, regulatory agencies, and other authorities having jurisdiction over the project.

c. Documentation: Copies of all permits and clearances must be submitted to the project owner before the commencement of any construction activities. The contractor must maintain a complete and up-to-date record of all permits and clearances on-site and make them available for inspection upon request by the project owner or regulatory authorities.

d. Timeline: All required permits and clearances must be secured within the timeline specified in the project schedule to avoid any delays in the start of construction. The contractor must promptly address any issues or delays in obtaining the necessary permits to ensure the project proceeds as planned.

4. Removal of Existing Roof Panel:

a. Procedure: The contractor is responsible for the careful removal of the existing roof panels. This process should be done in a manner that avoids damaging the structure or surrounding areas. The use of appropriate tools and techniques is required to ensure safety and efficiency.

b. Sorting and Storage: All removed roof panels must be sorted based on their condition. Panels that are deemed reusable should be separated from those that will be disposed of. The sorted panels should be neatly stored in designated areas on- site, ensuring they are protected from damage or deterioration.

c. Handling: Panels should be handled with care to prevent damage. Any panels that are deemed reusable or salvageable should be separated and stored separately from those that are to be disposed of.

d. Turnover: All removed roofing materials must be documented and turned over to the university. A detailed inventory of the materials should be provided, including their condition and any relevant notes.

5. Installation of Roof Panels including Accessories:

a. Material Specifications: Roof panels must be of 0.5mm thickness, meeting the approved specifications as detailed in the project documentation. The panels should be sourced from a reputable manufacturer, suitable for local climate, and comply with all relevant standards.

b. Insulation:

i.Type and Thickness: The roof insulation must consist of a high-performance material such as fiberglass, foam or rockwool, with a thickness of at least 50mm, unless otherwise specified. The insulation material should have suitable R-value to ensure adequate thermal resistance, reducing heat transfer and improving energy efficiency.

ii. Installation: The insulation must be installed continuously across the roof area, with no gaps or compressions that could compromise its effectiveness. It should be placed between the roof panels and the roof deck or underlayment, ensuring full coverage. Care should be taken to avoid crushing the insulation during installation of roof panels.

iii. Attachment: The insulation must be securely attached or adhered to the roof panel, ensuring it stays in place and performs effectively over the lifespan of the roof.

c. Installation of Roof Panels: The roof panels must be installed according to the manufacturer's guidelines and best industry practices. This includes securing the panels properly to the roof structure, ensuring that all fasteners and connections are tightly secured, aligning the panels accurately to maintain a uniform appearance.

d. Lapping and Sealing: Ensure that the laps (overlapping area) of the roof panels are properly sealed to prevent water penetration. This includes applying the specified sealant or tape along the edges where panels overlap, ensuring a continuous, watertight seal. The sealing method should conform to the manufacturer's recommendations and industry standards.

e. Accessories:

i. Installation: All necessary accessories, such as flashing, ridge caps, and sealants, must be installed with the roof panels. These accessories should be of the same quality as the roof panels and should be installed to ensure watertight finish. Special attention should be given to areas around vents, chimneys, and other penetrations to ensure proper sealing.

f. Leak and Water Testing:

i. Water Spray Test: Conduct a final water spray test to confirm that no leaks are present. Check for water infiltration in both the immediate and underlying areas, including the interior of the building.

g. Documentation and Reporting:

i. Prepare a detailed final inspection report, including photographs of the roof condition, test results, and any issues identified. Document any corrective any corrective actions taken and provide a summary of the overall inspection findings.

ii. Submit the final inspection report to the project owner for review and approval.

h. Punch List:

i. Create and address a punch list of any minor issues or deficiencies noted during the final inspection. Ensure that all items on the punch list are completed and re-inspected as necessary.

i. Final Approval:

i. Obtain written confirmation from the project owner or authorized representative that the final inspection has been successfully completed and that the roof installation is approved.

6. Waterproofing of Concrete Gutter and Concrete Canopy:

a. Scope of Work:

The scope includes the application of cementitious waterproofing compounds to concrete gutters and concrete canopies to prevent water ingress and ensure long-term protection.

b. Materials:

i. Waterproofing Compound: Use high-quality cementitious waterproofing compounds that are compatible with the project requirements. The product must meet the manufacturer's specifications and industry standards for water resistance, adhesion, and durability.

ii. Surface Preparation Materials: Include products for cleaning, priming, and repairing concrete surfaces, such as degreasers, and concrete patching compounds, if required.

c. Surface Preparation:

i. Cleaning: Thoroughly clean all surfaces to remove dirt, debris, oil, and other contaminants. Use appropriate cleaning agents and methods to ensure a clean substrate.

ii. Repair: Inspect the concrete surfaces for cracks, spalls, or other defects. Repair any identified issues with suitable concrete repair compounds to provide a smooth and even substrate for waterproofing application.

iii. Surface Profiling: Ensure that the concrete surfaces are adequately profiled, either by mechanical means or chemical etching, to promote adhesion of the waterproofing compound.

d. Application:

i. Priming: Apply a primer if recommended by the waterproofing compound manufacturer. The primer should be applied uniformly and allowed to dry as per the manufacturer's instructions.

ii. Waterproofing Compound:

1. Mixing: Follow the manufacturer's guidelines for mixing the waterproofing compound. Mix in the correct proportions to achieve the desired consistency and performance.

2. Application: Apply the waterproofing compound to the concrete gutters and canopies using a suitable application method, such as a brush, roller, or trowel. Ensure even coverage, with no missed spots or excessive buildup.

3. Layering: Apply multiple coats as required by the product specifications. Allow each coat to dry thoroughly before applying the subsequent layer.

4. Thickness: Ensure that the applied waterproofing compound achieves the recommended thickness for effective performance, as specified by the manufacturer.

5. Detailing:

a. Joints and Penetrations: Pay special attention to joints, seams, and any penetrations in the concrete surfaces. Reinforce these areas with additional waterproofing materials or membranes as per the manufacturer's recommendations to ensure a continuous watertight barrier.

b. Edge Treatment: Properly seal edges and transitions between the concrete surfaces and adjacent materials to prevent water ingress.

6. Curing and Protection:

a. Curing: Allow the waterproofing compound to cure as per the manufacturer's instructions. Avoid exposing the freshly applied coating to water or harsh environmental conditions until it has fully cured.

b. Protection: Protect the applied waterproofing layer from physical damage, extreme temperatures, and other adverse conditions during the curing period. Use temporary coverings or barriers if necessary.

7. Quality Control:

a. Inspection: Conduct a thorough inspection of the applied waterproofing compound to ensure that it meets the project specifications and manufacturer's requirements. Check for uniform coverage, proper thickness, and correct application of detailing.

8. Testing:

a. Water Spray Test

i. Procedure: Simulate a heavy rainfall by spraying water over the entire surface of the waterproofed concrete gutters and canopies using hoses or sprinklers. Ensure the water is applied evenly across all areas.

ii. Duration: This test should be conducted for a period sufficient to evaluate the effectiveness of the waterproofing, typically around 30 minutes to 1 hour.

iii. Inspection: During and after the test, check for any signs of water penetration or leakage inside the building or underneath the waterproofed surfaces. Document any areas where water ingress is detected.

b. Water Ponding Test (for flat surfaces):

i. Procedure: For flat surfaces, create small test ponds by containing water on the waterproofed surface. Allow water to remain for 24 hours or as specified by the manufacturer.

ii. Inspection: After the test period, check for any signs of leakage or water infiltration. Inspect the surrounding areas for any evidence of water damage and penetration.

9. Documentation and Reporting:

a. Recording Results: Document the result of all tests, including photographs, observations, and any issues detected. Provide detailed descriptions of the testing procedures and outcomes.

b. Final Report: Prepare a comprehensive final report summarizing the testing procedures, results, any actions taken, and confirmation that the waterproofing system meets the project's specifications and manufacturer's guidelines.

10. Remediation:

a. Addressing Issues: If any issues or deficiencies are identified during testing, promptly address them. Reapply or repair the waterproofing as needed, and retest to ensure the issues have been resolved.

11. Final Approval:

a. Acceptance: The waterproofing system will be considered acceptable once all testing procedures have been successfully completed, and any issues have been resolved to the satisfaction of the owner or project representative.

12. Warranty Details:

a. Warranty Period: The contractor shall provide a warranty for the waterproofing work for a period of 5 years from the date of final acceptance. The warranty should cover defects in materials and workmanship including any failure of the waterproofing system to prevent water ingress.

b. Coverage: The warranty shall include coverage for repair or replacement of the waterproofing system, including any damage resulting from defects in

materials or improper application. It should also cover the cost associated with removing or reapplying the waterproofing system if required.

c. Claim Procedure: In the event of a warranty claim, the contractor must address any issues within thirty (30) calendar days upon receiving notice from the project owner. The contractor is responsible for inspecting the issue, providing a remedy, and ensuring that the waterproofing system meets the original specifications.

d. Exclusions: The warranty does not cover damage resulting from external factors such as structural movements, misuse, accidental damage, or failure to maintain the waterproofing system as per the manufacturer's guidelines.

7. Repainting of Roof Trusses and Purlins:

a. Scope of Work:

i. Repainting of Trusses and Purlins: Includes the preparation, rust conversion/removal, priming, and application of topcoat on existing trusses and purlins.

b. Materials:

i. Rust Converter/Remover: Use a high-quality rust converter/remover suitable for metal surfaces. The product should effectively neutralize rust and prepare the surface for painting.

ii. Epoxy Primer: Use an epoxy-based primer that provides excellent adhesion and corrosion resistance. The primer should be compatible with the rust converter and the topcoat.

iii. Epoxy Topcoat: Apply an epoxy-based topcoat for a durable and protective finish. The topcoat should be suitable for metal surfaces and provide resistance to environmental factors.

c. Surface Preparation:

i. Cleaning: Clean all surfaces to remove loose rust, dust, dirt, and other contaminants. Use methods such as wire brushing, sanding, or abrasive blasting as necessary.

ii. Rust Conversion/Removal: Apply the rust converter/remover according to the manufacturer's instructions. Ensure complete coverage of rusted areas and allow adequate time for the product to work before proceeding.

iii. Surface Profiling: Ensure the surface is smooth and free from any loose material. Any remaining rust or contaminants should be thoroughly removed before applying the primer.

d. Application:

i. Rust Converter/Remover:

1. Application: Apply the rust converter/remover to all rusted areas using a brush, roller, or spray. Follow the manufacturer's instructions for application thickness and curing time.

2. Drying: Allow the rust converter/remover to dry completely before proceeding with the next steps.

ii. Epoxy Primer:

1. Application: Mix the epoxy primer according to the manufacturer's instructions. Apply a uniform coat of primer to all prepared surfaces using a brush, roller, or spray equipment. Ensure full coverage and pay special attention to joints and welds.

2. Drying: Allow the primer to cure as per the manufacturer's recommendations before applying the topcoat.

iii. Epoxy Topcoat:

1. Application: Mix the epoxy topcoat according to the manufacturer's instructions. Apply a uniform coat over the primed surfaces using a brush, roller, or spray. Ensure even coverage and avoid drips or runs.

2. Finish: Apply a second coat if required by the manufacturer or project specifications. Allow sufficient drying time between coats.

e. Safety Measures:

i. Fall protection: Implement comprehensive fall protection systems, including harnesses, guardrails, and safety nets, for workers at height. Ensure all safety equipment is properly maintained and used.

ii. Scaffolding: Use stable properly constructed scaffolding or aerial lifts to access trusses and purlins. Inspect and certify scaffolding before use.

iii. Personal Protective Equipment (PPE): Require all workers to wear appropriate PPE, such as helmets, safety glasses, gloves, and protective clothing. Ensure PPE is in good condition and suitable for the task.

iv. Skilled Workers: Ensure that only skilled and competent workers are allowed to work at heights. Verify that all workers have the necessary training and experience for working at height and operating relevant safety equipment.

v. Ventilation: Ensure adequate ventilation in areas where epoxy-based paints are applied to minimize exposure to fumes and ensure worker safety.

f. Environmental and Safety Considerations:

i. Waste Disposal: Dispose of all waste materials, including used paint, solvents, and cleaning agents, in accordance with local regulations.

ii. Containment: Implement measures to prevent paint splashes and drips from contaminating surrounding areas and surfaces.

g. Quality Control:

i. Inspection: Conduct regular inspections during and after the painting process to ensure compliance with project specifications and quality standards. Check for uniform coverage, proper adhesion, and finish quality.

ii. Documentation: Maintain records of the painting process, including materials used, application methods, safety measures, and inspection results.

h. Final Acceptance:

i. Completion: The repainting work will be considered complete upon successful inspection, adherence to safety measures, and the final appearance meeting project requirements.

ii. Handover: Provide a final report to the project owner, detailing work performed, materials used, and confirmation of compliance with specifications and safety requirements.

i. Warranty:

i. Warranty Period: The contractor shall provide a warranty for the repainting work for a period of one (1) year from the date of final acceptance. The warranty covers defects in material and workmanship.

ii. Coverage: The warranty includes repair or reapplication of paint if defects or issues arise within the warranty period.

iii. Exclusions: The warranty does not cover damage from external factors such as extreme weather or misuse.

8. Damaged Ceiling Replacement and Repainting:

a. Scope of Work:

i. Replacement of Damaged Ceiling: Includes the removal of damaged ceiling boards, replacement with new 3.5mm thick fiber cement boards, replacement of damaged ceiling frames, and repainting of the replaced ceiling.

b. Materials:

i. Ceiling Boards: Use 3.5mm thick fiber cement boards for the ceiling replacement. The boards should be of approved quality, meeting relevant standards for durability and fire resistance.

ii. Ceiling Frames: Replace damaged ceiling frames with new frames of the same type and specifications as the existing ones. Ensure that all framing components are of high quality and meet structural requirements.

iii. Paint: Use a high-quality, durable ceiling paint suitable for fiber cement boards. The paint should provide good coverage and be resistant to mildew and peeling.

c. Surface Preparation:

i. Removal: Carefully remove damaged ceiling boards and frames. Ensure that all debris is properly collected and disposed of in accordance with local regulations.

ii. Inspection: Inspect the ceiling structure for any additional damage or issues that need to be addressed before installing the new boards. Repair any structural issues as needed.

d. Installation:

i. Ceiling Boards:

1. Preparation: Prepare the new fiber cement boards by cutting to the required size and shape. Ensure that all edges are clean and properly finished.

2. Installation: Install the new 3.5mm thick fiber cement boards onto the ceiling frames. Secure the boards with appropriate fasteners and ensure that they are properly aligned and level.

3. Finishing: Seal joints between boards and ensure that the surface is smooth and ready for painting.

ii. Ceiling Frames:

1. Removal and Replacement: Remove damaged ceiling frames and replace them with new frames. Ensure that all connections are secure and the frames are properly aligned.

2. Inspection: Inspect the installed frames to ensure that they are level and properly supported.

iii. Repainting:

1. Preparation: Clean the surface of the new ceiling boards to remove any dust or debris. Ensure that all joints and seams are properly filled and smoothed.

2. Priming: Apply a suitable primer to the new ceiling boards if required by the paint manufacturer.

3. Painting: Apply the ceiling paint in accordance with the manufacturer's instructions. Ensure that the paint is applied evenly and covers all areas completely. Apply additional coats if needed to achieve the desired finish.

4. Drying: Allow adequate drying time between coats and before allowing any other disturbances to the painted surface.

iv. Safety Measures:

1. Work at Height: Ensure that all work is conducted safely at height. Use appropriate scaffolding or elevated work platforms that are inspected and approved for safety.

2. Personal Protective Equipment (PPE): All personnel must wear suitable PPE, including hard hats, safety harnesses, gloves, eye protection, and respiratory protection if required.

v. Quality Control:

1. Inspection: Conduct thorough inspections of the ceiling boards, frames, and painting work to ensure that all specifications are met and that there are no defects.

2. Testing: Verify the adhesion and finish of the paint to ensure durability and quality.

vi. Environmental and Safety Considerations:

1. Ventilation: Ensure adequate ventilation in the work area to disperse fumes from the paint and other materials.

2. Waste Disposal: Dispose of all waste materials, including old ceiling boards, frames, paint, and other debris, in accordance with local regulations.

vii. Final Acceptance:

1. Completion: The project will be considered complete upon the successful inspection of the replaced ceiling boards, frames, and the repainting work, ensuring all specifications are met.

2. Handover: Provide a final report detailing the work completed, materials used, and confirmation that the project meets all safety and quality requirements.

V. MINIMUM REQUIREMENTS FOR SAFETY AND HEALTH PROGRAM:

1. Safety Management System:

a. Safety Policy: Develop and document a safety policy outlining the organization's commitment to health and safety, particularly considering the presence of faculty, students, and other stakeholders.

b. Objectives: Define clear safety objectives and goals aligned with organizational priorities and the educational environment.

c. Responsibilities: Assign safety responsibilities and designate an Occupational Safety Officer or Project Safety Officer. This individual should have relevant training certified by the Department of Labor and Employment (DOLE) and be the point person for safety protocols. This role may be filled by the assigned project engineer if suitably qualified.

2. Risk Assessment and Management:

a. Hazard Identification: Conduct regular hazard assessments to identify potential safety risks and health hazards in the workplace.

b. Risk Evaluation: Evaluate the risks associated with identified hazards and their potential impact on students, faculty, and other stakeholders.

c. Control Measures: Implement appropriate control measures to mitigate or eliminate identified risks, including physical barriers, signage, and restricted access to hazardous areas.

3. Safety Training and Education:

a. Orientation: Provide safety orientation and training for all new employees and contractors, emphasizing the unique environment of the educational institution.

b. Ongoing Training: Offer regular safety training and refresher courses for all employees on relevant topics, including emergency procedures and hazard recognition, with a focus on interacting safely in an environment with students and faculty (if necessary).

c. Specialized Training: Provide additional training for employees exposed to specific hazards or using specialized equipment (if necessary).

4. Personal Protective Equipment (PPE):

a. Provision: Provide appropriate PPE to employees based on the identified hazards.

b. Use and Maintenance: Ensure that employees use PPE correctly and that it is maintained in good condition.

c. Training: Train employees on the proper use, maintenance, and storage of PPE (if necessary).

5. Emergency Preparedness and Response:

a. Emergency Plan: Develop and document an emergency response plan specific to the educational institution, covering scenarios such as evacuations involving students and faculty.

b. Drills: Conduct regular emergency drills in coordination with the institution’s existing emergency procedures to ensure effective response by both construction personnel and institution stakeholders (if necessary).

c. Emergency Contacts: Maintain a list of emergency contacts and make it accessible to all employees.

6. Incident Reporting and Investigation:

a. Reporting System: Establish a system for reporting workplace incidents, injuries, and near-misses.

b. Investigation: Investigate all incidents to determine causes and implement corrective actions to prevent recurrence.

c. Documentation: Maintain records of incidents, investigations, and corrective actions taken.

7. Health and Safety Inspections:

a. Routine Inspections: Conduct regular safety inspections of the workplace to Identify and address potential hazards, particularly those affecting areas frequented by students and faculty.

b. Inspection Records: Document inspection findings and ensure that corrective actions are taken.

8. Health and Wellness Programs:

a. Health Monitoring: Implement programs for monitoring employee health and wellness, including pre-employment and periodic health checks.

b. Wellness Programs: Offer wellness programs and resources to promote employee well-being and reduce workplace stress.

9. Compliance and Legal Requirements:

a. Regulatory Compliance: Ensure compliance with relevant local, national, and international health and safety regulations and standards.

b. Documentation: Keep up-to-date records of compliance, including permits, licenses, and safety certifications.

10. Communication and Involvement:

a. Safety Meetings: Hold regular safety meetings to discuss safety issues, share information, and engage employees in the safety program, with consideration for the educational setting.

b. Feedback: Encourage and provide channels for employees to provide feedback on safety matters and participate in safety initiatives.

11. Documentation and Record-Keeping:

a. Safety Records: Maintain comprehensive records related to safety training, incident reports, inspections, and risk assessments.

b. Accessibility: Ensure that safety documentation is readily accessible to employees, students, faculty, and relevant authorities.

12. Contractor Responsibilities:

a. Safety Precautions: The contractor must observe proper safety precautions to protect faculty, students, and other stakeholders in the vicinity. This includes implementing physical barriers, clear signage, and restricted access to construction zones.

b. Communication: Coordinate with the institution to ensure that construction activities are conducted in a manner that minimizes disruption to academic activities and ensures the safety of all individuals on site.

VI. REPORTORIAL REQUIREMENT

Upon acceptance of the Notice to Proceed, the Contractor is required to submit the following documentation in Microsoft Word or an equivalent format:

Project Schedule:

- A detailed project schedule in the form of a bar chart, outlining all significant phases and milestones of the project.
- The schedule should clearly indicate the start and end dates for each phase, including any critical paths that may affect the project's timeline.
- Any dependencies or sequential tasks must be highlighted to ensure clarity in project execution.

Manpower Schedule:

- A corresponding manpower schedule that aligns with the project schedule, detailing the number and type of personnel required for each phase of the project.
- The manpower schedule should reflect the planned allocation of labor resources, ensuring that sufficient personnel are available to meet the project deadlines.
- Include information on work shifts, if applicable, and any planned overtime or special work arrangements.

Construction/Repair Methodology:

- A comprehensive construction/repair methodology detailing the step-by-step approach that will be taken to complete the project.
- The methodology should cover all critical tasks, including but not limited to site preparation, material handling, installation processes, safety protocols, and quality control measures.
- Consideration must be given to minimizing disruptions to the educational institution's operations, ensuring safety for all stakeholders on site, and addressing any environmental concerns.

All documentation must be submitted within seven [7] days of receiving the Notice to Proceed. These documents will be subject to review and approval by the Project Management Unit before any construction activities commence.

VII. PROJECT COMPLETION

The contractor shall complete the repair project within calendar (40) days taking into account the unfavorable weather conditions.

VIII. WARRANTY

The contractor shall guarantee the completed structure against structural defects and failure for its satisfactory performance vis-à-vis the prescribed Minimum Performance Standards and Specifications (MPSS) during the lifetime of the structure.

MINIMUM PERFORMANCE STANDARDS AND SPECIFICATIONS for the REPAIR OF GYMNASIUM (LOT 2)

URS MORONG CAMPUS

I. PROJECT BACKGROUND:

The gymnasium at URS Morong Campus serves as a vital facility for various academic, recreational, and extracurricular activities. Over time, the floor, benches, walls, and restrooms, specifically male and female common toilets have deteriorated due to constant use and natural wear and tear. The existing condition of these facilities no longer meets the standards required to ensure the safety, comfort, and functionality needed for the diverse range of activities held in the gymnasium. The proposed rehabilitation aims to restore and enhance these facilities, thereby extending their useful life and improving the overall experience for students, faculty, and other stakeholders who utilize the gymnasium.

II. PROJECT OBJECTIVE:

The primary objective of this rehabilitation project is to restore the floor, benches, walls, and male and female restrooms of the gymnasium to optimal condition. The project seeks to address structural and aesthetic deficiencies, ensuring that the gymnasium provides a safe, comfortable, and conducive environment for sports, events, and other activities. This rehabilitation will also aim to comply with relevant safety standards and improve the overall user experience, promoting the gymnasium as a central hub for campus life.

III. PROJECT SITE:

The rehabilitation project will be conducted at the gymnasium located within the University of Rizal System, Morong Campus. The site is situated within the central area of the campus, easily accessible to students, faculty, and staff. The gymnasium is adjacent to other key facilities, making it a focal point for various campus activities. The scope of the rehabilitation will encompass the entire gymnasium floor, seating benches, internal walls, and the male and female toilets and bathrooms.

IV. PROJECT SPECIFICATIONS AND METHODOLOGIES:

The Contractor is required to perform the following scope of work:

1. Project Billboard/ Sign Board:
    a. *Material*: The billboard/sign board shall be constructed using approved materials that are durable and weather-resistant. All materials must be of high-quality and suitable for outdoor use.

b. *Dimensions*: The billboard/sign board should have standard dimensions as required by local regulations or as specified by the project owner. Typically, the dimensions might range around 4 feet by 8 feet, or as per project specifications.
c. *Content*: The content on the billboard/sign board must include the project name, location, owner, contractor, project duration, start and end dates, and any other pertinent information. The text should be clearly legible, using a professional font and color scheme that contrasts with the background for maximum visibility.
d. *Placement*: The billboard/sign board must be installed in a conspicuous location at the project site, easily visible to the public and project stakeholders. It should be securely mounted and maintained in good condition throughout the entire duration of the project.
e. *Duration*: The billboard/sign board should remain in place and be well-maintained from the start of the project until its completion and final acceptance by the owner.

2. Mobilization/Demobilization:
    a. *Mobilization*: The general contractor is responsible for the efficient and timely setup of all necessary project facilities, equipment, and temporary utilities required for the execution of the project. This includes but is not limited to site offices, storage areas, worker accommodations (if applicable), safety barriers, and temporary power and water supplies. All setup activities must comply with relevant safety and environmental regulations.
    b. *Demobilization*: Upon completion of the project, the general contractor is responsible for the orderly dismantling and removal of all temporary facilities, equipment, and materials brought onto the site for the project. The contractor must ensure that the site is restored to its original condition or as specified in the contract. This includes the removal of debris, temporary structures, and any hazardous materials. Final site cleanup must be performed to the satisfaction of the project owner.
    c. *Timeline*: Mobilization should be completed before the commencement of construction activities and within the timeline specified in the project schedule. Demobilization should occur immediately following project completion and acceptance, ensuring no unnecessary delays.
3. Permits and Clearances (if necessary):
    a. *Responsibility*: The general contractor shall be solely responsible for obtaining all necessary permits and clearances required for the execution of the project. This includes, but is not limited to, building permits, environmental clearances, safety certifications, and any other approvals mandated by local and national statutory

laws and regulations.

b. *Compliance*: The contractor must ensure full compliance with all relevant laws, ordinances, and regulations throughout the project duration. This includes adhering to the requirements set forth by local government units, regulatory agencies, and other authorities having jurisdiction over the project.
c. *Documentation*: Copies of all permits and clearances must be submitted to the project owner before the commencement of any construction activities. The contractor must maintain a complete and up-to-date record of all permits and clearances on-site and make them available for inspection upon request by the project owner or regulatory authorities.
d. *Timeline*: All required permits and clearances must be secured within the timeline specified in the project schedule to avoid any delays in the start of construction. The contractor must promptly address any issues or delays in obtaining the necessary permits to ensure the project proceeds as planned.

4. Floor Correction
    a. The scope of work for this project includes the following activities:
        i. *Surface Preparation*: Clean and prepare the existing floor surface by removing dust, debris, and any loose material. The surface must be sound, clean, and free of any contaminants that may affect the bonding of the mortar.
        ii. *Crack Repair*: Identify and repair all visible cracks on the floor surface using appropriate crack repair materials to ensure a smooth and uniform substrate for the application of the rapid setting mortar.
        iii. *Application of Rapid Setting Mortar*:
            1. Mix the rapid setting mortar as per the manufacturer's instructions.
            2. Apply the mortar to the prepared surface, ensuring even distribution and proper leveling.
            3. The application should achieve a smooth and uniform finish with the desired thickness as specified by the project requirements.
        iv. *Curing and Finishing*: Allow the mortar to cure as per the manufacturer's recommendations. Perform any necessary finishing touches to achieve the desired surface texture and appearance.
        v. *Inspection and Approval*: Conduct a thorough inspection of the finished floor to ensure compliance with the project specifications and standards.
    b. Material Specifications
        i. *Rapid Setting Mortar*:
            1. *Type*: High-performance rapid setting mortar specifically designed for floor and pavement applications.
            2. *Compressive Strength*: Minimum 25 MPa at 24 hours.
            3. *Setting Time*: Initial setting time within 30 minutes, final setting time within 60 minutes.
            4. *Bonding Strength*: High bonding strength to concrete substrates, suitable for both indoor and outdoor applications.
            5. *Thickness*: Capable of being applied in thicknesses ranging from 10mm to 50mm without significant shrinkage or cracking.
            6. *Curing*: Rapid curing properties that allow foot traffic within 2-4 hours and full load-bearing capacity within 24 hours.
    c. Quality Assurance

i. The contractor must ensure that the rapid setting mortar used is of high quality and meets the specified standards.
ii. All materials must be sourced from reputable suppliers and accompanied by material data sheets and certifications.
iii. The application must be performed by skilled workers with experience in using rapid setting mortars for flooring applications.

d. Safety and Compliance
i. All work must comply with relevant safety standards and regulations.
ii. The contractor must ensure that appropriate personal protective equipment (PPE) is provided to all workers on site.
iii. Safety measures must be in place to prevent accidents and injuries during the application of the mortar.

e. Waste Disposal Protocol
i. *Waste Identification*: Identify all types of waste generated during the floor correction process, including but not limited to old flooring materials, packaging from the mortar, excess mortar, and any other debris.
ii. *Segregation*: Segregate waste materials at the source, categorizing them into recyclable, non-recyclable, and hazardous waste, if applicable.
iii. *Collection*: Collect waste in designated containers that are clearly marked for each type of waste. Ensure that hazardous waste, if any, is handled according to specific regulations.
iv. *Transport and Disposal*: Arrange for the timely transport of waste to authorized disposal or recycling facilities. Ensure that all waste is disposed of in compliance with local regulations and environmental standards.
v. *Documentation*: Maintain records of waste disposal activities, including the quantity and type of waste disposed of, the method of disposal, and the disposal facility used.

5. Floor Painting
a. Scope of Work
i. *Surface Preparation*: Clean and prepare the existing floor surface by removing any dirt, grease, oil, and loose particles. The surface must be dry, smooth, and free of any contaminants that could affect the adhesion of the coating.
ii. *Priming*: Apply a suitable primer if required, based on the floor's current condition and the manufacturer's recommendations for the acrylic chlorinated rubber-based coating.
iii. *Application of Acrylic Chlorinated Rubber-Based Floor Coating*:
1. Mix the floor coating according to the manufacturer's instructions.
2. Apply the first coat of the floor coating using a roller or spray equipment, ensuring even coverage across the entire floor surface.
3. Allow the first coat to dry completely as per the manufacturer's recommended drying time.
4. Apply the second coat of the floor coating, ensuring a uniform finish and full coverage.
iv. *Curing*: Allow the coated floor to cure properly before allowing foot traffic or placing any equipment on the surface.
v. *Inspection and Approval*: Conduct a thorough inspection of the finished floor to ensure compliance with the project specifications and standards.

b. Material Specifications
i. Acrylic Chlorinated Rubber-Based Floor Coating:
1. *Type*: High-performance acrylic chlorinated rubber-based floor

coating.

2. *Color*: To be determined during application.
3. *Coverage*: As specified by the manufacturer's recommendations.
4. *Drying Time*: As specified by the manufacturer's recommendations.
5. *Application*: Suitable for application by roller, brush, or spray.
6. *Resistance*: Excellent resistance to chemicals, oils, and abrasion, making it ideal for high-traffic areas.
7. *Finish*: Semi-gloss or high sheen.

c. Quality Assurance
   i. The contractor must ensure that the acrylic chlorinated rubber-based floor coating used is of high quality and meets the specified standards.
   ii. All materials must be sourced from reputable suppliers and accompanied by material data sheets and certifications.
   iii. The application must be performed by skilled workers with experience in applying specialized floor coatings.
d. Safety and Compliance
   i. All work must comply with relevant safety standards and regulations.
   ii. The contractor must ensure that appropriate personal protective equipment (PPE) is provided to all workers on site.
   iii. Adequate ventilation must be ensured during the application of the coating to prevent the buildup of fumes.
   iv. Safety measures must be in place to prevent accidents and injuries during the coating application process.
e. Waste Disposal Protocol
   i. *Waste Identification*: Identify all types of waste generated during the floor painting process, including empty paint containers, used brushes or rollers, masking materials, and any other debris.
   ii. *Segregation*: Segregate waste materials at the source, categorizing them into recyclable, non-recyclable, and hazardous waste, if applicable.
   iii. *Collection*: Collect waste in designated containers that are clearly marked for each type of waste. Ensure that hazardous waste, if any, is handled according to specific regulations.
   iv. *Transport and Disposal*: Arrange for the timely transport of waste to authorized disposal or recycling facilities. Ensure that all waste is disposed of in compliance with local regulations and environmental standards.
   v. *Documentation*: Maintain records of waste disposal activities, including the quantity and type of waste disposed of, the method of disposal, and the disposal facility used.

6. Painting of Benches, Wall, and Dugout Facade
   a. Scope of Work
      i. *Surface Cleaning*:
         1. Thoroughly clean the bench surfaces to remove dirt, grease, mildew, and any loose paint.
         2. Use appropriate cleaning agents that do not damage the surface but effectively remove contaminants.
         3. Ensure the surfaces are dry and clean before proceeding with surface corrections and painting.
      ii. Surface Corrections:
         1. Inspect the bench surfaces for any cracks, holes, or imperfections.
         2. Fill cracks and holes with appropriate wood filler or putty and sand the surface smooth once dried.

3. Sand the entire bench surface to create a smooth, even base for painting.

iii. Application of Semi-Gloss Latex Paint:
1. Apply a suitable primer if required, based on the bench material and the manufacturer's recommendations for latex paint.
2. Mix the semi-gloss latex paint thoroughly as per the manufacturer's instructions.
3. Apply the first coat of semi-gloss latex paint using a brush or roller, ensuring even coverage across all surfaces of the benches.
4. Allow the first coat to dry completely before applying the second coat.
5. Apply the second coat to achieve a smooth, uniform finish.

iv. Curing: Allow the painted surfaces to cure properly before using the benches.

v. Inspection and Approval: Conduct a thorough inspection of the finished benches to ensure compliance with the project specifications and standards.

b. Material Specifications
i. Semi-Gloss Latex Paint:
1. *Type*: High-quality semi-gloss latex paint suitable for indoor use.
2. *Color*: As specified by the project requirements.
3. *Drying Time*: Touch dry in 1-2 hours; hard dry in 4-6 hours.
4. *Application*: Suitable for application by brush or roller.
5. *Finish*: Semi-gloss finish that provides a durable, easy-to-clean surface.

c. Quality Assurance
i. The contractor must ensure that the semi-gloss latex paint used is of high quality and meets the specified standards.
ii. All materials must be sourced from reputable suppliers and accompanied by material data sheets and certifications.
iii. The application must be performed by skilled workers with experience in painting outdoor furniture.

d. Safety and Compliance
i. All work must comply with relevant safety standards and regulations.
ii. The contractor must ensure that appropriate personal protective equipment (PPE) is provided to all workers on site.
iii. Safety measures must be in place to prevent accidents and injuries during the surface preparation and painting process.

e. Waste Disposal Protocol
i. Waste Identification: Identify all types of waste generated during the bench painting process, including used paint containers, used brushes or rollers, masking materials, and any other debris.
ii. Segregation: Segregate waste materials at the source, categorizing them into recyclable, non-recyclable, and hazardous waste, if applicable.
iii. Collection: Collect waste in designated containers that are clearly marked for each type of waste. Ensure that hazardous waste, if any, is handled according to specific regulations.
iv. Transport and Disposal: Arrange for the timely transport of waste to authorized disposal or recycling facilities. Ensure that all waste is disposed of in compliance with local regulations and environmental standards.
v. Documentation: Maintain records of waste disposal activities, including the quantity and type of waste disposed of, the method of disposal, and the disposal facility used.

7. Rehabilitation of Common Male Toilet
    a. Chipping, Demolition, and Disposal Works
        i. Scope of Work
            1. Pre-Demolition Inspection:
                a. Conduct a detailed inspection of the toilets to identify the areas and structures to be demolished.
                b. Mark the specific areas and materials that require chipping and demolition.
            2. Chipping and Demolition:
                a. Carefully chip away and demolish identified sections of the toilet structures, such as floor tiles, wall tiles, and fixtures.
                b. Use appropriate tools and equipment to ensure the safe and efficient removal of materials.
                c. Avoid damage to adjacent structures and areas not marked for demolition.
            3. Sorting and Inventory:
                a. Sort the demolished materials into categories: concrete debris, reusable fixtures, metal parts, and other materials.
                b. Conduct an inventory of all sorted materials, noting items for disposal and those to be turned over to the university.
            4. Waste Disposal:
                a. Dispose of identified concrete debris in accordance with local regulations and environmental standards.
                b. Ensure that non-disposable materials, such as reusable fixtures and non-concrete debris, are properly stored and turned over to the university.
                c. Implement strict disposal protocols to prevent environmental contamination and ensure proper waste management.
        ii. Material and Equipment Specifications
            1. Demolition Tools:
                a. Heavy-duty demolition hammers, chisels, and other tools suitable for chipping and breaking concrete.
                b. Appropriate safety equipment, including helmets, gloves, and protective eyewear.
            2. Waste Containers:
                a. Durable, labeled containers for collecting and sorting different types of waste materials.
                b. Containers suitable for transporting concrete debris to authorized disposal sites.
            3. Inventory Materials:
                a. Inventory forms and labeling materials for tracking items to be turned over to the university.
        iii. Quality Assurance
            1. The contractor must ensure that all work is performed with care and precision to avoid damage to areas not designated for demolition.
            2. All waste materials must be accurately sorted and categorized, with clear records maintained for items to be disposed of and those to be turned over.
            3. The disposal of concrete debris must comply with all relevant environmental and safety regulations.
        iv. Safety and Compliance

1. All work must be carried out in accordance with relevant safety standards and regulations.
2. The contractor must ensure that appropriate personal protective equipment (PPE) is provided to all workers on site.
3. Safety barriers and signage must be in place to prevent unauthorized access to the demolition area.
4. Strict adherence to safety protocols during the chipping and demolition process to prevent accidents and injuries.

v. Waste Disposal Protocol

1. *Waste Identification*: Clearly identify the types of waste generated during the demolition process, particularly distinguishing between concrete debris and other materials.
2. *Sorting*: Sort the waste materials at the source, categorizing them into concrete debris, reusable fixtures, metal parts, and other items.
3. *Inventory*: Document all non-disposable materials, ensuring that items to be turned over to the university are properly recorded and labeled.
4. *Transport and Disposal*: Transport concrete debris to authorized disposal facilities, ensuring compliance with local regulations. Non-disposable items must be securely stored and handed over to the university with proper documentation.
5. *Documentation*: Maintain detailed records of all disposal activities, including the quantity and type of waste disposed of, the disposal method, and the disposal facility used.

a. Waterline and Sewerline Installation

i. Scope of Works

1. Site Preparation:
    a. Inspect the site and existing water and sewer lines to determine the most appropriate tapping points.
    b. Mark the areas where the new waterline and sewerline systems will be installed.
2. Waterline Installation:
    a. Supply and install PPR pipes and fittings for the waterline system.
    b. Lay the PPR pipes along the designated routes, ensuring proper alignment and support.
    c. Connect the PPR pipes to the existing waterline system at the identified tapping points.
    d. Test the waterline system for leaks and ensure proper functioning.
3. Sewerline Installation:
    a. Supply and install PVC series 600 pipes and fittings for the sewerline system.
    b. Lay the PVC pipes along the designated routes, ensuring proper slope and alignment for efficient drainage.
    c. Connect the PVC pipes to the existing sewerline system at the identified tapping points.
    d. Test the sewerline system for blockages and ensure proper functioning.
4. Declogging of Lines:
    a. In case the tapping points are non-functional due to

blockages, the contractor shall declog the lines using appropriate equipment and methods.
    b. Ensure the lines are clear and functional before connecting the new pipes.
5. Final Testing and Commissioning:
    a. Conduct a final test of the installed waterline and sewerline systems to ensure they are leak-free and functioning correctly.
    b. Make any necessary adjustments to the system to meet project specifications and standards.

ii. Material Specifications
1. PPR Pipes (for Waterline System):
    a. Type: Polypropylene Random (PPR) pipes and fittings.
    b. Diameter: As per the project design and specifications.
    c. Pressure Rating: Suitable for the specified water pressure requirements.
    d. Temperature Rating: Suitable for both hot and cold water applications.
2. PVC Series 600 Pipes (for Sewerline System):
    a. Type: PVC series 600 pipes and fittings.
    b. Diameter: As per the project design and specifications.
    c. Load Rating: Capable of handling the specified waste loads.
    d. Slope: Ensured for efficient drainage and prevention of backflow.
3. Fittings and Accessories:
    a. Appropriate PPR and PVC fittings, including elbows, tees, unions, and valves.
    b. Pipe hangers, supports, and clamps for securing the pipes in place.
4. Testing Equipment
    a. Pressure testing equipment for the waterline system.
    b. Drainage testing tools for the sewerline system.

iii. Quality Assurance
1. All materials must be sourced from reputable suppliers and accompanied by product certifications.
2. The installation must be performed by skilled workers with experience in plumbing and pipework.
3. The contractor must ensure that all connections are secure and leak-free.
4. All work must comply with relevant building codes, plumbing standards, and safety regulations.

iv. Safety and Compliance
1. The contractor must adhere to all safety standards and regulations during the installation process.
2. Personal protective equipment (PPE) must be provided to all workers.
3. Safety measures, such as barricades and warning signs, must be in place to prevent accidents in the work area.
4. Proper handling and storage of materials must be ensured to avoid damage or contamination.

v. Waste Management

1. The contractor must ensure that all waste materials, such as excess pipes, fittings, and packaging, are properly disposed of.
2. Non-reusable materials must be sorted and disposed of in accordance with local environmental regulations.
3. Reusable materials or surplus items should be turned over to the university with proper documentation.

a. Tiling Works
    i. Scope of Work
        1. Site Preparation
            a. Inspect the existing surfaces and remove any loose or damaged materials.
            b. Clean and level the surfaces to ensure proper adhesion of the tiles.
            c. Mark the layout for the installation of the wall and floor tiles.
        2. Tile Installation
            a. Wall Tiles (30x60 cm):
                i. Supply and install 30x60 cm wall tiles as per the approved specifications.
                ii. Ensure proper alignment and spacing between tiles using spacers.
                iii. Apply the recommended tile adhesive mixed with an approved adhesive additive to ensure full adhesion.
                iv. Grout the tiles after installation, ensuring clean and straight grout lines.
            b. Floor Tiles (30x30 cm):
                i. Supply and install 30x30 cm floor tiles as per the approved specifications.
                ii. Ensure proper alignment and spacing between tiles using spacers.
                iii. Apply the recommended tile adhesive mixed with an approved adhesive additive to ensure full adhesion.
                iv. Grout the tiles after installation, ensuring clean and straight grout lines.
        3. Finishing
            a. Clean all installed tiles, removing excess grout and adhesive.
            b. Ensure all tiles are properly secured and free from defects.
            c. Apply sealant if required by the tile specifications.
        4. Quality Control:
            a. Inspect the installed tiles for alignment, spacing, and overall appearance.
            b. Address any issues such as uneven tiles, gaps, or loose tiles immediately.
        5. Material Specifications
            a. Wall Tiles:
                i. Size: 30x60 cm
                ii. Material: As per university specifications or approved sample
                iii. Finish: As per university specifications or approved sample
            b. Floor Tiles:
                i. Size: 30x30 cm

ii. Material: As per university specifications or approved sample
iii. Finish: As per university specifications or approved sample

c. Tile Adhesive:
i. Use a high-quality tile adhesive suitable for the type of tiles being installed.
ii. Additive: Mix the tile adhesive with an approved additive to enhance adhesion and bonding strength.

d. Grout:
i. Use a grout that matches the tile color and is suitable for both wall and floor applications.

e. Sealant:
i. If required, use a sealant recommended for the specific type of tiles installed.

6. Quality Assurance
a. All materials must be sourced from reputable suppliers and accompanied by product certifications.
b. The installation must be performed by skilled workers with experience in tile setting.
c. The contractor must ensure that all tiles are properly aligned, secured, and free from defects.
d. All work must comply with relevant building codes, tiling standards, and safety regulations.

7. Safety and Compliance:
a. The contractor must adhere to all safety standards and regulations during the tiling process.
b. Personal protective equipment (PPE) must be provided to all workers.
c. Safety measures, such as barricades and warning signs, must be in place to prevent accidents in the work area.
d. Proper handling and storage of tiles and materials must be ensured to avoid damage or contamination.

8. Waste Management
a. The contractor must ensure that all waste materials, such as broken tiles and packaging, are properly disposed of.
b. Non-reusable materials must be sorted and disposed of in accordance with local environmental regulations.
c. Reusable materials or surplus items should be turned over to the university with proper documentation.

9. Approval Process:
a. If the contractor opts to submit a tile sample, it must be presented to the project management unit for approval before procurement and installation.
b. The project management unit reserves the right to approve or reject the submitted sample based on quality, design, and compatibility with the existing environment.

b. Installation of Fixtures
i. Scope of Work:
1. Site Preparation:
a. Inspect the designated areas for the installation of each

fixture.
b. Ensure that all plumbing and mounting surfaces are clean, level, and ready for installation.
c. Verify that water supply lines, drain lines, and mounting hardware are properly positioned and functional.

2. Installation:
   a. Water Closet:
      i. Supply and install the specified water closet.
      ii. Ensure proper alignment with the existing drainage system and secure the water closet to the floor using the recommended bolts and sealant.
      iii. Connect the water supply line and test for leaks.
      iv. Install the toilet seat and check for proper operation.
   b. Urinal:
      i. Supply and install the specified urinal with a top inlet.
      ii. Ensure proper alignment with the existing drainage system and secure the urinal to the wall using the recommended mounting hardware.
      iii. Connect the water supply line and test for leaks.
      iv. Install the flush valve and check for proper operation.
   c. Lavatory Sink:
      i. Supply and install the specified lavatory sink.
      ii. Secure the sink to the wall or countertop using the appropriate mounting hardware.
      iii. Connect the water supply lines to the faucet and the drain line to the waste pipe, ensuring proper seals and connections.
      iv. Install the faucet, test for leaks, and check for proper operation.
   d. Facial Mirror:
      i. Supply and install the specified facial mirror above the lavatory sink.
      ii. Ensure proper alignment and secure the mirror to the wall using the recommended mounting hardware.
      iii. Check that the mirror is securely fastened and positioned at the appropriate height.

3. Quality Control
   a. Inspect all installed fixtures for alignment, stability, and proper operation.
   b. Address any issues, such as leaks, misalignment, or loose fittings, immediately.

ii. Material Specifications

1. Water Closet:
   a. Material: Vitreous china
   b. Type: Siphonic, close-coupled, or equivalent
   c. Flush Mechanism: Dual flush system
   d. Finish: Glossy white
2. Urinal:
   a. Material: Vitreous china
   b. Type: Wall-hung with top inlet
   c. Flush Mechanism: Manual or sensor-activated flush valve

d. Finish: Glossy white

3. Lavatory Sink:
    a. Material: Vitreous china
    b. Type: Wall-mounted or countertop
    c. Faucet: Single-lever mixer with aerator
    d. Finish: Glossy white
4. Facial Mirror:
    a. Material: Glass with a beveled edge
    b. Size: As specified by the project management unit
    c. Mounting: Wall-mounted with concealed brackets or equivalent

iii. Quality Assurance

1. All materials and fixtures must be sourced from reputable suppliers and accompanied by product certifications.
2. The installation must be performed by skilled plumbers with experience in installing bathroom fixtures.
3. The contractor must ensure that all connections are secure, leak- free, and compliant with plumbing codes.
4. All work must comply with relevant building codes, plumbing standards, and safety regulations.

iv. Safety Compliance

1. The contractor must adhere to all safety standards and regulations during the installation process.
2. Personal protective equipment (PPE) must be provided to all workers.
3. Safety measures, such as barricades and warning signs, must be in place to prevent accidents in the work area.
4. Proper handling and storage of fixtures and materials must be ensured to avoid damage or contamination.

v. Waste Management

1. The contractor must ensure that all packaging materials and waste generated during the installation are properly disposed of.
2. Non-reusable materials must be sorted and disposed of in accordance with local environmental regulations.
3. Reusable materials or surplus items should be turned over to the university with proper documentation.

vi. Approval Process

1. The project management unit will inspect all installed fixtures upon completion.
2. Any issues identified during the inspection must be addressed by the contractor before final approval.

c. Painting of Wall and Ceiling

i. Scope of Work

1. Site Preparation:
    a. Inspect and clean all surfaces to be painted, ensuring they are free from dust, grease, and loose materials.
    b. Repair any damaged or uneven areas on the walls and ceilings.
    c. Mask off areas not to be painted, including fixtures, trims, and floors, to protect them from paint splatters.
2. Painting:

a. Wall Surface:
    i. Apply a primer coat to the wall surface if necessary to ensure proper adhesion of the latex paint.
    ii. Apply a high-quality flat latex paint to the walls in the specified color.
    iii. Ensure even coverage and a smooth finish with no visible streaks or roller marks.
b. Ceiling Surface:
    i. Apply a primer coat to the ceiling surface if necessary to ensure proper adhesion of the enamel paint.
    ii. Apply a quick-drying enamel paint to the ceiling in the specified color.
    iii. Ensure even coverage and a smooth, durable finish.

3. Finishing:
    a. Inspect all painted surfaces for uniformity, coverage, and quality of finish.
    b. Touch up any areas with incomplete coverage or visible defects.
    c. Remove masking tape and protective coverings carefully to avoid damaging the painted surfaces.
    d. Clean up all painting tools and materials, and dispose of any waste in accordance with local regulations.

ii. Material Specifications
1. Wall Paint:
    a. Type: Flat latex finish
    b. Quality: Premium-grade, washable, and mildew-resistant
    c. Color: As specified by the project management unit or approved sample
2. Ceiling Paint:
    a. Type: Quick-drying enamel
    b. Quality: High-performance, durable, and stain-resistant
    c. Color: As specified by the project management unit or approved sample.

iii. Quality Assurance
1. Wall Paint:
    a. Type: Flat latex finish
    b. Quality: Premium-grade, washable, and mildew-resistant
    c. Color: As specified by the project management unit or approved sample
2. Ceiling Paint:
    a. Type: Quick-drying enamel
    b. Quality: High-performance, durable, and stain-resistant
    c. Color: As specified by the project management unit or approved sample.

iv. Safety and Compliance:

1. The contractor must adhere to all safety standards and regulations during the painting process.
2. Personal protective equipment (PPE) must be provided to all workers.
3. Safety measures, such as proper ventilation and the use of non-toxic paints, must be in place to ensure a safe working environment.

4. Proper handling and storage of painting materials must be ensured to avoid damage or contamination.

v. Waste Management:

1. The contractor must ensure that all paint cans, brushes, rollers, and other materials are properly cleaned and disposed of in accordance with local environmental regulations.
2. Waste materials, such as paint cans and used brushes, must be disposed of responsibly.
3. Reusable materials or surplus paint should be turned over to the university with proper documentation.

vi. Approval Process:

1. The project management unit will inspect the painted surfaces upon completion.
2. Any issues identified during the inspection must be addressed by the contractor before final approval.

8. Electrical Works-Replacement of Lighting Fixtures and Switches
    a. Scope of Work
        i. Site Preparation:
            1. Inspect the existing lighting fixtures and switch devices.
            2. Ensure all power sources are turned off before starting work.
            3. Remove and properly dispose of old lighting fixtures and switch devices.
        ii. Installation:
            1. Gymnasium:
                a. Install 150-watt high bay lights.
                b. Ensure proper mounting and alignment of fixtures.
                c. Connect the high bay lights to the existing electrical system, ensuring all connections are secure and compliant with electrical codes.
                d. Test the installation to verify functionality and adjust as needed.
            2. Toilets:
                a. Install 18-watt slim panel lights.
                b. Ensure proper mounting and alignment of fixtures.
                c. Connect the slim panel lights to the existing electrical system, ensuring all connections are secure and compliant with electrical codes.
                d. Test the installation to verify functionality and adjust as needed.
                e. Install 12-watt LED flat bulb lights.
                f. Ensure proper installation and secure connection to the existing electrical system.
                g. Test the installation to verify functionality and adjust as needed.
            3. Switch Devices:
                a. Remove and replace old switch devices with new switches.
                b. Ensure switches are compatible with the existing wiring and fixtures.
                c. Install the new switches securely and ensure proper functionality.

d. Test the switches to verify proper operation.

iii. Quality Control:

1. Inspect all installed fixtures and switches for proper operation and alignment.
2. Verify that all electrical connections are secure and compliant with safety standards.
3. Address any issues such as flickering lights or faulty switches immediately.

b. Material Specifications

i. Gymnasium Lights:

1. Type: High bay lights
2. Wattage: 150 watts
3. Features: High lumen output, durable housing suitable for gym environments
4. Finish: As specified by the project management unit or approved sample

ii. Toilet Lights:

1. Type: Slim panel lights
2. Wattage: 18 watts
3. Features: Energy-efficient, low-profile design
4. Finish: As specified by the project management unit or approved sample
5. Type: LED flat bulb lights
6. Wattage: 12 watts
7. Features: Energy-efficient, long-lasting
8. Finish: As specified by the project management unit or approved sample

iii. Switch Devices:

1. Type: Single-pole or multi-pole switches as needed
2. Features: Durable, easy to operate, compatible with existing wiring
3. Finish: As specified by the project management unit or approved sample

c. Quality Assurance

i. All lighting fixtures, switch devices, and materials must be sourced from reputable suppliers and meet the required quality standards.
ii. Electrical work must be performed by licensed electricians with experience in installing commercial lighting and switch systems.
iii. All installations must comply with relevant electrical codes and safety standards.
iv. All fixtures and switches must be tested for proper operation before final acceptance.

d. Safety and Compliance:

i. The contractor must adhere to all safety standards and regulations during the installation process.
ii. Personal protective equipment (PPE) must be provided to all workers.
iii. Ensure proper handling and installation of electrical components to prevent hazards.
iv. Follow all applicable electrical codes and standards to ensure safety and compliance.

e. Waste Management:

i. The contractor must properly dispose of all removed lighting fixtures, switch

devices, and materials in accordance with local regulations.
ii. Reusable or recyclable materials should be sorted and disposed of responsibly.
iii. Any surplus or unused lighting fixtures and switch devices must be turned over to the university with proper documentation.

f. Approval Process:
i. The project management unit will inspect the installed lighting fixtures and switch devices upon completion.
ii. Any issues identified during the inspection must be addressed by the contractor before final approval.

V. MINIMUM REQUIREMENTS FOR SAFETY AND HEALTH PROGRAM:

1. Safety Management System:
   a. *Safety Policy*: Develop and document a safety policy outlining the organization's commitment to health and safety, particularly considering the presence of faculty, students, and other stakeholders.
   b. *Objectives:* Define clear safety objectives and goals aligned with organizational priorities and the educational environment.
   c. *Responsibilities*: Assign safety responsibilities and designate an Occupational Safety Officer or Project Safety Officer. This individual should have relevant training certified by the Department of Labor and Employment (DOLE) and be the point person for safety protocols. This role may be filled by the assigned project engineer if suitably qualified.
2. Risk Assessment and Management:
   a. *Hazard Identification*: Conduct regular hazard assessments to identify potential safety risks and health hazards in the workplace.
   b. *Risk Evaluation*: Evaluate the risks associated with identified hazards and their potential impact on students, faculty, and other stakeholders.
   c. *Control Measures:* Implement appropriate control measures to mitigate or eliminate identified risks, including physical barriers, signage, and restricted access to hazardous areas.
3. Safety Training and Education:
   a. *Orientation*: Provide safety orientation and training for all new employees and contractors, emphasizing the unique environment of the educational institution.
   b. *Ongoing Training*: Offer regular safety training and refresher courses for all employees on relevant topics, including emergency procedures and hazard recognition, with a focus on interacting safely in an environment with students and faculty (if necessary).
   c. *Specialized Training:* Provide additional training for employees exposed to specific hazards or using specialized equipment (if necessary).
4. Personal Protective Equipment (PPE):
   a. *Provision*: Provide appropriate PPE to employees based on the identified hazards.
   b. *Use and Maintenance*: Ensure that employees use PPE correctly and that it is

maintained in good condition.

c. *Training*: Train employees on the proper use, maintenance, and storage of PPE (if necessary).

5. Emergency Preparedness and Response:
    a. *Emergency Plan*: Develop and document an emergency response plan specific to the educational institution, covering scenarios such as evacuations involving students and faculty.
    b. *Drills*: Conduct regular emergency drills in coordination with the institution's existing emergency procedures to ensure effective response by both construction personnel and institution stakeholders (if necessary).
    c. *Emergency Contacts*: Maintain a list of emergency contacts and make it accessible to all employees.
6. Incident Reporting and Investigation:
    a. *Reporting System*: Establish a system for reporting workplace incidents, injuries, and near-misses.
    b. *Investigation*: Investigate all incidents to determine causes and implement corrective actions to prevent recurrence.
    c. *Documentation*: Maintain records of incidents, investigations, and corrective actions taken.
7. Health and Safety Inspections:
    a. *Routine Inspections*: Conduct regular safety inspections of the workplace to identify and address potential hazards, particularly those affecting areas frequented by students and faculty.
    b. *Inspection Records*: Document inspection findings and ensure that corrective actions are taken.
8. Health and Wellness Programs:
    a. *Health Monitoring*: Implement programs for monitoring employee health and wellness, including pre-employment and periodic health checks.
    b. *Wellness Programs*: Offer wellness programs and resources to promote employee well-being and reduce workplace stress.
9. Compliance and Legal Requirements:
    a. *Regulatory Compliance*: Ensure compliance with relevant local, national, and international health and safety regulations and standards.
    b. *Documentation*: Keep up-to-date records of compliance, including permits, licenses, and safety certifications.
10. Communication and Involvement:
    a. *Safety Meetings:* Hold regular safety meetings to discuss safety issues, share information, and engage employees in the safety program, with consideration for the educational setting.
    b. *Feedback*: Encourage and provide channels for employees to provide feedback on safety matters and participate in safety initiatives.
11. Documentation and Record-Keeping:
    a. *Safety Records*: Maintain comprehensive records related to safety training, incident reports, inspections, and risk assessments.

b. *Accessibility:* Ensure that safety documentation is readily accessible to employees, students, faculty, and relevant authorities.

12. Contractor Responsibilities:
    a. *Safety Precautions*: The contractor must observe proper safety precautions to protect faculty, students, and other stakeholders in the vicinity. This includes implementing physical barriers, clear signage, and restricted access to construction zones.
    b. *Communication*: Coordinate with the institution to ensure that construction activities are conducted in a manner that minimizes disruption to academic activities and ensures the safety of all individuals on site.

VI. REPORTORIAL REQUIREMENT:

Upon acceptance of the Notice to Proceed, the Contractor is required to submit the following documentation in Microsoft Word or an equivalent format:

Project Schedule:

- A detailed project schedule in the form of a bar chart, outlining all significant phases and milestones of the project.
- The schedule should clearly indicate the start and end dates for each phase, including any critical paths that may affect the project's timeline.
- Any dependencies or sequential tasks must be highlighted to ensure clarity in project execution.

Manpower Schedule:

- A corresponding manpower schedule that aligns with the project schedule, detailing the number and type of personnel required for each phase of the project.
- The manpower schedule should reflect the planned allocation of labor resources, ensuring that sufficient personnel are available to meet the project deadlines.
- Include information on work shifts, if applicable, and any planned overtime or special work arrangements.

Construction/Repair Methodology:

- A comprehensive construction/repair methodology detailing the step-by-step approach that will be taken to complete the project.
- The methodology should cover all critical tasks, including but not limited to site preparation, material handling, installation processes, safety protocols, and quality control measures.
- Consideration must be given to minimizing disruptions to the educational institution’s operations, ensuring safety for all stakeholders on site, and addressing any

environmental concerns.

All documentation must be submitted within seven [7] days of receiving the Notice to Proceed. These documents will be subject to review and approval by the Project Management Unit before any construction activities commence.

VII. PROJECT COMPLETION:

The contractor shall complete the repair project within thirty (30) calendar days taking into account the unfavorable weather conditions.

VIII. WARRANTY:

The contractor shall guarantee the completed structure against structural defects and failure for its satisfactory performance vis-à-vis the prescribed Minimum Performance Standards and Specifications (MPSS) during the lifetime of the structure.

MINIMUM PERFORMANCE STANDARDS AND SPECIFICATIONS for the REPAIR OF FUNCTION HALL-(LOT 3)

URS MORONG CAMPUS

I. PROJECT BACKGROUND:

The Function Hall at the University of Rizal System (URS) Morong Campus has been identified as requiring significant rehabilitation to enhance its functionality, safety, and aesthetic appeal. Over time, the hall has experienced wear and tear, particularly in the window treatments and flooring. The existing curtains have not only deteriorated but also no longer meet the desired visual standards for the space. To modernize the facility and improve its overall ambiance, the project will involve replacing the existing curtains with combi blinds, which offer a more contemporary and visually appealing solution.

In addition to the window treatment upgrade, the flooring has become worn and damaged, necessitating the installation of new 60x120 cm floor tiles. These updates will ensure that the Function Hall remains a safe, durable, and attractive venue for various academic, administrative, and social events.

II. PROJECT OBJECTIVES:

- *Modernization*: Upgrade the Function Hall by replacing outdated curtains with modern, functional combi blinds that offer enhanced light control and privacy.
- *Durability*: Ensure that the new window treatments are durable and capable of withstanding regular use in a high-traffic environment.
- *Aesthetic Improvement*: Enhance the visual appeal of the Function Hall, creating a more inviting and professional atmosphere for various events and functions.
- *Efficiency*: Provide a more efficient window treatment solution that allows for easy adjustment and maintenance, improving the overall user experience.

III. PROJECT SITE:

The rehabilitation works will take place at the Function Hall of the University of Rizal System (URS) Morong Campus, located in Morong, Rizal. The Function Hall is a multi-purpose facility used for various academic, administrative, and social events. The hall's strategic location within the campus makes it a central venue for activities, necessitating the need for modern, reliable,

and visually appealing infrastructure.

IV. PROJECT SPECIFICATIONS AND WORK METHODOLOGIES:

The Contractor is required to perform the following scope of work:

1. Project Billboard/ Sign Board:
    a. *Material*: The billboard/sign board shall be constructed using approved materials that are durable and weather-resistant. All materials must be of high-quality and suitable for outdoor use.
    b. *Dimensions*: The billboard/sign board should have standard dimensions as required by local regulations or as specified by the project owner. Typically, the dimensions might range around 4 feet by 8 feet, or as per project specifications.
    c. *Content*: The content on the billboard/sign board must include the project name, location, owner, contractor, project duration, start and end dates, and any other pertinent information. The text should be clearly legible, using a professional font and color scheme that contrasts with the background for maximum visibility.
    d. *Placement*: The billboard/sign board must be installed in a conspicuous location at the project site, easily visible to the public and project stakeholders. It should be securely mounted and maintained in good condition throughout the entire duration of the project.
    e. *Duration*: The billboard/sign board should remain in place and be well-maintained from the start of the project until its completion and final acceptance by the owner.
2. Mobilization/Demobilization:
    a. *Mobilization*: The general contractor is responsible for the efficient and timely setup of all necessary project facilities, equipment, and temporary utilities required for the execution of the project. This includes but is not limited to site offices, storage areas, worker accommodations (if applicable), safety barriers, and temporary power and water supplies. All setup activities must comply with relevant safety and environmental regulations.
    b. *Demobilization*: Upon completion of the project, the general contractor is responsible for the orderly dismantling and removal of all temporary facilities, equipment, and materials brought onto the site for the project. The contractor must ensure that the site is restored to its original condition or as specified in the contract. This includes the removal of debris, temporary structures, and any hazardous materials. Final site cleanup must be performed to the satisfaction of the project owner.
    c. *Timeline*: Mobilization should be completed before the commencement of construction activities and within the timeline specified in the project schedule. Demobilization should occur immediately following project completion and acceptance, ensuring no unnecessary delays.
3. Permits and Clearances (if necessary):
    a. *Responsibility*: The general contractor shall be solely responsible for obtaining all

necessary permits and clearances required for the execution of the project. This includes, but is not limited to, building permits, environmental clearances, safety certifications, and any other approvals mandated by local and national statutory laws and regulations.

b. *Compliance*: The contractor must ensure full compliance with all relevant laws, ordinances, and regulations throughout the project duration. This includes adhering to the requirements set forth by local government units, regulatory agencies, and other authorities having jurisdiction over the project.
c. *Documentation*: Copies of all permits and clearances must be submitted to the project owner before the commencement of any construction activities. The contractor must maintain a complete and up-to-date record of all permits and clearances on-site and make them available for inspection upon request by the project owner or regulatory authorities.
d. *Timeline*: All required permits and clearances must be secured within the timeline specified in the project schedule to avoid any delays in the start of construction. The contractor must promptly address any issues or delays in obtaining the necessary permits to ensure the project proceeds as planned.

4. Tiling Works
    a. Scope of Work:
        i. Scope of Work
        The scope of this work includes the supply, installation, grouting, and finishing of 60x120 cm floor tiles in the function hall. The contractor is required to ensure that the installation adheres to the highest standards, capable of withstanding heavy foot traffic.
    b. Materials Specification:
        i. *Tile Size*: 60x120 cm
        ii. *Tile Type*: Porcelain or equivalent, designed for heavy-duty applications
        iii. *Tile Adhesive*: Heavy-duty, high-performance tile adhesive suitable for large format tiles, as recommended by the tile manufacturer.
        iv. *Tile Additive*: Use of a compatible tile additive to enhance bonding strength, as specified by the manufacturer.
        v. *Tile Grout*: High-performance, water-resistant grout suitable for heavy traffic areas. The grout must be compatible with the selected tile and adhesive, and it should provide durability and resistance to cracking and staining.
    c. Installation Procedure:
        i. *Surface Preparation*: Ensure that the substrate is clean, level, and free from any contaminants before the application of the adhesive.
        ii. *Mixing of Adhesive*: Follow the manufacturer's instructions for mixing the tile adhesive and additive. Ensure proper consistency to support the large format tiles.
        iii. *Application of Adhesive*: Apply the adhesive using a notched trowel as recommended by the adhesive manufacturer, ensuring full coverage beneath the tiles to avoid voids.
    d. Tile Installation:

i. Place the tiles with appropriate spacing for grout lines, ensuring alignment and levelness across the entire floor.
ii. Use tile spacers to maintain consistent grout joints.
iii. Ensure that tiles are pressed firmly into the adhesive to avoid air pockets.

e. Grouting
    i. Once the adhesive has cured, apply grout as per the manufacturer's recommendations. Ensure that the grout is applied evenly and penetrates all joints fully.
    ii. Clean the tiles immediately after grouting to avoid staining, and ensure that the grout lines are smooth and consistent.
    iii. Allow the grout to cure according to the manufacturer's instructions before allowing any foot traffic.
f. Compliance with Manufacturer's Manual
    i. All procedures for adhesive and grout mixing, application, and curing times must strictly follow the manufacturer's manual. Any deviation must be approved in writing by the project Management Unit of URS.
g. Traffic Considerations
    i. The tiles, adhesive, and grout used must be suitable for heavy traffic areas. The contractor must ensure that the tiling works can handle the expected load without failure.
    ii. Foot traffic should only be allowed after the adhesive and grout have fully cured, as specified by the manufacturer.
h. Quality Assurance
    i. Regular inspections must be carried out during the installation process to ensure adherence to specifications and quality standards.
    ii. Any defective work or non-compliance will be rectified by the contractor at no additional cost.
i. Warranties
    i. *Material Warranty*: The contractor shall provide a minimum of a 1-year warranty on all materials supplied, including tiles, adhesive, and grout, ensuring that they are free from defects in material and workmanship under normal use.
    ii. *Workmanship Warranty*: The contractor shall provide a minimum of a 1-year warranty on the workmanship, covering any defects in installation, such as tile displacement, cracking, or grout deterioration.
    iii. Warranty Terms:
        1. During the warranty period, any defects or failures in the materials or workmanship shall be repaired or replaced by the contractor at no additional cost to the owner.
        2. The warranty shall commence upon the final acceptance of the completed tiling works by the Project Management Unit of URS.
        3. The contractor shall respond to any warranty claims within 7 days of notification and shall complete any necessary repairs within 30 days unless otherwise agreed.

5. Removal of Curtains and Installation of Combi Blinds
    a. Scope of Work
        i. The scope of this work includes the removal of existing curtains, the installation of new combi blinds on windows, and the turnover of the removed curtains to the university.
    b. Materials Specification
        i. Curtains: All existing curtains, including rods, hooks, and any related hardware, are to be removed.
        ii. Combi Blinds:
            1. *Type*: Dual-layered combi blinds with alternating sheer and opaque fabric.
            2. *Material*: High-quality, durable fabric suitable for long-term use.
            3. *Color*: To be selected by the university from the contractor's samples, ensuring consistency with the interior design of the space.
            4. *Operating Mechanism*: Smooth and reliable manual or motorized system, depending on the specifications provided by the university.
    c. Removal of Curtains
        i. Procedure:
            1. Carefully remove all curtains, ensuring that no damage is caused to the windows, walls, or surrounding areas.
            2. Remove all hardware associated with the curtains, including rods, hooks, and brackets.
            3. Any holes or marks left by the removal of hardware must be patched, sanded, and painted to match the existing wall color.
        ii. Turnover:
            1. All removed curtains, along with any hardware, shall be neatly packaged and turned over to the university.
            2. The turnover must be documented and acknowledged by a university representative.
    d. Installation of Combi Blinds
        i. Preparation:
            1. Measure all windows accurately to ensure the proper fit of the combi blinds.
            2. Verify the selected colors and styles with the university before installation.
        ii. Installation Procedure:
            1. Install the combi blinds according to the manufacturer's instructions, ensuring proper alignment and secure attachment.
            2. Ensure that the operating mechanism (manual or motorized) functions smoothly and reliably.
            3. Adjust the blinds to ensure they operate without obstruction and provide the desired level of light control and privacy.
    e. Quality Assurance
        i. Inspection:
            1. All work shall be subject to inspection by the university's project manager to ensure compliance with specifications.
            2. Any defects or non-compliance issues identified during the inspection must be corrected by the contractor at no additional cost to the university.
    f. Safety and Workmanship

i. The contractor must ensure that all work is performed in a safe manner, adhering to all relevant Occupational Safety and Health regulations.
ii. Proper protective gear must be worn by workers during the removal and installation process.

g. Warranties
i. *Material Warranty*: The contractor shall provide a minimum of a 1-year warranty on the combi blinds and associated hardware, ensuring that they are free from defects in material and workmanship under normal use.
ii. *Workmanship Warranty*: The contractor shall provide a minimum of a 1-year warranty on the installation, covering any defects in the mounting or operation of the combi blinds.

h. Turnover and Final Acceptance
i. Upon completion of the installation, the contractor shall conduct a walkthrough with the university's representative to ensure satisfaction with the work.
ii. The removed curtains and hardware must be turned over to the university before final acceptance of the project.

6. Replacement of Main Door Panel
a. Scope of Work
i. This project involves the removal of the existing sling door and the installation of a new frameless glass swing door made of 12mm thick tempered glass mounted on patch fittings.

b. Materials Specification
i. *Existing Door*: The current sling door, along with its associated hardware, is to be removed.
ii. New Door:
1. *Type*: Frameless glass swing door.
2. *Glass Specification*: 12mm thick, clear, tempered glass, compliant with safety standards.
3. *Fittings*: High-quality, corrosion-resistant patch fittings suitable for 12mm thick glass. The fittings should be capable of supporting the weight of the glass and providing smooth operation.
4. *Handles*: Stainless steel handles, design to be confirmed by the university, with a finish that complements the overall aesthetic.

c. Removal of Existing Sling Door
i. Procedure
1. Carefully remove the existing sling door, including the door panel, frame, and all associated hardware.
2. Ensure that the removal does not cause any damage to the surrounding walls, floor, or ceiling.
3. Patch and repair any areas where the sling door and its hardware were installed to ensure a smooth and clean surface for the new door installation.
ii. Turnover
1. The removed door panel, frame, and hardware shall be neatly packaged and turned over to the university.
2. The turnover must be documented and acknowledged by a university representative.

d. Installation of Frameless Glass Swing Door
i. Preparation
1. Verify the dimensions and structural integrity of the door opening to

ensure it can accommodate the frameless glass swing door.
2. Make any necessary adjustments to the door frame or surrounding structure to ensure a perfect fit.

ii. Installation Procedure:
1. Install the patch fittings securely to support the weight of the 12mm thick tempered glass.
2. Mount the glass door onto the fittings, ensuring proper alignment and secure attachment.
3. Install the handles and any other hardware, ensuring they are firmly secured and function smoothly.
4. Adjust the door to ensure smooth opening and closing, with no obstructions or misalignment.
5. Check the door's operation to ensure it swings correctly and returns to the closed position without issue.

iii. Quality Assurance
1. Inspection
a. The installation will be inspected by the university's project manager to ensure that all work meets the specified standards.
b. Any defects or issues identified during the inspection must be rectified by the contractor at no additional cost to the university.

iv. Safety and Workmanship
1. The contractor must ensure that all work is carried out safely, adhering to relevant Occupational Safety and Health regulations.
2. Workers must use proper protective equipment during the installation process.

v. Warranties
1. *Material Warranty*: The contractor shall provide a minimum of a 1-year warranty on the glass and fittings, ensuring they are free from defects in material and workmanship under normal use.
2. *Workmanship Warranty*: The contractor shall provide a minimum of a 1-year warranty on the installation, covering any defects in mounting, alignment, or operation of the door.

vi. Final Acceptance
1. Upon completion, the contractor shall conduct a walkthrough with the university's representative to ensure satisfaction with the installation.
2. The project will only be considered complete once the university's representative has approved the work and the removed door panel and frame have been successfully turned over to the university.

7. Replacement of Damaged Urinal
a. Scope of Work
i. This project involves the replacement of the existing damaged urinal with a new urinal that meets the specified standards. The removed urinal is to be turned over to the university.

b. Materials Specification
i. New Urinal:
1. *Type*: Top inlet urinal.
2. *Finish:* Glossy.
3. *Material*: Vitreous china, which is durable, non-porous, and has a smooth finish for easy cleaning and maintenance.

ii. Existing Urinal:
    1. The existing urinal, which is damaged, will be carefully removed.

c. Removal of Damaged Urinal
    i. Procedure:
        1. Carefully disconnect and remove the damaged urinal, including all associated fixtures and fittings.
        2. Ensure that the removal process does not cause damage to the surrounding tiles, plumbing, or wall structure.
        3. Patch and repair any areas that require attention following the removal to ensure a clean installation surface for the new urinal.
    ii. Turnover:
        1. The removed urinal shall be cleaned and prepared for turnover to the university.
        2. The turnover process must be documented and acknowledged by a university representative.

d. Installation of New Urinal
    i. Preparation:
        1. Ensure that the plumbing system is in good condition and compatible with the new top inlet urinal.
        2. Make any necessary adjustments to the plumbing or wall structure to accommodate the new urinal.
    ii. Installation Procedure:
        1. Install the new urinal according to the manufacturer's guidelines, ensuring secure and proper alignment.
        2. All connections, including the top inlet, must be leak-proof and compliant with local plumbing codes.
        3. Test the urinal after installation to ensure it is functioning correctly, with proper water flow and drainage.

e. Quality Assurance
    i. Inspection:
        1. The installation will be inspected by the university’s project manager to ensure it meets the specified standards.
        2. Any defects or issues identified during the inspection must be rectified by the contractor at no additional cost to the university.

f. Safety and Workmanship
    i. The contractor must ensure that all work is carried out safely, adhering to relevant Occupational Safety and Health regulations.
    ii. Workers must use proper protective equipment during the removal and installation processes.

g. Warranties
    i. Material Warranty: The contractor shall provide a minimum of a 1-year warranty on the new urinal, ensuring it is free from defects in material and workmanship under normal use.
    ii. Workmanship Warranty: The contractor shall provide a minimum of a 1-year warranty on the installation, covering any defects in the installation process, including leaks or improper alignment.

h. Final Acceptance
    i. Upon completion, the contractor shall conduct a walkthrough with the university’s representative to ensure satisfaction with the installation.
    ii. The project will only be considered complete once the university’s representative has approved the work and the removed urinal has been

successfully turned over to the university.

8. Replacement of Busted Lighting Fixtures
    a. Scope of Work
        i. This project involves the replacement of all busted lighting fixtures at the hall area, ensuring that the new fixtures meet the specified requirements, including the installation of 9-watt LED bulbs. The project also includes the careful disposal of the removed, busted light bulbs.
    b. Material Specifications
        i. New Lighting Fixtures:
            1. *Bulb Type*: LED
            2. *Wattage*: 9 watts
            3. *Color Temperature*: 35000K-4500K (cool white) to provide a bright, clear lighting environment suitable for the hall area.
            4. *Fixture Design*: The fixture should be compatible with the 9-watt LED bulbs, aesthetically pleasing, durable, and suitable for the hall's interior decor.
            5. *Certifications*: All new fixtures must be certified for safety and energy efficiency, complying with local electrical standards.
        ii. Busted Light Bulbs:
            1. Removed bulbs that are non-functional will be carefully handled to prevent breakage or release of any hazardous substances.
    c. 3. Removal of Busted Lighting Fixtures
        i. Procedure:
            1. Carefully remove all busted lighting fixtures, including the bulbs and associated hardware.
            2. Ensure that the removal process does not cause damage to the ceiling, wiring, or surrounding areas.
            3. Inspect the wiring and electrical connections to ensure they are in good condition and safe for the installation of new fixtures.
        ii. Disposal:
            1. The busted light bulbs shall be disposed of with care, following environmental and safety regulations.
            2. Disposal should be conducted in a manner that prevents the release of hazardous materials, such as mercury, if present in the bulbs.
            3. Documentation of proper disposal methods must be provided to the university.
    d. Installation of New Lighting Fixtures
        i. Preparation:
            1. Verify the electrical connections and ensure they are compatible with the new 9-watt LED bulbs and fixtures.
            2. Make any necessary repairs or adjustments to the wiring or mounting surfaces before installation.
        ii. Installation Procedure:
            1. Install the new lighting fixtures according to the manufacturer's guidelines, ensuring secure and proper alignment.
            2. Test all electrical connections to ensure the fixtures are functioning correctly, with no flickering or dimming issues.
            3. Ensure that the installed lighting provides even and adequate illumination across the hall area.
    e. Quality Assurance
        i. Inspection:

1. The installation will be inspected by the university's project manager to ensure it meets the specified standards.
2. Any defects or issues identified during the inspection must be rectified by the contractor at no additional cost to the university.

f. Safety and Workmanship
   i. The contractor must ensure that all work is carried out safely, adhering to relevant Occupational Safety and Health regulations.
   ii. Workers must use proper protective equipment during the removal and installation processes.
   iii. The handling and disposal of busted light bulbs must follow safety protocols to prevent any health risks or environmental harm.

g. Warranties
   i. *Material Warranty*: The contractor shall provide a minimum of a 1-year warranty on the new lighting fixtures and LED bulbs, ensuring they are free from defects in material and workmanship under normal use.
   ii. *Workmanship Warranty*: The contractor shall provide a minimum of a 1-year warranty on the installation, covering any defects in the installation process, including wiring issues or fixture malfunctions.

h. Final Acceptance
   i. Upon completion, the contractor shall conduct a walkthrough with the university's representative to ensure satisfaction with the installation.
   ii. The project will only be considered complete once the university's representative has approved the work and documentation of proper disposal of the busted light bulbs has been submitted.

V. MINIMUM REQUIREMENTS FOR SAFETY AND HEALTH PROGRAM:

1. Safety Management System:
   a. Safety Policy: Develop and document a safety policy outlining the organization's commitment to health and safety, particularly considering the presence of faculty, students, and other stakeholders.
   b. Objectives: Define clear safety objectives and goals aligned with organizational priorities and the educational environment.
   c. Responsibilities: Assign safety responsibilities and designate an Occupational Safety Officer or Project Safety Officer. This individual should have relevant training certified by the Department of Labor and Employment (DOLE) and be the point person for safety protocols. This role may be filled by the assigned project engineer if suitably qualified.
2. Risk Assessment and Management:
   a. Hazard Identification: Conduct regular hazard assessments to identify potential safety risks and health hazards in the workplace.
   b. Risk Evaluation: Evaluate the risks associated with identified hazards and their potential impact on students, faculty, and other stakeholders.
   c. Control Measures: Implement appropriate control measures to mitigate or eliminate identified risks, including physical barriers, signage, and restricted access to hazardous areas.

3. Safety Training and Education:
    a. Orientation: Provide safety orientation and training for all new employees and contractors, emphasizing the unique environment of the educational institution.
    b. Ongoing Training: Offer regular safety training and refresher courses for all employees on relevant topics, including emergency procedures and hazard recognition, with a focus on interacting safely in an environment with students and faculty (if necessary).
    c. Specialized Training: Provide additional training for employees exposed to specific hazards or using specialized equipment (if necessary).
4. Personal Protective Equipment (PPE):
    a. Provision: Provide appropriate PPE to employees based on the identified hazards.
    b. Use and Maintenance: Ensure that employees use PPE correctly and that it is maintained in good condition.
    c. Training: Train employees on the proper use, maintenance, and storage of PPE (if necessary).
5. Emergency Preparedness and Response:
    a. Emergency Plan: Develop and document an emergency response plan specific to the educational institution, covering scenarios such as evacuations involving students and faculty.
    b. Drills: Conduct regular emergency drills in coordination with the institution's existing emergency procedures to ensure effective response by both construction personnel and institution stakeholders (if necessary).
    c. Emergency Contacts: Maintain a list of emergency contacts and make it accessible to all employees.
6. Incident Reporting and Investigation:
    a. Reporting System: Establish a system for reporting workplace incidents, injuries, and near-misses.
    b. Investigation: Investigate all incidents to determine causes and implement corrective actions to prevent recurrence.
    c. Documentation: Maintain records of incidents, investigations, and corrective actions taken.
7. Health and Safety Inspections:
    a. Routine Inspections: Conduct regular safety inspections of the workplace to Identify and address potential hazards, particularly those affecting areas frequented by students and faculty.
    b. Inspection Records: Document inspection findings and ensure that corrective actions are taken.
8. Health and Wellness Programs:
    a. Health Monitoring: Implement programs for monitoring employee health and wellness, including pre-employment and periodic health checks.
    b. Wellness Programs: Offer wellness programs and resources to promote employee well-being and reduce workplace stress.
9. Compliance and Legal Requirements:
    a. Regulatory Compliance: Ensure compliance with relevant local, national, and international health and safety regulations and standards.
    b. Documentation: Keep up-to-date records of compliance, including permits, licenses, and safety certifications.
10. Communication and Involvement:
    a. Safety Meetings: Hold regular safety meetings to discuss safety issues, share information, and engage employees in the safety program, with consideration for the educational setting.

b. Feedback: Encourage and provide channels for employees to provide feedback on safety matters and participate in safety initiatives.

11. Documentation and Record-Keeping:
    a. Safety Records: Maintain comprehensive records related to safety training, incident reports, inspections, and risk assessments.
    b. Accessibility: Ensure that safety documentation is readily accessible to employees, students, faculty, and relevant authorities.
12. Contractor Responsibilities:
    a. Safety Precautions: The contractor must observe proper safety precautions to protect faculty, students, and other stakeholders in the vicinity. This includes implementing physical barriers, clear signage, and restricted access to construction zones.
    b. Communication: Coordinate with the institution to ensure that construction activities are conducted in a manner that minimizes disruption to academic activities and ensures the safety of all individuals on site.

VI. REPORTORIAL REQUIREMENT:

Upon acceptance of the Notice to Proceed, the Contractor is required to submit the following documentation in Microsoft Word or an equivalent format:

Project Schedule:

- A detailed project schedule in the form of a bar chart, outlining all significant phases and milestones of the project.
- The schedule should clearly indicate the start and end dates for each phase, including any critical paths that may affect the project's timeline.
- Any dependencies or sequential tasks must be highlighted to ensure clarity in project execution.

Manpower Schedule:

- A corresponding manpower schedule that aligns with the project schedule, detailing the number and type of personnel required for each phase of the project.
- The manpower schedule should reflect the planned allocation of labor resources, ensuring that sufficient personnel are available to meet the project deadlines.
- Include information on work shifts, if applicable, and any planned overtime or special work arrangements.

Construction/Repair Methodology:

- A comprehensive construction/repair methodology detailing the step-by-step approach that will be taken to complete the project.
- The methodology should cover all critical tasks, including but not limited to site preparation, material handling, installation processes, safety protocols, and quality control measures.
- Consideration must be given to minimizing disruptions to the educational institution’s operations, ensuring safety for all stakeholders

on site, and addressing any environmental concerns.

All documentation must be submitted within seven [7] days of receiving the Notice to Proceed. These documents will be subject to review and approval by the Project Management Unit before any construction activities commence.

VII. REPORTORIAL COMPLETION:

The contractor shall complete the repair project within thirty (30) calendar days taking into account the unfavorable weather conditions.

VIII. WARRANTY:

The contractor shall guarantee the completed structure against structural defects and failure for its satisfactory performance vis-à-vis the prescribed Minimum Performance Standards and Specifications (MPSS) during the lifetime of the structure.

MINIMUM PERFORMANCE STANDARDS AND SPECIFICATIONS for the RENOVATION OF FUNCTION HALL URS RODRIGUEZ CAMPUS

I. PROJECT BACKGROUND:

The function hall at the Administration Building of the University of Rizal System (URS) Rodriguez Campus is a vital space used for academic and administrative activities, gatherings, seminars, and events. To maximize the utility of the hall and improve its functionality, a renovation is required to provide additional enclosure by installing drywall and glass partitions. This project aims to enhance the space by creating a defined, multipurpose area that will provide both acoustic separation and an aesthetically pleasing environment. These improvements will ensure a better, more comfortable experience for users and optimize the use of the function hall for various purposes.

II. PROJECT OBJECTIVE:

- **Improve functionality**: To provide enclosure and space management by installing drywall and glass partitions, enhancing the hall's flexibility for different activities and events.
- **Increase comfort and privacy**: To enhance the acoustic separation between spaces to ensure minimal disruption and maximum comfort for all users.
- **Enhance aesthetics**: To modernize the function hall by incorporating glass partitions, creating a clean, professional look while maintaining visual openness.
- **Ensure durability**: To install durable materials that meet industry standards and will withstand the demands of regular use while ensuring safety and stability.

III. PROJECT SITE:

The renovation project will take place at the Function Hall of the Administration Building at the University of Rizal System (URS) Rodriguez Campus, located in Rodriguez, Rizal. The site will require careful planning and coordination to minimize disruptions to ongoing administrative and academic activities in the building. All construction activities will be executed within the designated function hall area.

IV. PROJECT SPECIFICATIONS AND WORK METHODOLOGIES:

The Contractor is required to perform the following scope of work:

1. **Project Billboard/ Sign Board:**
    a. *Material*: The billboard/sign board shall be constructed using approved materials that are durable and weather-resistant. All materials must be of high-quality and suitable for outdoor use.
    b. *Dimensions*: The billboard/sign board should have standard dimensions as required by local regulations or as specified by the project owner. Typically, the dimensions might range around 4 feet by 8 feet, or as per project specifications.
    c. *Content*: The content on the billboard/sign board must include the project name, location, owner, contractor, project duration, start and end dates, and any other pertinent information. The text should be clearly legible, using a professional font and color scheme that contrasts with the background for maximum visibility.
    d. *Placement*: The billboard/sign board must be installed in a conspicuous location at the project site, easily visible to the public and project stakeholders. It should be securely mounted and maintained in good condition throughout the entire duration of the project.
    e. *Duration*: The billboard/sign board should remain in place and be well-maintained from the start of the project until its completion and final acceptance by the owner.
2. **Mobilization/Demobilization:**
    a. *Mobilization*: The general contractor is responsible for the efficient and timely setup of all necessary project facilities, equipment, and temporary utilities required for the execution of the project. This includes but is not limited to site offices, storage areas, worker accommodations (if applicable), safety barriers, and temporary power and water supplies. All setup activities must comply with relevant safety and environmental regulations.
    b. *Demobilization*: Upon completion of the project, the general contractor is responsible for the orderly dismantling and removal of all temporary facilities, equipment, and materials brought onto the site for the project. The contractor must ensure that the site is restored to its original condition or as specified in the contract. This includes the removal of debris, temporary structures, and any hazardous materials. Final site cleanup must be performed to the satisfaction of the project owner.
    c. *Timeline*: Mobilization should be completed before the commencement of construction activities and within the timeline specified in the project schedule. Demobilization should occur immediately following project completion and acceptance, ensuring no unnecessary delays.
3. **Permits and Clearances (if applicable):**
    a. *Responsibility*: The general contractor shall be solely responsible for obtaining all necessary permits and clearances required for the execution of the project. This includes but is not limited to, building permits, environmental clearances, safety certifications, and any other approvals mandated by local and national statutory laws and

regulations.

b. *Compliance*: The contractor must ensure full compliance with all relevant laws, ordinances, and regulations throughout the project duration. This includes adhering to the requirements set forth by local government units, regulatory agencies, and other authorities having jurisdiction over the project.
c. *Documentation*: Copies of all permits and clearances must be submitted to the project owner before the commencement of any construction activities. The contractor must maintain a complete and up-to-date record of all permits and clearances on-site and make them available for inspection upon request by the project owner or regulatory authorities.
d. *Timeline*: All required permits and clearances must be secured within the timeline specified in the project schedule to avoid any delays in the start of construction. The contractor must promptly address any issues or delays in obtaining the necessary permits to ensure the project proceeds as planned.

4. Drywall Partition (6mm Fiber Cement Board)

a. Scope of Work
The provision of drywall partitions involves the supply, delivery, installation, and finishing of 6mm thick fiber cement boards in designated areas within the Function Hall at URS Rodriguez Campus. The work includes all necessary framing, and surface preparation for painting or finishing.
b. Material Specifications
- Fiber Cement Board:
  - Type: 6mm thick fiber cement board, moisture-resistant, and suitable for interior partitioning.
  - Size: Standard 1.2m x 2.4m (4ft x 8ft) boards.
  - Compliance: Conforms to ASTM C1186 or local equivalent standards for non-combustible fiber cement boards.
- Framing:
  - Material: Galvanized steel studs and tracks.
  - Stud Size: 0.5mm thickness, 50mm x 100mm dimensions.
  - Track Size: Matching stud dimensions.
  - Compliance: ASTM C645 or equivalent.
- Fasteners:
  1. Screws: Self-tapping screws suitable for fiber cement boards, corrosion-resistant.
  2. Screw Spacing: 300mm (12 inches) on center along framing members.
- Jointing and Taping:
  1. Joint Tape: Alkali-resistant mesh tape.
  2. Joint Compound: Cement-based joint compound or fiber cement-specific joint compound.
- Surface Finish:

1. Surface Preparation: Joint compound applied and sanded to achieve a smooth, even surface.
2. Finish: Ready for painting or other surface finishes after installation.

c. Performance Standards:
- Structural Integrity:
  - The partition should be securely fastened to ensure stability and resistance to movement or vibration.
  - Stud spacing should be maintained at 600mm on center for proper load distribution and partition strength.
- Moisture Resistance:
  - Fiber cement boards must be moisture-resistant, providing durability in areas exposed to humidity or dampness.
- Fire Resistance:
  - Fiber cement boards are inherently fire-resistant and should comply with fire safety standards, offering non-combustibility.
- Durability:
  - The 6mm fiber cement boards should withstand normal wear and tear in high-traffic areas without sagging, warping, or cracking.

d. Installation Guidelines
- Framing Installation:
  1. Secure the bottom and top tracks to the floor and ceiling using appropriate fasteners and anchors.
  2. Ensure vertical studs are installed plumb and spaced evenly at 600mm on center.
  3. Provide additional bracing where required for stability.
- Fiber Cement Board Installation:
  1. Fiber cement boards should be installed vertically or horizontally based on the wall height.
  2. Screw the boards into place with a maximum spacing of 300mm along studs and tracks.
  3. Ensure all panel edges are tightly butted together to prevent gaps or misalignment.
- Jointing and Finishing:
  1. Apply alkali-resistant mesh tape over all seams.
  2. Use cement-based joint compound to cover seams, screw heads, and edges.
  3. Apply multiple coats of joint compound and sand between coats to achieve a smooth, even surface.
- Final Surface Preparation:
  1. Inspect the finished surface to ensure it's smooth, defect-free, and ready for painting or other finishes.

e. Quality Control and Testing:
- Inspection:
  1. Regular inspections should be conducted to ensure proper installation and adherence to specifications.

- Moisture Resistance Testing:
    1. Test for proper sealing and moisture resistance in areas prone to humidity.
- Fire Resistance:
    1. Verify that fiber cement boards meet local fire safety regulations.

f. Workmanship Standards
- All framing must be installed plumb, square, and securely fastened.
- Fiber cement boards should be cut neatly, with no rough edges or gaps between boards.
- Joint compound should be applied evenly, and all seams and edges should be properly covered and sanded smooth.
- The finished surface should be aesthetically pleasing and ready for painting or other surface finishes.

g. Safety and Compliance
- All work shall comply with Occupational Safety and Health Standards as prescribed by the Department of Labor and Employment (DOLE).
- Workers must wear appropriate PPE (Personal Protective Equipment), including masks and gloves when handling fiber cement boards.
- The contractor must ensure that all waste materials, including offcuts and debris, are disposed of responsibly.

5. Painting Works

a. Scope of Work

The scope of work includes the preparation, priming, and painting of the drywall partitions in designated areas within the Function Hall at URS Rodriguez Campus. The work will ensure a smooth, high-quality finish, protecting the drywall and enhancing the overall aesthetics of the space.

b. Materials Specifications
- Primer:
    1. Type: Water-based acrylic primer, compatible with latex paint.
    2. Coverage: At least 30 square meters per liter, depending on surface porosity.
    3. Standard: ASTM D5590 or local equivalent standards for drywall primer.
- Paint:
    1. Type: High-quality, water-based latex paint.
    2. Finish: Flat, eggshell, or semi-gloss finish, depending on the desired appearance and usage of the area.
    3. Color: To be specified by the client.
    4. Coverage: Minimum 30 square meters per liter per coat, depending on the surface condition.
    5. Standard: Conforms to ASTM D4236 for latex paints.

- Putty/Joint Compound:
    1. Type: Acrylic-based putty or joint compound suitable for surface imperfections on drywall.
    2. Coverage: As per manufacturer's instructions.

c. Surface Preparation Standards
    1. Drywall Surface Condition:
        - Ensure that the drywall surface is clean, dry, and free from dust, grease, or any loose material.
        - All joints, screw holes, and imperfections must be filled with joint compound or putty and sanded to a smooth, even finish.
        - Remove dust after sanding using a vacuum or damp cloth to ensure a clean surface before applying primer.
    2. Primer Application:
        - Apply one uniform coat of water-based acrylic primer using a roller or brush.
        - Ensure the primer is applied evenly to cover the entire drywall surface.
        - Drying time should follow the manufacturer’s recommendations (typically 2–4 hours) before applying the top coat.

d. Painting Standards:
    1. Latex Paint Application:
        - Apply at least two coats of latex paint, ensuring even coverage without streaks or roller marks.
        - The paint should be applied using high-quality rollers, brushes, or sprayers, depending on the area size and surface conditions.
        - Ensure uniform paint application, avoiding drips, runs, or sagging.
    2. Drying Time:
        - Allow at least 2–4 hours of drying time between coats (based on manufacturer recommendations and environmental conditions).
    3. Final Coat:
        - The final coat should provide a smooth, even finish with no visible defects.
        - Inspect the surface for consistent color and texture, and ensure all areas are properly covered.

e. Performance Standards:
    1. Adhesion:
        - The latex paint must adhere well to the drywall surface without peeling, blistering, or cracking.

        - Adhesion should be tested according to ASTM D3359 (cross-cut adhesion test).
    2. Durability:
        - The painted surface should resist normal wear and tear, scuffing, and minor scratches, especially in high-traffic areas.
        - The finish should be cleanable and washable without damage, in compliance with ASTM D4828.
    3. Aesthetic Quality:
        - The paint should offer a uniform appearance without visible roller marks, brush strokes, or uneven texture.
        - The finish must be aesthetically pleasing and consistent throughout the painted area.

f. Installation Guidelines:
    - Surface Preparation:
        1. Clean and prepare the drywall surface by ensuring it is smooth and free from contaminants before applying the primer.
    - Paint Application:
        1. Use a roller or brush to apply the primer and latex paint evenly across the entire surface.
        2. For larger areas, sprayers can be used to ensure a quicker, more uniform application.
        3. Paint edges and corners carefully, ensuring neat and even lines.
    - Joint Treatment:
        1. Ensure all drywall joints are properly taped and finished with joint compound before painting.
        2. Sand joints smooth, clean the surface, and apply primer over the joints for a seamless finish.

g. Quality Control and Testing:
    - Visual Inspection:
        1. Inspect the painted surface to ensure even color distribution, no missed spots, and no visible roller or brush marks.
    - Adhesion Test (if applicable):
        1. Perform adhesion tests on the painted surface following ASTM D3359 standards to ensure strong paint adherence.
    - Surface Smoothness:
        1. Check that all surfaces are smooth, free from imperfections, and properly sanded prior to priming and painting.
    - Moisture Resistance:
        1. Ensure that latex paint performs well in slightly humid environments without blistering or peeling.

h. Workmanship Standards:

- Skill Requirements:
    1. All painting works must be done by skilled painters with experience in drywall painting techniques.
- Consistency:
    1. Maintain consistent application of primer and paint to avoid uneven patches or streaking.
- Clean Work Area:
    1. Protect floors, windows, and other surfaces from paint splatter. Clean all work areas after painting.

i. Safety and Compliance:

- PPE:
    1. Painters must wear appropriate PPE (Personal Protective Equipment) such as masks, goggles, and gloves to protect from fumes and skin irritation.
- Ventilation:
    1. Ensure the area is well-ventilated during painting to allow proper drying and to reduce the build-up of paint fumes.
- Waste Disposal:
    1. Dispose of paint cans, brushes, and other materials following environmental guidelines and regulations.

6. Glass Partition and Swing Glass Door (Using 12mm thick Tempered Glass with frosted Sticker):

a. Scope of Work:

- The work includes the supply, fabrication, and installation of a 12mm thick tempered glass partition and swing glass door with frosted sticker finish for the Function Hall at URS Rodriguez Campus. This includes all necessary accessories and hardware for proper installation.

b. Materials Specifications

- Tempered Glass:
    1. Thickness: 12mm.
    2. Type: Fully tempered glass, complying with ASTM C1048 for safety and strength.
    3. Finish: Clear glass with frosted sticker applied as per design specifications.
    4. Frosted Sticker: High-quality, UV-resistant vinyl sticker providing a matte, frosted finish to the glass surface.
    5. Edge Finish: Polished edges for safety and aesthetics.
- Swing Glass Door:
    1. Glass: 12mm thick tempered glass matching the partition material.
    2. Type: Frameless swing door.
    3. Door Dimensions: To be specified as per site measurements.
    4. Accessories: High-quality fittings, including patch fittings, hinges, handles, and locks.

5. Handle Type: Stainless steel D-type pull handle (600mm length).
6. Lock: Floor-mounted door lock with stainless steel finish.

- Accessories and Hardware:
  1. Patch fittings: Stainless steel (Grade 304), corrosion-resistant, and designed for heavy-duty use.
  2. Hinges: Heavy-duty stainless steel floor springs for proper alignment and swing functionality.
  3. Gaskets: Clear silicone gaskets for airtight installation and to prevent rattling.
  4. Seals: Rubber or neoprene seals at the door edges to prevent air gaps.
  5. Fasteners: Stainless steel or galvanized screws and anchors, suitable for securing glass and fittings to the floor and ceiling.

c. Glass Partition Installation Standards:

- Glass Panels:
  1. The glass panels must be cut to size, with each panel installed plumb and level.
  2. Glass must be secured using stainless steel patch fittings, which are to be anchored into the floor, ceiling, or wall, depending on the layout.
  3. Frosted sticker must be applied uniformly on the glass, with no air bubbles or creases.
- Spacing and Gaps:
  1. Ensure uniform gaps between glass panels (usually not more than 5mm), with clear silicone sealant or rubber gaskets used to fill any gaps.
  2. Joints must be flush, and the partition must be securely anchored to prevent movement or vibration.
- Frosted Sticker Application:
  1. The frosted sticker should be applied smoothly and without bubbles.
  2. The design, pattern, or coverage area of the frosted sticker should match the approved client design and specification.

d. Swing Glass Door Installation Standards:

- Door Alignment:
  1. The glass door must be precisely aligned with the partition, ensuring it swings freely and smoothly without obstruction.
  2. Ensure a uniform gap between the door and the adjacent glass partition or wall (typically 3-5mm).
- Door Operation
  1. Install hydraulic floor springs for smooth, controlled opening and closing.
  2. The door must swing smoothly without excessive resistance and automatically return to its closed position using the hydraulic closer.

- Handle and Lock installation:
    1. Install the D-type handle on both sides of the door, ensuring it is securely fastened.
    2. The floor-mounted lock must be aligned and function smoothly with no excessive force required.

e. Performance Standards:
- Glass Strength:
    1. The tempered glass must meet safety standards (ASTM C1048), ensuring that it can withstand impact without shattering into sharp fragments.
- Aesthetic Quality:
    1. The glass and frosted sticker must present a clean, professional appearance, free from scratches, bubbles, or imperfections.
    2. The edges of the glass must be smooth and polished for safety and aesthetics.
- Door Functionality:
    1. The door must open and close smoothly, with the hydraulic closer ensuring a controlled, quiet operation.
    2. The door should remain aligned over time, with no sagging or misalignment of fittings.

f. Installation Guidelines:
- Glass Partition:
    1. Install the tempered glass panels in their designated locations as per the approved design.
    2. Use appropriate stainless steel fittings to secure the glass to the floor, ceiling, or walls, ensuring the panels are stable and do not rattle or shake.
    3. Apply frosted stickers to the glass partition as per the client’s design, ensuring a bubble-free, smooth finish.
- Glass Door:
    1. Position and secure the glass swing door with the specified hardware (hinges, patch fittings, door closer).
    2. Ensure that the door opens smoothly and is aligned with the glass partition.
    3. Test the hydraulic closer to ensure smooth, controlled door movement.
- Hardware Installation:
    1. Stainless steel accessories (patch fittings, handles, locks) must be securely fastened to the glass and the supporting structure, ensuring long-term durability and stability.

g. Quality Control and Testing:
- Visual Inspection:
    1. Inspect the glass for scratches, chips, or imperfections before installation.

2. Ensure the frosted sticker is applied without air bubbles or wrinkles.
3. Verify that the edges are polished and smooth.

- Door Operation Test:
  1. Test the swing glass door to ensure proper alignment and smooth operation of hinges, locks, and hydraulic closer.
  2. Confirm that the door closes quietly and returns to its closed position without excessive force.
- Safety Testing:
  1. Test the tempered glass for impact resistance as per ASTM C1048.
  2. Ensure that all hardware, including hinges and handles, is securely fastened and capable of supporting the weight of the door and partition.

h. Workmanship Standards:
- Skilled Labor:
  1. The installation must be carried out by experienced professionals with expertise in glass partition and door installations.
- Edge and Detail Work:
  1. Precision is required in the alignment of glass panels and doors, with all edges and joints neatly finished.
- Clean Worksite:
  1. All debris, glass offcuts, and other waste materials must be cleared from the site following installation.

i. Safety and Compliance:
- Personal Protective Equipment (PPE):
  1. Workers must wear appropriate PPE, including gloves and safety goggles, to handle glass safely.
- Handling and Transport:
  1. The tempered glass must be handled carefully during transport and installation to avoid scratches, chips, or other damage.
- Waste Disposal:
  1. All waste materials, including glass offcuts, must be disposed of in accordance with environmental regulations.

j. Warranty
- Warranty Period: The contractor shall provide a 1-year warranty for the glass partition and swing door installation, covering material defects, workmanship issues, and functionality.
- Warranty Coverage:
  1. Material defects in the tempered glass, including cracks or breakage not caused by external impact.
  2. Defective or malfunctioning hardware (patch fittings, handles, hinges, locks, and door closers).
  3. Adhesion failure or damage to the frosted sticker

within the warranty period.
4. Misalignment or operational issues with the swing glass door, such as failure of the hydraulic closer or difficulty in opening and closing.

- Warranty Exclusions:
  1. Damage caused by improper use, vandalism, or forceful impact.
  2. Scratches or surface wear from normal use.
  3. Modifications or repairs made by unauthorized personnel.

V. MINIMUM REQUIREMENTS FOR SAFETY AND HEALTH PROGRAM

1. Safety Management System:
   a. *Safety Policy*: Develop and document a safety policy outlining the organization's commitment to health and safety, particularly considering the presence of faculty, students, and other stakeholders.
   b. *Objectives:* Define clear safety objectives and goals aligned with organizational priorities and the educational environment.
   c. *Responsibilities*: Assign safety responsibilities and designate an Occupational Safety Officer or Project Safety Officer. This individual should have relevant training certified by the Department of Labor and Employment (DOLE) and be the point person for safety protocols. This role may be filled by the assigned project engineer if suitably qualified.
2. Risk Assessment and Management:
   a. *Hazard Identification*: Conduct regular hazard assessments to identify potential safety risks and health hazards in the workplace.
   b. *Risk Evaluation*: Evaluate the risks associated with identified hazards and their potential impact on students, faculty, and other stakeholders.
   c. *Control Measures:* Implement appropriate control measures to mitigate or eliminate identified risks, including physical barriers, signage, and restricted access to hazardous areas.
3. Safety Training and Education:
   a. *Orientation*: Provide safety orientation and training for all new employees and contractors, emphasizing the unique environment of the educational institution.
   b. *Ongoing Training*: Offer regular safety training and refresher courses for all employees on relevant topics, including emergency procedures and hazard recognition, with a focus on interacting safely in an environment with students and faculty (if necessary).
   c. *Specialized Training:* Provide additional training for employees exposed to specific hazards or using specialized equipment (if necessary).
4. Personal Protective Equipment (PPE):
   a. *Provision*: Provide appropriate PPE to employees based on the identified hazards.
   b. *Use and Maintenance*: Ensure that employees use PPE correctly and

that it is maintained in good condition.
    c. *Training*: Train employees on the proper use, maintenance, and storage of PPE (if necessary).
5. Emergency Preparedness and Response:
    a. *Emergency Plan*: Develop and document an emergency response plan specific to the educational institution, covering scenarios such as evacuations involving students and faculty.
    b. *Drills*: Conduct regular emergency drills in coordination with the institution's existing emergency procedures to ensure effective response by both construction personnel and institution stakeholders (if necessary).
    c. *Emergency Contacts*: Maintain a list of emergency contacts and make it accessible to all employees.
6. Incident Reporting and Investigation:
    a. *Reporting System*: Establish a system for reporting workplace incidents, injuries, and near-misses.
    b. *Investigation*: Investigate all incidents to determine causes and implement corrective actions to prevent recurrence.
    c. *Documentation*: Maintain records of incidents, investigations, and corrective actions taken.
7. Health and Safety Inspections:
    a. *Routine Inspections*: Conduct regular safety inspections of the workplace to identify and address potential hazards, particularly those affecting areas frequented by students and faculty.
    b. *Inspection Records*: Document inspection findings and ensure that corrective actions are taken.
8. Health and Wellness Programs:
    a. *Health Monitoring*: Implement programs for monitoring employee health and wellness, including pre-employment and periodic health checks.
    b. *Wellness Programs*: Offer wellness programs and resources to promote employee well-being and reduce workplace stress.
9. Compliance and Legal Requirements:
    a. *Regulatory Compliance*: Ensure compliance with relevant local, national, and international health and safety regulations and standards.
    b. *Documentation*: Keep up-to-date records of compliance, including permits, licenses, and safety certifications.
10. Communication and Involvement:
    a. *Safety Meetings:* Hold regular safety meetings to discuss safety issues, share information, and engage employees in the safety program, with consideration for the educational setting.
    b. *Feedback*: Encourage and provide channels for employees to provide feedback on safety matters and participate in safety initiatives.
11. Documentation and Record-Keeping:
    a. *Safety Records*: Maintain comprehensive records related to safety training, incident reports, inspections, and risk assessments.
    b. *Accessibility:* Ensure that safety documentation is readily accessible to employees, students, faculty, and relevant authorities.

12. Contractor Responsibilities:
    a. *Safety Precautions*: The contractor must observe proper safety precautions to protect faculty, students, and other stakeholders in the vicinity. This includes implementing physical barriers, clear signage, and restricted access to construction zones.
    b. *Communication*: Coordinate with the institution to ensure that construction activities are conducted in a manner that minimizes disruption to academic activities and ensures the safety of all individuals on site.

VI. REPORTORIAL REQUIREMENT

Upon acceptance of the Notice to Proceed, the Contractor is required to submit the following documentation in Microsoft Word or an equivalent format:

Project Schedule:

- A detailed project schedule in the form of a bar chart, outlining all significant phases and milestones of the project.
- The schedule should clearly indicate the start and end dates for each phase, including any critical paths that may affect the project's timeline.
- Any dependencies or sequential tasks must be highlighted to ensure clarity in project execution.

Manpower Schedule:

- A corresponding manpower schedule that aligns with the project schedule, detailing the number and type of personnel required for each phase of the project.
- The manpower schedule should reflect the planned allocation of labor resources, ensuring that sufficient personnel are available to meet the project deadlines.
- Include information on work shifts, if applicable, and any planned overtime or special work arrangements.

Both documents must be submitted within seven (7) days of receiving the Notice to Proceed. The documents will be subject to review and approval by the Project Management Unit before any construction activities commence.

VII. PROJECT COMPLETION

The contractor shall complete the repair project within thirty (30) calendar days taking into account the unfavorable weather conditions.

VIII. WARRANTY

The contractor shall guarantee the completed structure against structural defects and failure for its satisfactory performance vis-à-vis the prescribed Minimum Performance Standards and Specifications (MPSS) during the lifetime of the structure.

MINIMUM PERFORMANCE STANDARDS AND SPECIFICATIONS for the REPAIR OF VARIOUS FACILITIES AND OTHER STRUCTURES AT URS CAINTA CAMPUS

I. PROJECT BACKGROUND:

The Cainta campus facilities, including the Office of Student Development Services (OSDS) office, Registrar's office, Cashier's office, classrooms 401 and 402, and the clinic's toilet and bath, have been subjected to regular use over the years. Due to wear and tear, these facilities now require repairs and renovations to maintain a conducive environment for students and staff, ensuring their functionality and safety. This project is an initiative to address the structural and aesthetic issues that affect the operations and overall appearance of these spaces.

II. PROJECT OBJECTIVE:

The objective of this project is to repair and improve the various facilities at the Cainta campus to provide a safe, functional, and welcoming environment for students, faculty, and staff. The repairs aim to restore these facilities to optimal working conditions, focusing on improving the infrastructure, enhancing user comfort, and ensuring compliance with safety standards.

III. PROJECT SITE:

The project site encompasses multiple facilities at the Cainta campus, including:

- Office of Student Development Services (OSDS) - A dedicated space where student affairs are managed.
- Registrar's Office - The administrative office responsible for student records and registration processes.
- Cashier's Office - The financial office where tuition and fees are processed.
- Rooms 401 and 402 - Classrooms primarily used for academic purposes.
- Clinic Toilet and Bath - Restroom and hygiene facilities adjacent to the clinic, providing necessary sanitation for healthcare purposes.

IV. PROJECT SPECIFICATIONS AND WORK METHODOLOGIES:

The Contractor is required to perform the following scope of work:

7. Project Billboard/ Sign Board:
    a. *Material*: The billboard/sign board shall be constructed using approved materials that are durable and weather-resistant. All materials must be of high-quality and suitable for outdoor use.
    b. *Dimensions*: The billboard/sign board should have standard dimensions as required by local regulations or as specified by the project owner. Typically, the dimensions might range around 4 feet by 8 feet, or as per project specifications.
    c. *Content*: The content on the billboard/sign board must include the project name, location, owner, contractor, project duration, start and end dates, and any other pertinent information. The text should be clearly legible, using a professional font and color scheme that contrasts with the background for maximum visibility.
    d. *Placement*: The billboard/sign board must be installed in a conspicuous location at the project site, easily visible to the public and project stakeholders. It should be securely mounted and maintained in good condition throughout the entire duration of the project.
    e. *Duration*: The billboard/sign board should remain in place and be well-maintained from the start of the project until its completion and final acceptance by the owner.
8. Mobilization/Demobilization:
    a. *Mobilization*: The general contractor is responsible for the efficient and timely setup of all necessary project facilities, equipment, and temporary utilities required for the execution of the project. This includes but is not limited to site offices, storage areas, worker accommodations (if applicable), safety barriers, and temporary power and water supplies. All setup activities must comply with relevant safety and environmental regulations.
    b. *Demobilization*: Upon completion of the project, the general contractor is responsible for the orderly dismantling and removal of all temporary facilities, equipment, and materials brought onto the site for the project. The contractor must ensure that the site is restored to its original condition or as specified in the contract. This includes the removal of debris, temporary structures, and any hazardous materials. Final site cleanup must be performed to the satisfaction of the project owner.
    c. *Timeline*: Mobilization should be completed before the commencement of construction activities and within the timeline specified in the project schedule. Demobilization should occur immediately following project completion and acceptance, ensuring no unnecessary delays.
9. Permits and Clearances (if necessary):
    a. *Responsibility*: The general contractor shall be solely responsible for obtaining all necessary permits and clearances required for the execution of the project. This includes, but is not limited to, building permits, environmental clearances, safety certifications, and any other

approvals mandated by local and national statutory laws and regulations.

b. *Compliance*: The contractor must ensure full compliance with all relevant laws, ordinances, and regulations throughout the project duration. This includes adhering to the requirements set forth by local government units, regulatory agencies, and other authorities having jurisdiction over the project.
c. *Documentation*: Copies of all permits and clearances must be submitted to the project owner before the commencement of any construction activities. The contractor must maintain a complete and up-to-date record of all permits and clearances on-site and make them available for inspection upon request by the project owner or regulatory authorities.
d. *Timeline*: All required permits and clearances must be secured within the timeline specified in the project schedule to avoid any delays in the start of construction. The contractor must promptly address any issues or delays in obtaining the necessary permits to ensure the project proceeds as planned.

For the OSDS Office;

1. Removal of Ceiling

Carefully remove the existing ceiling without damaging structural elements, electrical, or plumbing systems above.

Methodology:

- Clear the area of furniture and fixtures to protect them from dust and debris.
- Use appropriate tools to detach ceiling panels or boards and remove them safely.
- Dispose of removed materials as per campus waste management regulations.
- Inspect the ceiling framing for any damages and make repairs as necessary before installing new materials.

2. Installation of Drywall

Install a drywall partition with a smooth, primed finish ready for painting.

i. Specifications:
    - Thickness: 6mm fiber cement board for durability and moisture resistance.
    - Frame: Mounted on a metal stud framework, securely anchored to floor and ceiling.
    - Finish: Smooth, primed, and ready for painting.

ii. Standards:
    - Ensure fiber cement board is securely attached to the metal framing, with all edges aligned and joints taped.
    - Apply joint compound over joints and sand for a smooth, seamless finish before painting.

Methodology:

- Measure and mark the layout for the drywall partition.
- Install metal framing or studs securely anchored to the floor and ceiling.
- Fix drywall sheets to the metal framing, ensuring smooth, even edges.
- Tape and finish joints, apply joint compound, and sand smooth.
- Prepare the surface for paint application once the partition is fully set.

3. Installation of Solid Panel Door

Install a high-quality solid panel door with proper hardware, including hinges, handle, and lockset.

Methodology:

- Check doorframe measurements to ensure a proper fit for the solid panel door.
- Install doorframe, ensuring it is level and plumb.
- Mount door hinges and align the door within the frame.
- Install handle and lockset as specified, ensuring smooth operation.
- Adjust and test for proper door swing and secure fit.

4. Installation of Ceiling Board(4.5mm Fiber Cement Board)

Install 4.5mm fiber cement board ceiling, ensuring it is securely fastened and aligned.

Methodology:

- Prepare the ceiling framework, ensuring it is level and capable of supporting fiber cement boards.
- Cut fiber cement boards to size and fasten them to the framework using appropriate screws.
- Seal joints and apply joint compound for a smooth finish.
- Sand down any rough areas, ensuring the ceiling is ready for painting or further finishing.

5. Painting Works

Apply two coats of primer followed by two coats of final paint, color as specified, ensuring smooth and even coverage.

Methodology:

- Prepare all surfaces by sanding, cleaning, and applying primer where necessary.
- Use rollers and brushes suited to the type of paint and surface to ensure even application.
- Allow each coat to dry completely before applying the next.
- Inspect for any uneven areas and make touch-ups as needed.

6. Installation of Prefabricated Modular Cubicle (L-Shaped)

Install a prefabricated modular cubicle with dimensions L=1.30m x W=0.65m x H=1.20m, including fabric panels and glass partition.

Methodology:

- Assemble prefabricated parts according to the manufacturer's instructions.
- Securely place and fasten modular cubicle components to ensure

stability.

- Install fabric panels and glass partitions as specified.
- Verify alignment and sturdiness of the structure.
- Conduct a final inspection to ensure the modular cubicle meets design specifications.

7. Repair of Downspout

Modify the downspout so it terminates above the roofing of the OSDS office, directing water onto the roof surface for proper runoff. Ensure a watertight seal at the termination point to prevent leaks.

Methodology:

- Identify the appropriate location above the OSDS office roof for the downspout termination, ensuring that the drainage path will not cause pooling or water damage to the roof.
- Cut the downspout at the designated point, ensuring it is angled appropriately to direct water flow onto the roofing.
- Install an end cap or elbow fitting, if needed, to control the direction of water flow.
- Seal the opening where the pipe exits or terminates to prevent any water intrusion back into the building.
- Use a high-quality, weather-resistant sealant around the termination point, allowing it to bond securely with the roof surface.
- Test by pouring water through the downspout to confirm proper flow and drainage onto the roof.

For the Registrar's Office;

Scope of Work:

Provision of a 4.10mx3.0m glass partition with:

- Two (2) transaction windows.
- A single swing door (1.20m x 2.10m).
- 12mm thick tempered glass on an anodized (analok) aluminum frame with complete accessories.

1. Glass Partition:

i. Specifications:

- Dimensions: 4.1m (width) x 3.0m (height).
- Glass Thickness: 12mm, tempered for durability and safety.

- Material: High-quality tempered glass to withstand impacts and prevent shattering.
- Frame: Anodized aluminum (analok finish) frame, providing corrosion resistance and aesthetic appeal.
- Finish: Frame finish should be smooth, with no visible defects, scratches, or dents.

ii. Standards:

- Glass should conform to relevant safety standards for tempered glass in office partitions.
- Aluminum frames should meet the required strength and durability standards, ensuring they securely hold the glass panels in place.

2. Transaction Windows:

i. Specifications:

- Quantity: Two (2) transaction windows integrated into the glass partition.
- Dimensions. Windows should be proportionate to the partition and accessible from both sides for convenient transactions.
- Design: Windows should have a sliding or push-to-open design, enabling secure yet easy access for communication and document exchange.

ii. Standards:

- Transaction windows should be reinforced with proper seals to minimize sound transmission and prevent air leakage.
- Hardware should be of commercial-grade quality, ensuring smooth operation and durability.

3. Single Swing Door:

i. Specifications:

- Dimensions: 1.20m (width) x 2.10m (height).
- Glass thickness: 12mm, tempered for safety.
- Frame and Hinges: Anodized aluminum frame with commercial-grade hinges that support the door's weight and allow smooth swinging motion.
- Accessories: Includes door handle, lockset, and door closer for controlled operation.

ii. Standards:

- Door hardware should be durable, with corrosion resistant properties.
- Door closer should meet the standards for controlled, silent operation, particularly in an office environment.

4. Accessories and Finishes

i. Specifications:

- Frame Seals: Use rubber or silicone seals on aluminum frames to securely hold the glass and reduce vibration or noise.
- Handles and Lockset: Install stainless steel or anodized aluminum handles and lockset for durability and a professional appearance.

ii. Standards:
- All accessories must meet quality standards for durability, ease of use, and compatibility with tempered glass.
- Finish for all visible components should be uniform, with no visible wear or defects.

5. Installation Methodology:

i. Preparation:
- Ensure the site is clear, and all measurements are confirmed to align with the partition and door specifications.
- Inspect and clean the floor and walls where frames and glass will be mounted.

ii. Installation:
- Install the anodized aluminum frame first, ensuring it is level and plumb.
- Mount the glass panels, securing them with appropriate rubber or silicone seals within the frame.
- Attach transaction windows and ensure smooth operation of the sliding or push-open mechanism.
- Install the single swing door with hinges, handle, and lockset, verifying proper alignment.
- Test the door closer to confirm it operates smoothly and adjust as necessary.

iii. Final Inspection:
- Check all joints, seals, and accessories for stability and proper function.
- Conduct a final quality assessment to ensure all installations meet safety, quality, and functional standards.

For the Cashier's Office;

Scope of Work:

Provision of a 2.80mx3.0m glass partition with:
- Two (2) transaction windows.
- A single swing door (0.90m x 2.10m).
- 12mm thick tempered glass on an anodized (analok) aluminum

frame with complete accessories.

1. Glass Partition:

i. Specifications:
- Dimensions: 2.8m (width) x 3.0m (height).
- Glass Thickness: 12mm, tempered for durability and safety.
- Material: High-quality tempered glass to withstand impacts and prevent shattering.
- Frame: Anodized aluminum (analok finish) frame, providing corrosion resistance and aesthetic appeal.
- Finish: Frame finish should be smooth, with no visible defects, scratches, or dents.

ii. Standards:
- Glass should conform to relevant safety standards for tempered glass in office partitions.
- Aluminum frames should meet the required strength and durability standards, ensuring they securely hold the glass panels in place.

2. Transaction Windows:

i. Specifications:
- Quantity: Two (2) transaction windows integrated into the glass partition.
- Dimensions. Windows should be proportionate to the partition and accessible from both sides for convenient transactions.
- Design: Windows should have a sliding or push-to-open design, enabling secure yet easy access for communication and document exchange.

ii. Standards:
- Transaction windows should be reinforced with proper seals to minimize sound transmission and prevent air leakage.
- Hardware should be of commercial-grade quality, ensuring smooth operation and durability.

3. Single Swing Door:

i. Specifications:
- Dimensions: 0.90m (width) x 2.10m (height).
- Glass thickness: 12mm, tempered for safety.
- Frame and Hinges: Anodized aluminum frame with commercial-grade hinges that support the door's weight and allow smooth swinging motion.
- Accessories: Includes door handle, lockset, and door closer for controlled operation.

ii. Standards:

- Door hardware should be durable, with corrosion resistant properties.
- Door closer should meet the standards for controlled, silent operation, particularly in an office environment.

4. Accessories and Finishes

i. Specifications:
   - Frame Seals: Use rubber or silicone seals on aluminum frames to securely hold the glass and reduce vibration or noise.
   - Handles and Lockset: Install stainless steel or anodized aluminum handles and lockset for durability and a professional appearance.

ii. Standards:
   - All accessories must meet quality standards for durability, ease of use, and compatibility with tempered glass.
   - Finish for all visible components should be uniform, with no visible wear or defects.

5. Installation Methodology:

i. Preparation:
   - Ensure the site is clear, and all measurements are confirmed to align with the partition and door specifications.
   - Inspect and clean the floor and walls where frames and glass will be mounted.

ii. Installation:
   - Install the anodized aluminum frame first, ensuring it is level and plumb.
   - Mount the glass panels, securing them with appropriate rubber or silicone seals within the frame.
   - Attach transaction windows and ensure smooth operation of the sliding or push-open mechanism.
   - Install the single swing door with hinges, handle, and lockset, verifying proper alignment.
   - Test the door closer to confirm it operates smoothly and adjust as necessary.

iii. Final Inspection:
   - Check all joints, seals, and accessories for stability and proper function.
   - Conduct a final quality assessment to ensure all installations meet safety, quality, and functional standards.

For the Clinic Toilet and Bath;

Scope of Work:

This item includes:

- Demolition of the existing wall for access from the clinic.
- Structural excavation, concreting works, formworks, masonry works, roofing, ceiling works, tile installation, painting, installation of doors and windows, sewer and waterline systems, and electrical works.

1. Demolition of Existing Wall:

i. Specifications:
   - Carefully demolish the designated wall section to create access from the clinic to the new toilet and bath area.

ii. Standards:
   - Use appropriate safety measures and tools to prevent damage to adjoining structures.
   - Clear debris immediately, ensuring minimal disruption to surrounding areas.

iii. Methodology:
   a. Site Preparation
      i. Clear or protect nearby furniture, fixtures, and equipment.
      ii. Set up barriers to contain dust and restrict access to the demolition area.
      iii. Identify any utilities within the wall, such as electrical wiring or plumbing, and disconnect or reroute as necessary.
   b. Mark and Secure Demolition Area
      i. Mark the section of the wall to be demolished.
      ii. Install temporary support if necessary for load-bearing walls.
   c. Controlled Demolition
      i. Use hand tools or light demolition equipment to carefully dismantle the wall, working from top to bottom.
      ii. Carefully remove each section to maintain control and avoid damaging adjacent areas.
   d. Debris Removal
      i. Regularly clear debris to keep the worksite organized and safe.
      ii. Separate recyclable materials as required.
   e. Final Site Clean-Up and Inspection
      i. Thoroughly clean the area and remove all remaining debris.
      ii. Inspect the surrounding surfaces for damage and prepare edges for further construction.

2. Structural Excavation:

i. Specifications:
- Depth and Width: Excavate to the specified depth and width as outlined in the project design, ensuring that dimensions accommodate both the foundation and any required utilities.
- Soil Type and Stability: Consider soil type and stability to determine appropriate excavation support or shoring if needed.
- Utility Identification: Identify and mark existing underground utilities before excavation to avoid damage.

ii. Standards:
- Safety Compliance: Follow all Occupational Safety and Health (OSH) standards for excavation work, including proper shoring, protective systems, and safe access and egress points.
- Stability of Surrounding Area: Ensure that adjacent structures and soil banks are not compromised by the excavation, with necessary support in place.
- Erosion Control: Implement erosion and sediment control measures to prevent soil displacement, especially in adverse weather.

iii. Methodology:
a. Site Preparation
   i. Conduct a survey to confirm excavation dimensions and location.
   ii. Mark the excavation area with stakes or spray paint.
   iii. Remove any surface obstructions, debris, or large rocks.
b. Utility Clearance
   i. Verify the location of all underground utilities (water, sewer, electrical) within or near the excavation area.
   ii. Coordinate with relevant utility providers to safely isolate or reroute utilities if necessary.
c. Excavation
   i. Begin excavation using appropriate equipment to reach the required depth.
   ii. Maintain sloping or install shoring if excavation depth or soil conditions require stabilization.
   iii. Remove soil systematically, keeping the worksite clear and organized.
d. Final Inspection and Site Clean-Up
   i. Inspect excavation to ensure compliance with

design dimensions, depth, and safety standards.

ii. Clear any loose soil from the excavation area and prepare it for the next construction stage.

3. Concreting Works:

i. Specifications:

- Concrete Mix: Use a concrete mix with a minimum compressive strength of 3,000 psi, unless otherwise specified in the design.
- Aggregate Size: Use clean, graded aggregates with a maximum size appropriate for the thickness of the concrete section, generally 20mm.
- Water-Cement Ratio: Maintain a water-cement ratio as per mix design, ensuring strength and durability of the concrete.
- Reinforcement: Install rebar and other reinforcing materials per structural design, maintaining proper spacing, cover, and alignment.

ii. Standards:

- Rebar Placement: Reinforcement should meet applicable standards for concrete coverage, alignment, and anchoring.
- Curing Requirements: Cure concrete for a minimum of 7 days to achieve adequate hydration and strength.

iii. Methodology:

a. Preparation

i. Site Inspection: Confirm that formwork, reinforcement, and embedded items are installed according to design.

ii. Surface Preparation: Clear debris, standing water, or loose material from the pouring area.

iii. Formwork: Ensure that formworks are securely in place, aligned, and free from gaps to prevent leakage.

iv. Reinforcement Placement: Verify that all rebar is properly placed, tied, and adequately spaced to avoid movement during pouring.

b. Manual Concrete Mixing

i. Material Preparation: Gather sand, gravel, cement, and water near the mixing area.

ii. Batching: Measure materials accurately to match the specified mix design; use containers or buckets to ensure consistent ratios.

iii. Mixing Process:

1. Spread sand in an even layer, add

cement on top, and thoroughly mix until uniform in color.
2. Add gravel to the sand-cement mixture and mix until evenly distributed.
3. Create a hollow in the center of the mix, add water gradually, and mix by hand using shovels until achieving the desired consistency and uniformity.

iv. Workability Check: Perform a slump test to verify consistency before placement.

c. Pouring and Compaction
   i. Placement: Pour concrete into the formwork from one end, spreading gradually to prevent segregation.
   ii. Compaction: Use hand tampers to compact the concrete, ensuring that air pockets are minimized.
   iii. Leveling and Finishing: Use screeds or trowels to level and smooth the surface to the required finish.

d. Curing
   i. Initial Curing: Begin curing immediately after finishing to retain moisture.
   ii. Curing Method: Use water curing, curing compounds, or cover with wet burlap or plastic sheeting for at least 7 days.
   iii. Protection: Safeguard the concrete surface from adverse weather, heavy loads, or vibrations during curing.

e. Site Clean-Up
   i. Formwork Removal: Carefully remove formwork after the concrete achieves sufficient strength.
   ii. Waste Disposal: Clean the site of unused materials and waste to prepare for the next construction stage.

4. Formworks and Falseworks:

i. Specifications:

- Form Face (Formwork): Use 3/4" (19mm) phenolic plywood, which is moisture-resistant and provides a smooth finish to concrete surfaces.
- Support Framing (Falsework): Use good quality lumber or coco lumber for support and framing, free of cracks, large knots, or defects that may compromise the structure's load-bearing capacity.
- Falsework Design: Falseworks should be adequately designed to support both the formwork and the wet

concrete loads without excessive deflection or movement. All components should be securely braced and aligned.

- Joint Sealing: Ensure tight-fitting joints to prevent leakage during concrete pouring, minimizing defects in the concrete surface.
- Concrete Coverage: Provide the required concrete cover over reinforcement, generally between 20-40mm, depending on the project specifications.

ii. Standards:

- Load Bearing Capacity: The formwork and falsework system must comply with ACI 347 or equivalent standards, capable of bearing the weight of wet concrete, reinforcement, and any applied loads during construction.
- Safety Compliance: Secure all formworks and falseworks per Occupational Safety and Health (OSH) standards for temporary construction. Falsework must be stable and designed to avoid collapse.
- Reusability: Inspect all components after each use; reuse only materials that remain structurally sound.
- Concrete Surface Finish: Phenolic boards should produce smooth, defect-free surfaces on the concrete. Ensure boards are clean and in good condition before each use.

iii. Methodology:

a. Preparation
   i. Material Inspection: Check phenolic boards and lumber for cracks, warping, or other defects. Ensure all materials meet design strength and quality requirements.
   ii. Layout and Cutting: Cut phenolic boards and lumber to the required dimensions, aligning with project design specifications.

b. Formwork Assembly
   i. Positioning: Set up phenolic boards as the form face where concrete will be poured, securing them to lumber supports.
   ii. Sealing Joints: Seal joints with form tape or similar material to prevent concrete leakage and ensure clean, consistent edges.
   iii. Reinforcement: Ensure rebar is positioned as per design with proper concrete cover.

c. Falsework Installation
   i. Supporting the Formwork: Construct the falsework structure using good or coco lumber to securely support the formwork.
   ii. Bracing and Stability: Install diagonal braces, ledgers, and supports, making sure the falsework can withstand loads from both the

concrete and construction activity.

iii. Alignment and Leveling: Ensure that the falsework is level and aligned. Adjust bracing to maintain stability and prevent deflection.

d. Concrete Pouring and Monitoring
    i. Pre-Pour Inspection: Before pouring concrete, confirm all formwork and falsework connections are secure and properly aligned.
    ii. Monitoring During Pouring: Watch for any signs of movement or leakage, and make immediate adjustments as needed. Use vibrators carefully to avoid putting excessive force on the forms.
    iii. Concrete Compaction: Properly compact the concrete using vibrators to prevent air pockets and achieve uniform density.
e. Curing and Form Removal
    i. Curing Time: Allow concrete to cure according to project specifications. Avoid removing falsework or formwork too early, as this could compromise the structural integrity.
    ii. Dismantling Falsework: Carefully remove falsework supports after achieving adequate concrete strength. Start with bracing and props, ensuring that the structure remains stable throughout removal.
f. Inspection and Site Clean-Up
    i. Surface Inspection: After removing formworks, check the concrete surfaces for smoothness and any defects, repairing if necessary.
    ii. Reusable Material Storage: Clean and store phenolic boards and lumber for future use, ensuring they are kept dry to prevent warping or deterioration.
    iii. Debris Removal: Clear the site of all waste material, including broken boards and unused lumber.

5. Masonry Works:

i. Specifications:

- Concrete Hollow Blocks (CHB): Use 150mm thick CHBs with a minimum compressive strength of 350 psi.
- Mortar Mix: Use a 1:3 ratio (cement to sand) mortar mix, ensuring a workable consistency for effective bonding.
- Reinforcement: Reinforce vertical and horizontal joints as specified, typically using 10mm rebar for verticals and horizontal bars spaced according to design.
- Grout Fill: Use grout mix (1:2 ratio of cement to sand) to fill

reinforced CHB cells, ensuring strong bonding for stability.

ii. Standards:
- Compressive Strength: CHBs must have a minimum compressive strength of 350 psi to meet structural requirements.
- Joint Thickness: Maintain a uniform 10mm (3/8 inch) mortar joint thickness between blocks for consistency and stability.
- Reinforcement Standards: Follow local building codes for rebar spacing, as specified in the plan.
- Quality Assurance: Inspect all blocks for cracks or defects before use, rejecting any damaged materials.

iii. Standards:
   a. Preparation
      i. Material Inspection: Check CHBs for cracks or damage. Inspect rebar for rust or bending, ensuring only quality materials are used.
      ii. Surface Cleaning: Clean the foundation or base surface of dust, debris, and standing water to ensure proper adhesion of the first course of blocks.
      iii. Layout: Mark the wall layout on the surface, verifying alignment and positioning with the project plans.
   b. Mixing Mortar
      i. Mortar Preparation: Prepare a 1:3 cement-to-sand mortar mix, adding water gradually until achieving a workable consistency.
      ii. Batch Mixing: Mix only enough mortar for immediate use, as mortar consistency may change if left too long before use.
   c. Block Laying
      i. First Course: Lay the first course of blocks along the layout line, ensuring alignment and levelness. This course is crucial as it sets the foundation for the entire wall.
      ii. Subsequent Courses: Place CHBs with staggered joints (running bond pattern) for structural stability. Use a mason's line to maintain straight and even courses.
      iii. Joint Thickness: Keep all horizontal and vertical joints at a uniform 10mm thickness, applying mortar generously to bond the blocks.
   d. Alignment and Leveling
      i. Regular Checks: Continuously check vertical and horizontal alignment with a spirit level or plumb bob. Adjust as needed to maintain

straightness.

ii. Wall Height and Plumb: Check wall height and plumb at regular intervals to ensure adherence to design specifications.

e. Curing

i. Initial Curing: Spray water lightly on the masonry wall after it has set to begin curing. Do not apply excessive water, as this could weaken mortar joints.

ii. Ongoing Curing: Continue curing the wall by spraying it twice daily for at least 3-7 days to achieve optimal mortar strength.

f. Finishing

i. Joint Finishing: Tool or strike the joints as needed for the specified finish (e.g., concave or flush).

ii. Surface Cleaning: Remove any excess mortar on the block faces before it hardens for a cleaner surface finish.

g. Site Clean-Up

i. Debris Disposal: Clear the site of broken blocks, mortar waste, and other debris.

ii. Inspection: Conduct a final inspection of the masonry wall for straightness, plumb, and finish quality. Address any defects or areas needing touch-up.

6. Roof Framing and Roofing Works:

i. Specifications:

a. Materials:

i. Angle Bars: 50mm x 50mm x 3mm thick for framing connections.

ii. C-Purlins: 50mm x 100mm x 1.2mm thick, spaced and aligned per structural design.

iii. C-Channels: 50mm x 100mm x 6mm thick for additional structural support.

iv. Roof Sheeting: Long span prepainted rib-type metal sheets, 0.4mm thick, with 5mm thick PE foam insulation.

v. Flashings: Prepainted flashing, gauge 24, for waterproofing and aesthetics along roof edges.

vi. Spandrel Eaves: Metal spandrels with integrated vents for adequate roof ventilation, designed for long-term durability and rust resistance.

ii. Standards:

- Structural Integrity: All roof framing components must

meet structural load-bearing standards and withstand local wind loads. Comply with AISC (American Institute of Steel Construction) or equivalent standards.

- Safety and Stability: Follow OSHA or local safety standards for working at heights. Ensure all welding is performed by certified welders.
- Waterproofing: Flashings and roof sheets must be installed to prevent leaks. Ensure proper overlap and fastening per manufacturer guidelines to achieve a water-tight installation.
- Thermal Insulation: 5mm PE foam insulation should cover the entire roof sheeting area to reduce heat transfer and improve indoor comfort.
- Ventilation: Spandrel eaves with vents should be installed as specified to ensure adequate ventilation, reducing moisture buildup under the roof.

iii. Methodology:

a. Preparation

i. Material Inspection: Check all steel members (angle bars, C-purlins, C-channels) for any rust, damage, or defects. Ensure metal roofing sheets are free of dents or warping.

ii. Surface Preparation: Clean the work area and ensure a safe, clear pathway for material handling and equipment movement.

b. Roof framing Installation

i. Marking and Layout: Lay out and mark the positions for each framing member per structural design drawings.

ii. Angle Bar Installation: Begin with 50mm x 50mm x 3mm angle bars, aligning them per design. Weld angle bars securely, ensuring all connections are properly grounded.

iii. C-Channel Placement: Position 50mm x 100mm x 6mm C-channels as main load-bearing supports. Weld securely to angle bars at connection points.

iv. C-Purlin Installation: Install 50mm x 100mm x 1.2mm C-purlins across the C-channels at regular intervals specified in the structural design (typically 600mm apart), ensuring alignment and levelness. Fasten securely with bolts or welds.

v. Welding and Bracing: Weld all connections as per structural design requirements. Add temporary braces as needed during installation to maintain stability.

c. Roof Sheeting and Insulation Installation
    i. Insulation Placement: Lay 5mm PE foam insulation directly on top of the installed C-purlins. Overlap adjacent insulation sheets by at least 50mm to prevent gaps.
    ii. Roof Sheet Installation: Begin placing pre-painted rib-type metal sheets, starting from the bottom edge of the roof and working up. Overlap sheets by at least one full rib and fasten with self-drilling screws.
    iii. Fastening: Use corrosion-resistant screws with rubber washers to secure sheets. Fasten screws along each rib to ensure a tight fit, following the manufacturer's spacing recommendations to prevent wind uplift.
d. Flashing and Spandrel Eaves Installation
    i. Flashing Installation: Install pre-painted gauge 24 flashing at the edges of the roof, valleys, and ridges, securing them to provide a water-tight seal. Ensure proper overlap between flashing sections (minimum 50mm overlap).
    ii. Spandrel Eaves with Vents: Attach metal spandrels with vents along the eaves for proper airflow. Ensure vents are clear and free from obstructions, and securely fasten each spandrel to maintain alignment.
    iii. Quality C Welding Inspection: Conduct visual inspection of all welds, checking for proper penetration and consistency. Rectify any incomplete welds or potential weak points.
    iv. Fastening Check: Verify all screws are securely fastened and rubber washers are not over-compressed. Check for proper sheet alignment and tight fit.
e. Final Inspection and Clean-Up
    i. Structural Inspection: Ensure the entire roof framing and sheeting system is structurally sound and stable. Check that all members are aligned and securely fastened.
    ii. Site Clean-Up: Remove any welding slag, excess insulation, or construction debris. Collect and dispose of any scrap metal or waste materials responsibly.

7. Ceiling Works

i. Specifications:

- Fiber Cement Board: Use 4.5mm thick fiber cement board

panels for the ceiling. Ensure the boards are smooth, free from cracks or warping, and resistant to moisture.

- Framing: Use galvanized metal furring channels (38mm x 12mm) as primary supports for the ceiling, spaced at 600mm centers, with additional cross-furring channels as needed for rigidity.
- Hanger Rods: Use 6mm galvanized steel hanger rods to suspend the framing from the structural ceiling, spaced at intervals specified in the design.
- Fasteners: Use corrosion-resistant screws designed for fiber cement board installation, typically self-tapping screws with washers.
- Joint Treatment: Use fiber cement-compatible joint compound and tape for seamless joints, creating a smooth, uniform finish.

ii. Standards:

- Moisture Resistance: Fiber cement boards should comply with local building standards for moisture resistance, especially in areas prone to humidity.
- Spacing and Alignment: Maintain 600mm spacing between framing channels and ensure that boards are attached without excessive spacing or gaps.
- Safety Standards: Comply with OSHA or equivalent safety regulations when installing overhead materials.
- Fire Resistance: Fiber cement boards should meet fire-resistant standards (ASTM E136 or equivalent) for ceiling applications, especially in fire-prone areas.

iii. Methodology:

a. Preparation

i. Material Inspection: Inspect fiber cement boards for cracks or defects. Ensure all metal furring channels and hanger rods are free from rust or deformation.

ii. Surface Preparation: Clear the work area, removing any obstacles and ensuring safe access to the ceiling area.

b. Framing Installation

i. Marking Layout: Mark the ceiling layout on the walls to indicate the desired height and alignment for the ceiling installation.

ii. Installing Hanger Rods: Attach 6mm galvanized steel hanger rods to the structural ceiling, spaced according to design (typically 1200mm centers). Ensure rods are securely fastened.

iii. Furring Channel Installation: Install primary galvanized furring channels (38mm x 12mm) by securing them to the hanger rods, maintaining

600mm spacing between channels. Level the channels to ensure a flat, even ceiling surface.

iv. Cross Furring: Add cross-furring channels as needed for additional support, particularly around the edges and seams of the fiber cement board.

c. Fiber Cement Board Installation
    i. Cutting and Sizing: Cut fiber cement boards to the required dimensions using a circular saw with a carbide-tipped blade, making sure cuts are clean and even.
    ii. Positioning: Begin by positioning the first board at one corner, leaving a 3-5mm gap between the wall and the edge of the board to allow for expansion.
    iii. Securing with Screws: Attach boards to the furring channels using self-tapping screws spaced at 200-300mm intervals along the edges and center of the board. Use corrosion-resistant screws with washers to prevent cracking.
    iv. Staggered Layout: Install boards in a staggered or offset pattern to improve stability and reduce visible joint lines across the ceiling.
d. Joint Treatment and Finishing
    i. Joint Compound Application: Apply fiber cement-compatible joint compound along the seams between boards, embedding fiber cement joint tape into the compound to strengthen the joints.
    ii. Sanding and Smoothing: Once the joint compound is dry, sand the seams lightly for a smooth, even surface, being careful not to damage the fiber cement board.
    iii. Final Inspection: Ensure the surface is free from imperfections or gaps, checking alignment, levelness, and consistency in fastening.
e. Clean-Up and Final Inspection
    i. Debris Removal: Clear the site of any excess materials, cut-offs, or waste.
    ii. Final Quality Check: Inspect the completed ceiling for evenness, secure fastening, and smooth joints. Address any imperfections before considering the installation complete.

8. Painting Works

i. Specifications:

a. Interior Ceiling (Flat Latex Paint):

i. Paint Type: Use water-based flat latex paint, suitable for ceilings. The paint should provide a non-reflective, matte finish with low odor and quick drying.
ii. Primer: Use a compatible water-based primer, especially if painting over a porous surface such as fiber cement board.
iii. Application: Minimum of two coats to achieve a uniform, smooth finish.

b. Exterior Walls (Elastomeric Paint):
i. Paint Type: Use high-quality elastomeric paint, designed for exterior surfaces to resist water penetration, UV light, and extreme weather conditions.
ii. Primer: Apply a masonry primer compatible with elastomeric paint to improve adhesion and coverage.
iii. Application: Minimum of two coats for enhanced durability, flexibility, and weatherproofing.

ii. Standards:

- Surface Preparation: Surfaces must be free from dust, dirt, grease, or other contaminants. For new surfaces, apply primer as per manufacturer's specifications.
- Application Conditions: Apply paint when the temperature is between 10°C and 35°C (50°F and 95°F) and humidity is below 85%. Avoid painting during high winds or rain for exterior work.
- Coverage and Consistency: Follow the manufacturer's recommended coverage rates for each coat. Ensure uniform thickness for even color and texture.
- Curing Time: Allow sufficient drying time between coats per manufacturer instructions, typically 2-4 hours for latex paint and 4-6 hours for elastomeric paint.
- Safety Standards: Follow OSHA or local safety regulations. Ensure proper ventilation for interior work and wear appropriate PPE (e.g., masks, gloves).

iii. Methodology:

1. Preparation
i. Surface Cleaning: Remove all dust, dirt, and contaminants from surfaces. For ceilings, lightly sand the surface to remove any imperfections.
ii. Repairs: Patch any holes, cracks, or irregularities with appropriate filler material, then sand smooth.
iii. Masking and Protection: Use painter's tape to mask off areas not to be painted (e.g., edges, fixtures). Protect floors and furniture with drop

cloths.

2. Priming
    i. Primer Application: For both interior and exterior surfaces, apply a compatible primer as the base layer. Use a roller or brush for even application, ensuring complete coverage. Allow primer to dry per manufacturer instructions.
    ii. Inspection: Inspect the primed surface for consistency. Sand lightly if necessary to achieve a smooth base for the topcoat.
3. Interior Ceiling Painting (Flat Latex)
    i. First Coat Application: Apply the first coat of flat latex paint with a roller, using a brush for edges and corners. Roll in a consistent direction to avoid streaks.
    ii. Drying Time: Allow the first coat to dry completely (typically 2-4 hours, depending on temperature and humidity).
    iii. Second Coat Application: Apply a second coat of flat latex paint in the same manner as the first, ensuring even coverage and a uniform finish.
    iv. Inspection: Inspect the ceiling for any missed spots or thin areas, and apply touch-ups as necessary.
4. Exterior Painting (Elastomeric)
    i. First Coat Application: Apply the first coat of elastomeric paint using a roller or airless sprayer, with a brush for edges and corners. Work in manageable sections to maintain a wet edge, preventing visible lines.
    ii. Drying Time: Allow the first coat to dry completely, typically 4-6 hours depending on weather conditions.
    iii. Second Coat Application: Apply a second coat of elastomeric paint for increased durability and uniform color. Ensure smooth, even application.
    iv. Final Inspection: After the second coat is dry, inspect for consistency and touch up any uneven areas or missed spots.
5. Clean-Up
    i. Equipment Cleaning: Clean rollers, brushes, and other tools with water (for latex and elastomeric paints) immediately after use.
    ii. Remove Masking: Carefully remove painter’s tape from edges and trim before the paint fully cures to avoid peeling.

iii. Site Clean-Up: Collect and dispose of all waste materials, drop cloths, and tape. Ensure the work area is clean and safe.

6. Final Inspection
    i. Surface Quality Check: Inspect all painted surfaces for uniformity, smoothness, and coverage. Look for any drips, streaks, or thin areas and apply touch-ups as needed.
    ii. Documentation: Record the completion date and any observations for quality control, ensuring the project meets specified standards.

9. Doors

i. Methodology:
    a. Door:
        i. Type: Flush hollow core door with integrated louver for ventilation.
        ii. Dimensions: Per project plans.
        iii. Thickness: 35mm to 40mm.
        iv. Finish: Pre-primed for painting, or veneer finish as specified.
    b. Lockset:
        i. Type: Lever-type lockset, preferably with a passage or privacy function.
        ii. Material: Stainless steel, with a corrosion-resistant finish.
        iii. Brand and Model: As per approved project specifications.
    c. Hinges:
        i. Material: Steel jamb, with rust-proof coating (powder-coated or painted).
        ii. Size and Shape: Dimensions and profiles according to design plans.
        iii. Finish: Pre-primed or finished in accordance with project specifications.

ii. Standards:
- Durability and Stability: Ensure that all materials comply with local building codes and standards for interior doors. The installation should withstand frequent use and meet specifications for commercial or institutional environments.
- Security and Safety: Lever lockset should comply with ANSI/BHMA standards (Grade 2 or higher for medium to high-frequency areas). Install hinges and lockset securely to prevent tampering or damage.
- Alignment and Clearances: Maintain even gaps around the door (typically 3mm on the sides and top, and 10-12mm at the bottom for clearance), and align door edges

for proper closure.

iii. Methodology:

a. Preparation

i. Materials Inspection: Check the hollow core door, steel jamb, hinges, and lockset for any damage or defects. Ensure that the louver is securely attached and free from obstructions.

ii. Work Area Preparation: Clear the work area and ensure all tools and materials are accessible. Verify door dimensions according to the plans to confirm compatibility with the jamb and opening.

b. Steel Jamb Installation

i. Positioning: Align the steel jamb within the door opening, ensuring it is level, plumb, and centered.

ii. Securing the Jamb: Use anchor bolts or screws to secure the jamb to the surrounding wall, placing fasteners at regular intervals (typically 300mm spacing) along each side for stability.

iii. Leveling: Check for level, plumb, and alignment continuously during installation. Adjust as necessary, shimming behind the jamb to maintain consistent gaps and alignment.

c. Door Preparation

i. Inspect Pre-Installed Hinges: Since steel jambs typically come with pre-installed hinges and pre-drilled holes, verify that these hinges are securely fastened and aligned.

ii. Check for Alignment: Confirm that the hinge locations on the door match the pre-installed hinges on the jamb. Ensure the door edge aligns with the jamb edge to maintain even gaps and smooth operation.

iii. Adjustment as Needed: If slight adjustments are necessary, use shims or spacers to achieve the correct alignment, ensuring a consistent and even gap around the door.

d. Door Hanging

i. Aligning the Door: Position the door within the jamb, aligning the hinges with the mortises on the jamb. Use temporary shims if necessary to maintain even gaps.

ii. Securing Hinges: Attach the hinges to the jamb, using shims or spacers to maintain the correct gap between the door and jamb for smooth operation.

iii. Test Door Swing: Open and close the door several times to check for proper alignment, clearance, and smooth operation. Make adjustments as needed to ensure proper functioning.

e. Lockset Installation
    i. Marking and Drilling: Mark the position for the lever-type lockset, typically at 1,000mm from the bottom of the door. Drill holes for the lock body and latch according to the manufacturer's template.
    ii. Lockset Installation: Install the lever lockset, securing the handle, latch, and strike plate as per manufacturer instructions. Ensure the lockset is firmly attached and operates smoothly.
    iii. Latch Adjustment: Align the latch with the strike plate in the jamb, adjusting as necessary to ensure the door latches securely when closed.
f. Finishing Touches
    i. Gap Check and Adjustments: Inspect all clearances around the door to ensure they meet specifications (typically 3mm on the sides and top and 10-12mm at the bottom for ventilation).
    ii. Louver Check: Ensure that the louver is clear of any blockages and securely attached, allowing proper airflow.
    iii. Sealant Application (Optional): Apply silicone or other appropriate sealant around the steel jamb edges to reduce air leakage if specified.
g. Final Inspection and Clean-Up
    i. Operation Test: Test the door's swing, lockset operation, and hinge function to ensure smooth, secure movement without resistance or binding.
    ii. Aesthetic Inspection: Check for any scratches, alignment issues, or surface imperfections. Touch up any exposed areas as needed.
    iii. Site Clean-Up: Remove any debris, dust, or leftover materials. Ensure the workspace is clean and the door is ready for use.

10. Windows

- (600mm x 600mm, 6mm Tempered Glass, Analok Aluminum Frame)

i. Specifications:
    a. Window Type: Awning window with top-hinged design for outward opening.
    b. Glass: 6mm thick tempered glass for durability, strength, and safety.
    c. Frame: Analok aluminum frame with corrosion-resistant, anodized finish.
    d. Hardware:
    e. Hinges: Top-mounted stainless steel friction hinges or

awning hinges to ensure smooth operation and secure positioning.

f. Locks: Push-button or lever-type lock to secure the window when closed.
g. Sealants: Silicone or polyurethane sealant suitable for glass-to-aluminum and aluminum-to-wall bonding.

ii. Standards:

- Safety: Tempered glass should comply with ASTM C1048 or equivalent local standards for impact resistance and safety in buildings.
- Weatherproofing: Use weather-resistant sealant around frame edges to prevent air and water infiltration. Ensure installation meets local weatherproofing and energy efficiency standards.
- Durability: Analok aluminum frames must conform to ISO 7599 or equivalent standards for anodizing aluminum, ensuring long-term resistance to corrosion, weather, and wear.
- Clearances: Maintain an even gap around the window frame (typically 5mm for thermal expansion and sealing). Frame should be plumb, level, and centered within the window opening.
- Accessibility: Ensure locking mechanisms are accessible for easy operation and maintenance.

iii. Methodology

a. Preparation
    i. Inspection of Opening: Check the window opening for level, plumb, and square alignment. Clean the opening of any debris, dust, or loose material to ensure proper bonding.
    ii. Material Check: Inspect the awning window frame, tempered glass, and hardware for any damage, scratches, or defects.
b. Frame Installation
    i. Positioning: Insert the analok aluminum frame into the window opening. Use shims at the top, sides, and bottom of the frame to maintain a consistent gap (usually 5mm).
    ii. Leveling and Centering: Ensure the frame is level and centered in the opening. Confirm alignment by checking that all sides are square to avoid warping or distortion.
    iii. Securing the Frame: Drill holes through the aluminum frame at pre-marked points, ensuring they align with the wall material. Attach the frame to the surrounding structure using appropriate screws and plugs, depending on the wall type.

iv. Sealant Application: Apply a continuous bead of weather-resistant silicone or polyurethane sealant along the outer edges of the frame, creating an airtight and watertight seal.

c. Glass Installation
    i. Glass Setting Blocks: Place rubber or plastic setting blocks along the bottom edge of the frame to support the tempered glass panel.
    ii. Glass Positioning: Carefully position the 6mm thick tempered glass panel into the frame, ensuring it rests securely on the setting blocks. Maintain even spacing between the glass and frame edges to allow for thermal expansion.
    iii. Securing the Glass: Use glazing beads or stops to secure the glass panel within the frame, pressing them into place around the perimeter. Ensure a tight fit with no gaps.
d. Hardware Installation
    i. Hinge Installation: Attach stainless steel friction or awning hinges at the top of the window frame, securing them to both the frame and the window sash.
    ii. Operation Check: Open and close the window to test hinge operation, ensuring smooth movement and proper positioning at various angles.
    iii. Lock Installation: Install the push-button or lever-type lock at the base of the sash, ensuring it aligns correctly with the latch point on the frame. Verify that the lock mechanism is functional and securely holds the window closed.
e. Finishing and Inspection
    i. Sealant Application: Apply silicone or polyurethane sealant around the interior and exterior side of the frame, filling any remaining gaps for improved insulation and air tightness.
    ii. Cleaning: Wipe down the glass and frame to remove any installation marks or sealant residue.
    iii. Final Inspection: Check for alignment, secure fastening, and airtight sealing. Open and close the window several times to ensure smooth operation, secure locking, and adequate weatherproofing.
f. Clean-Up and Documentation
    i. Remove Protective Film: Remove any protective film from the aluminum frame and glass.
    ii. Dispose of Waste: Collect and dispose of any debris, packaging, or waste materials in accordance with site protocols.

iii. Documentation: Record the completion date and final inspection observations, ensuring all specifications have been met.

11. Sanitary and Plumbing Works

i. Specifications:
   a. Piping System (Drainage):
      i. Material: PVC pipes for drainage, waste, and vent lines, following ASTM D2665 standards.
      ii. Size: As specified in project plans to ensure optimal flow and drainage.
      iii. Connections: Solvent weld or rubber couplings for PVC joints, ensuring leak-free connections.
      iv. Support: Support PVC pipes at 1.2m intervals horizontally and 1.8m vertically.
   b. Water Supply System (PPR Pipes):
      i. Material: PPR pipes for hot and cold water lines, conforming to ISO 15874 standards.
      ii. Size: Pipe diameters as specified in the design to ensure sufficient water pressure and flow rate.
      iii. Connections: Use heat fusion welding for secure, leak-free joints in PPR piping.
      iv. Supports: Use pipe supports at intervals of 0.5m to 1m to avoid sagging or misalignment.
   c. Fixtures and Accessories:
      i. Toilets, Lavatories, Faucets, Showers, Floor Drains: Installed as specified in previous details.

ii. Standards:
- Compliance with Code: Install all piping and fixtures according to local and national plumbing codes.
- Manufacturer’s Recommendations: Adhere to manufacturers' specifications for PPR installation and fusion welding techniques.
- Water Conservation: Use water-efficient fixtures where specified, to comply with environmental standards.
- Leak Testing: Pressure test PPR waterlines at 1.5 times the operating pressure after installation to ensure integrity.

iii. Methodology:
   a. Preparation
      i. Site Layout: Mark fixture locations, pipe routes, and valve points according to the design plan.
      ii. Materials Check: Inspect PPR pipes, PVC pipes, fittings, and fixtures for any visible damage.
   b. Piping Installation
      1. Drainage System (PVC):
         a. Routing and Slope: Route PVC drainage lines with a slope of 1/4 inch

per foot for gravity drainage.
    b. Jointing and Supports: Solvent-weld PVC joints, securing them with supports to prevent sagging.
2. Water Supply System (PPR Embedded in Concrete):
    a. Cutting and Welding: Use clean cuts and heat fusion welding for all PPR pipe joints, ensuring a secure, leak-proof bond.
    b. Positioning in Concrete: Position pipes with sleeves within the concrete hollow block channels or concrete surface, securing temporarily with clips if necessary.
    c. Pressure Testing: Perform pressure testing before pouring concrete to check for any leaks.
3. Fixture Installation
    a. Installation of Toilets, Lavatories, Faucets, and Showers: Securely attach each fixture to the embedded PPR supply and PVC drainage lines as per specified fixture height and alignment.
4. Final Inspection and Finishing
    a. Testing: After embedding and curing, perform a final pressure and operational test to ensure the system is functional and leak-free.
    b. Surface Sealing: Seal around fixture penetrations and pipe outlets to prevent water intrusion.
5. Documentation and Handover
    a. Provide an as-built layout, with pipe routings in concrete and fixture locations documented for future reference.

12. Electrical Works

i. Specifications:
    a. Wiring and Conduits:
        i. Wires: THHN copper wires sized according to load requirements.
        ii. Voltage Rating: Wires and equipment shall conform to Philippine electrical standards, typically 220V for residential and general-purpose circuits.

iii. Conduits: PVC conduits for embedded installations; flexible metal conduits for surface installations as required by the design. Conduit sizing shall follow Philippine standards.

b. Outlets, Switches, and Fixtures:
   i. Outlets: Standard 15A or 20A duplex outlets for general circuits, with GFCI outlets in wet areas.
   ii. Switches: Toggle or rocker switches rated for 15A or 20A, depending on circuit requirements.
   iii. Lighting Fixtures: LED fixtures with wattage based on design and energy efficiency requirements.
   iv. Mounting Height: Outlets typically installed at 300mm above finished floor, switches at 1.2m to 1.5m from floor level.

c. Testing and Safety Equipment:
   i. Insulation Resistance: Megger testing of cables to ensure insulation integrity.
   ii. Voltage Testing: Test each circuit for correct voltage and continuity in compliance with local standards.
   iii. Breaker Labels: Proper labeling of all circuit breakers for easy identification.

ii. Standards:
   a. Compliance with Code: All installations must follow the Philippine Electrical Code (PEC) for safety and efficiency.
   b. Manufacturer's Guidelines: Install fixtures, panels, and devices as per manufacturer recommendations.

iii. Methodology:
   a. Preparation and Planning
      i. Site Layout: Mark locations for outlets, switches, panels, and fixtures per the design plan.
      ii. Materials Check: Inspect wires, conduits, and fixtures for compliance with specifications and standards.
   b. Conduit and Cable Installation
      i. Routing:
         1. Embedded Conduits: Install PVC conduits in walls or ceilings as per design, ensuring depth requirements for embedded conduits.
         2. Surface Conduits: Use metal or flexible conduits for exposed installations.
      ii. Wire Pulling:
         1. Pull THHN wires through conduits, labeling at both ends to identify circuits accurately.
   c. Fixture and Device Installation:
      i. Outlets and Switches:
         1. Install outlets and switches at designated heights, connecting all live, neutral, and ground wires as per polarity.

2. Install GFCI outlets in all designated wet areas.

ii. Lighting Fixtures:

1. Mount and connect lighting fixtures following design requirements and grounding where applicable.

d. Testing and Inspection:

i. Continuity and Polarity: Check continuity and polarity of all circuits.

e. Final Inspection and Handover:

i. Inspection: Final inspection with an authorized representative to confirm code compliance.

ii. Documentation: Provide as-built documentation and maintenance instructions.

V. MINIMUM REQUIREMENTS FOR SAFETY AND HEALTH PROGRAM

13. Safety Management System:
    a. *Safety Policy*: Develop and document a safety policy outlining the organization's commitment to health and safety, particularly considering the presence of faculty, students, and other stakeholders.
    b. *Objectives:* Define clear safety objectives and goals aligned with organizational priorities and the educational environment.
    c. *Responsibilities*: Assign safety responsibilities and designate an Occupational Safety Officer or Project Safety Officer. This individual should have relevant training certified by the Department of Labor and Employment (DOLE) and be the point person for safety protocols. This role may be filled by the assigned project engineer if suitably qualified.
14. Risk Assessment and Management:
    a. *Hazard Identification*: Conduct regular hazard assessments to identify potential safety risks and health hazards in the workplace.
    b. *Risk Evaluation*: Evaluate the risks associated with identified hazards and their potential impact on students, faculty, and other stakeholders.
    c. *Control Measures:* Implement appropriate control measures to mitigate or eliminate identified risks, including physical barriers, signage, and restricted access to hazardous areas.
15. Safety Training and Education:
    a. *Orientation*: Provide safety orientation and training for all new employees and contractors, emphasizing the unique environment of the educational institution.
    b. *Ongoing Training*: Offer regular safety training and refresher courses for all employees on relevant topics, including emergency procedures and hazard recognition, with a focus on interacting safely in an environment with students and faculty (if necessary).
    c. *Specialized Training:* Provide additional training for employees exposed

to specific hazards or using specialized equipment (if necessary).

16. Personal Protective Equipment (PPE):
    a. *Provision*: Provide appropriate PPE to employees based on the identified hazards.
    b. *Use and Maintenance*: Ensure that employees use PPE correctly and that it is maintained in good condition.
    c. *Training*: Train employees on the proper use, maintenance, and storage of PPE (if necessary).
17. Emergency Preparedness and Response:
    a. *Emergency Plan*: Develop and document an emergency response plan specific to the educational institution, covering scenarios such as evacuations involving students and faculty.
    b. *Drills*: Conduct regular emergency drills in coordination with the institution's existing emergency procedures to ensure effective response by both construction personnel and institution stakeholders (if necessary).
    c. *Emergency Contacts*: Maintain a list of emergency contacts and make it accessible to all employees.
18. Incident Reporting and Investigation:
    a. *Reporting System*: Establish a system for reporting workplace incidents, injuries, and near-misses.
    b. *Investigation*: Investigate all incidents to determine causes and implement corrective actions to prevent recurrence.
    c. *Documentation*: Maintain records of incidents, investigations, and corrective actions taken.
19. Health and Safety Inspections:
    a. *Routine Inspections*: Conduct regular safety inspections of the workplace to identify and address potential hazards, particularly those affecting areas frequented by students and faculty.
    b. *Inspection Records*: Document inspection findings and ensure that corrective actions are taken.
20. Health and Wellness Programs:
    a. *Health Monitoring*: Implement programs for monitoring employee health and wellness, including pre-employment and periodic health checks.
    b. *Wellness Programs*: Offer wellness programs and resources to promote employee well-being and reduce workplace stress.
21. Compliance and Legal Requirements:
    a. *Regulatory Compliance*: Ensure compliance with relevant local, national, and international health and safety regulations and standards.
    b. *Documentation*: Keep up-to-date records of compliance, including permits, licenses, and safety certifications.
22. Communication and Involvement:
    a. *Safety Meetings:* Hold regular safety meetings to discuss safety issues, share information, and engage employees in the safety program, with consideration for the educational setting.
    b. *Feedback*: Encourage and provide channels for employees to provide feedback on safety matters and participate in safety initiatives.

23. Documentation and Record-Keeping:
    a. *Safety Records*: Maintain comprehensive records related to safety training, incident reports, inspections, and risk assessments.
    b. *Accessibility:* Ensure that safety documentation is readily accessible to employees, students, faculty, and relevant authorities.
24. Contractor Responsibilities:
    a. *Safety Precautions*: The contractor must observe proper safety precautions to protect faculty, students, and other stakeholders in the vicinity. This includes implementing physical barriers, clear signage, and restricted access to construction zones.
    b. *Communication*: Coordinate with the institution to ensure that construction activities are conducted in a manner that minimizes disruption to academic activities and ensures the safety of all individuals on site.

VI. REPORTORIAL REQUIREMENT

Upon acceptance of the Notice to Proceed, the Contractor is required to submit the following documentation in Microsoft Word or an equivalent format:

Project Schedule:

- A detailed project schedule in the form of a bar chart, outlining all significant phases and milestones of the project.
- The schedule should clearly indicate the start and end dates for each phase, including any critical paths that may affect the project's timeline.
- Any dependencies or sequential tasks must be highlighted to ensure clarity in project execution.

Manpower Schedule:

- A corresponding manpower schedule that aligns with the project schedule, detailing the number and type of personnel required for each phase of the project.
- The manpower schedule should reflect the planned allocation of labor resources, ensuring that sufficient personnel are available to meet the project deadlines.
- Include information on work shifts, if applicable, and any planned overtime or special work arrangements.

Both documents must be submitted within seven (7) days of receiving the Notice to Proceed. The documents will be subject to review and approval by the Project Management Unit before any construction activities commence.

VII. PROJECT COMPLETION

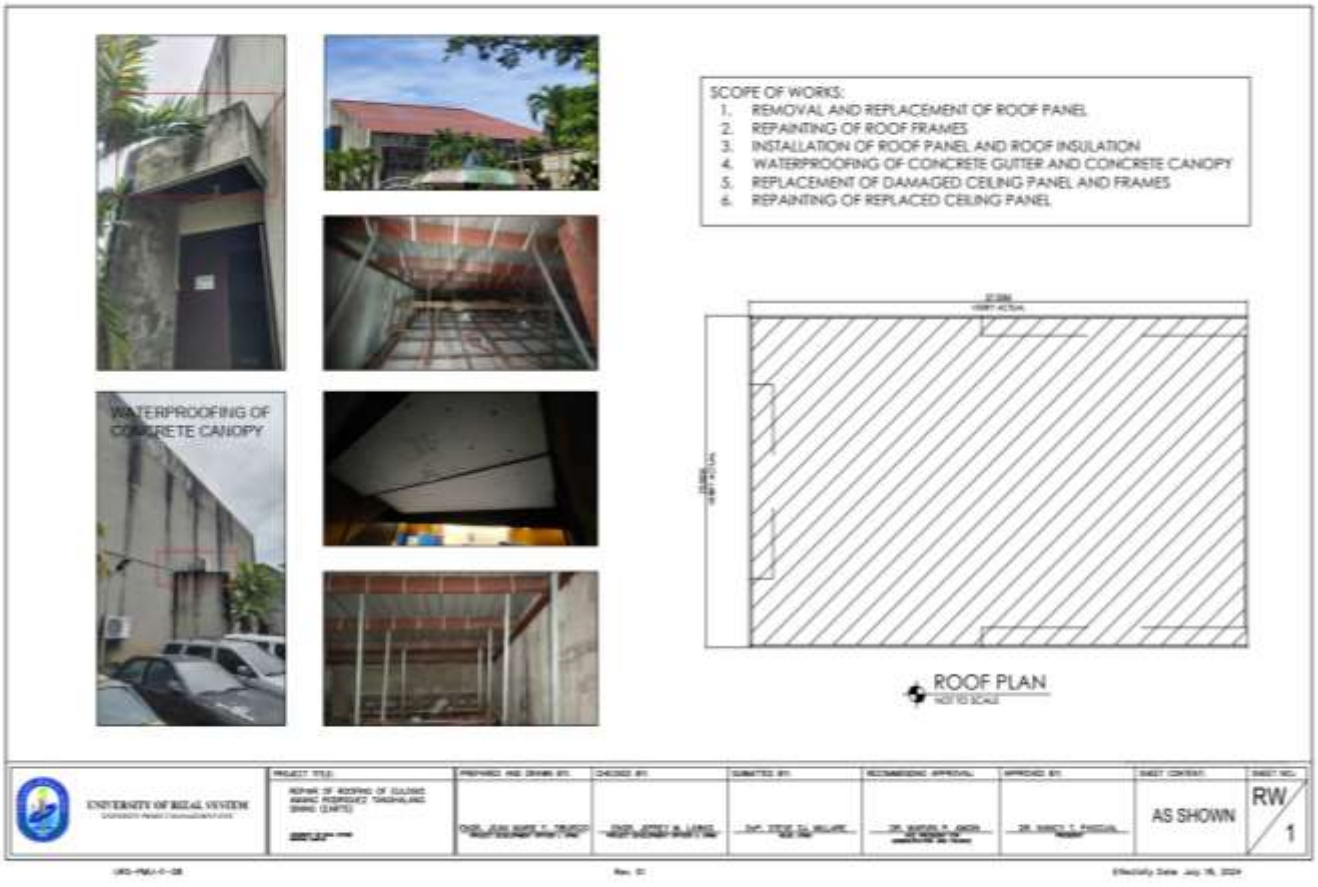
The contractor shall complete the repair project within ninety (90) calendar days taking into account the unfavorable weather conditions.

VIII. WARRANTY

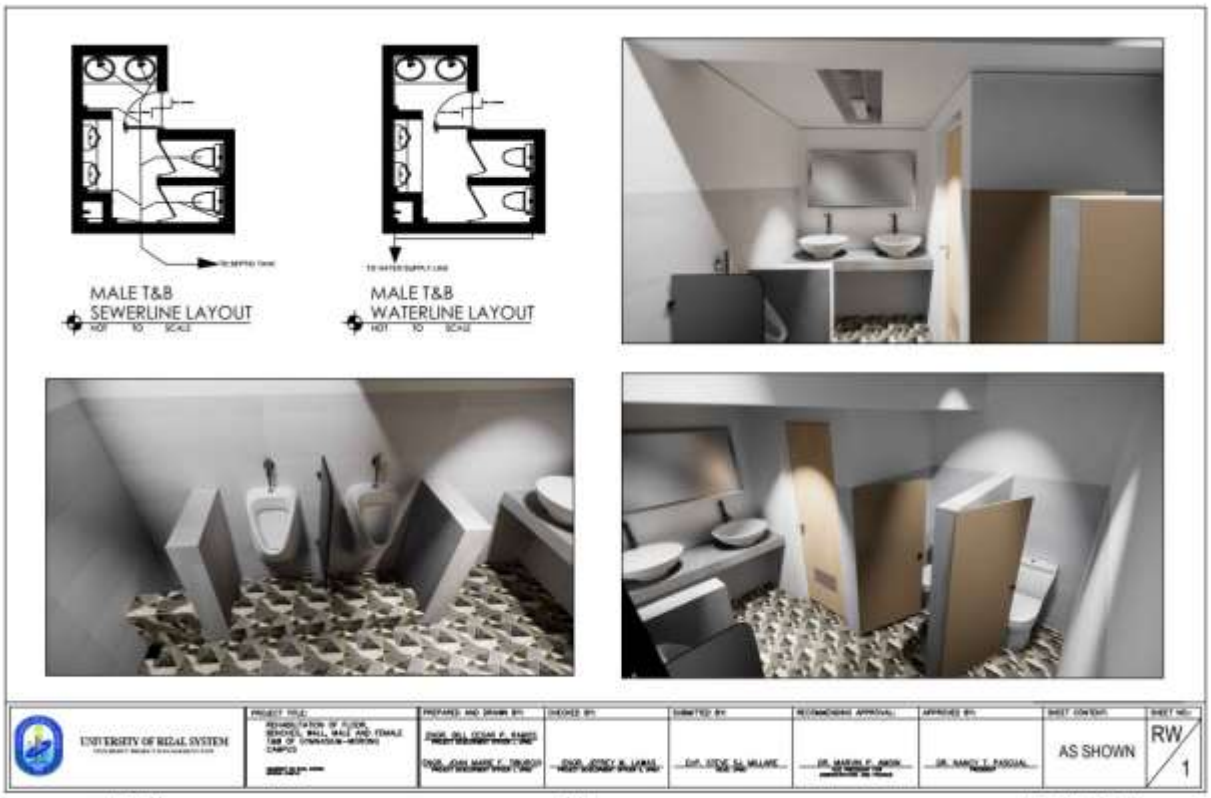
The contractor shall guarantee the completed structure against structural defects and failure for its satisfactory performance vis-à-vis the prescribed Minimum Performance Standards and Specifications (MPSS) during the lifetime of the structure.

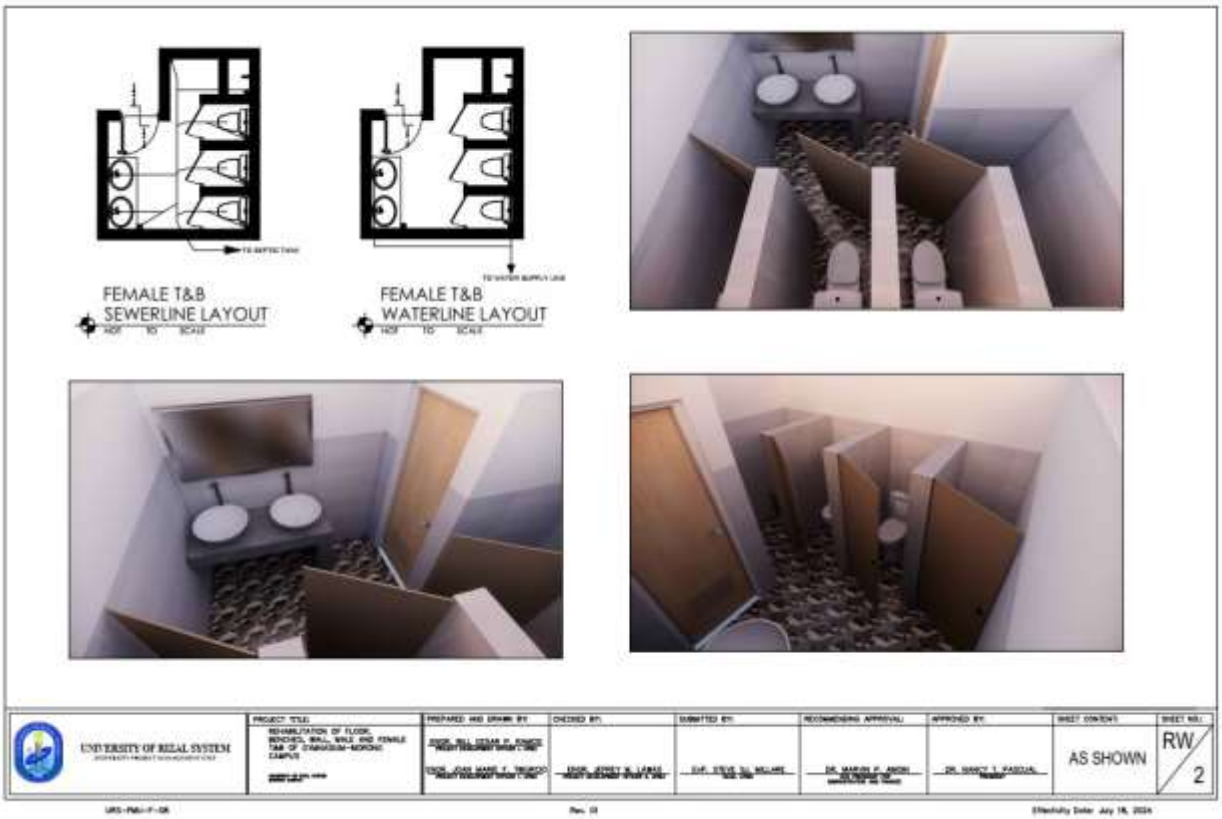
Section VII. Drawings

Lot 1(Repair of EARTS)



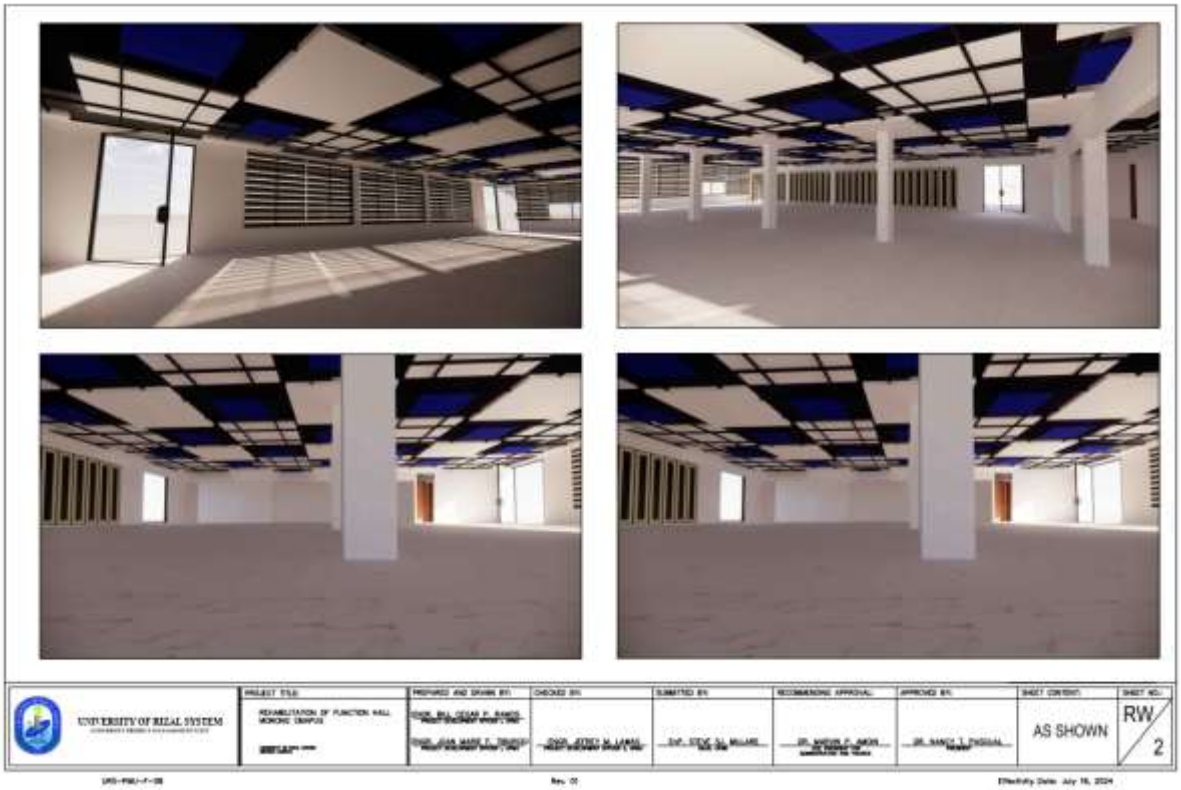
Lot 2(Repair of Gymnasium)



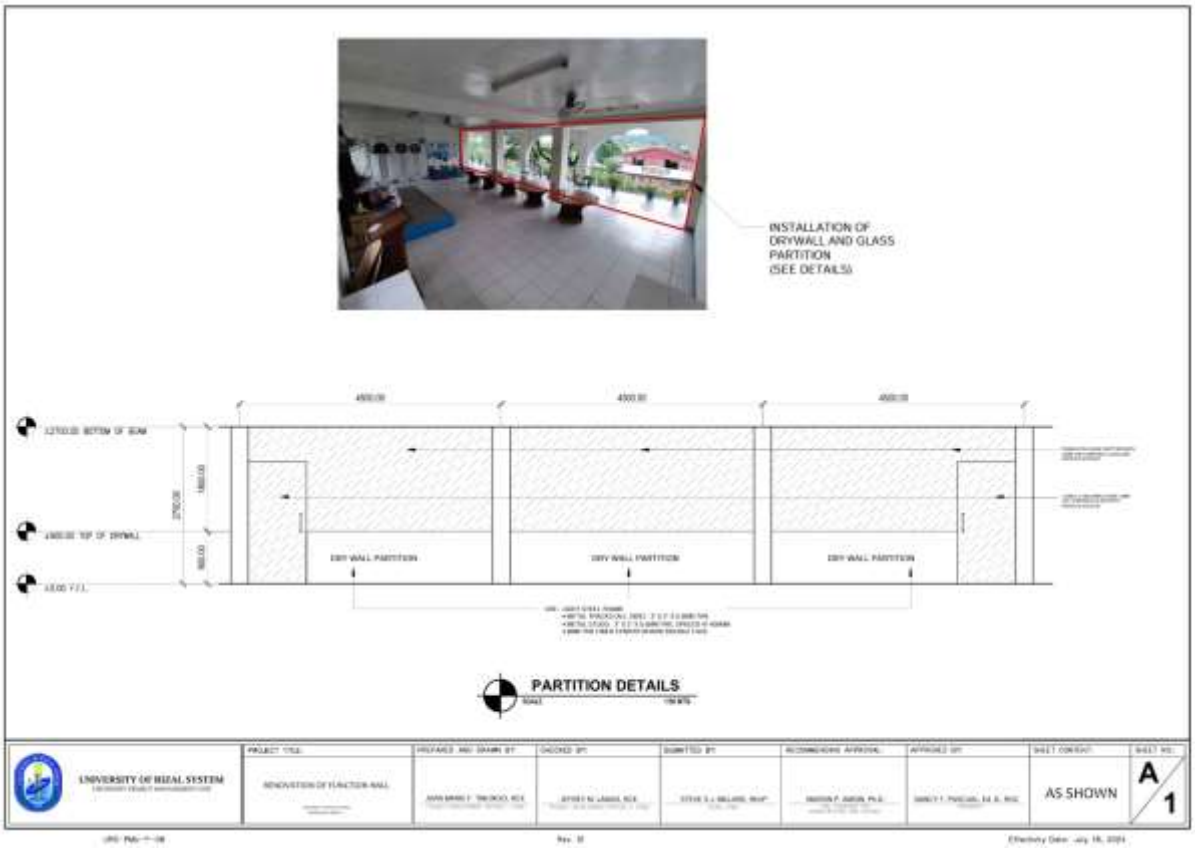


Lot 2(Repair of Gymnasium)

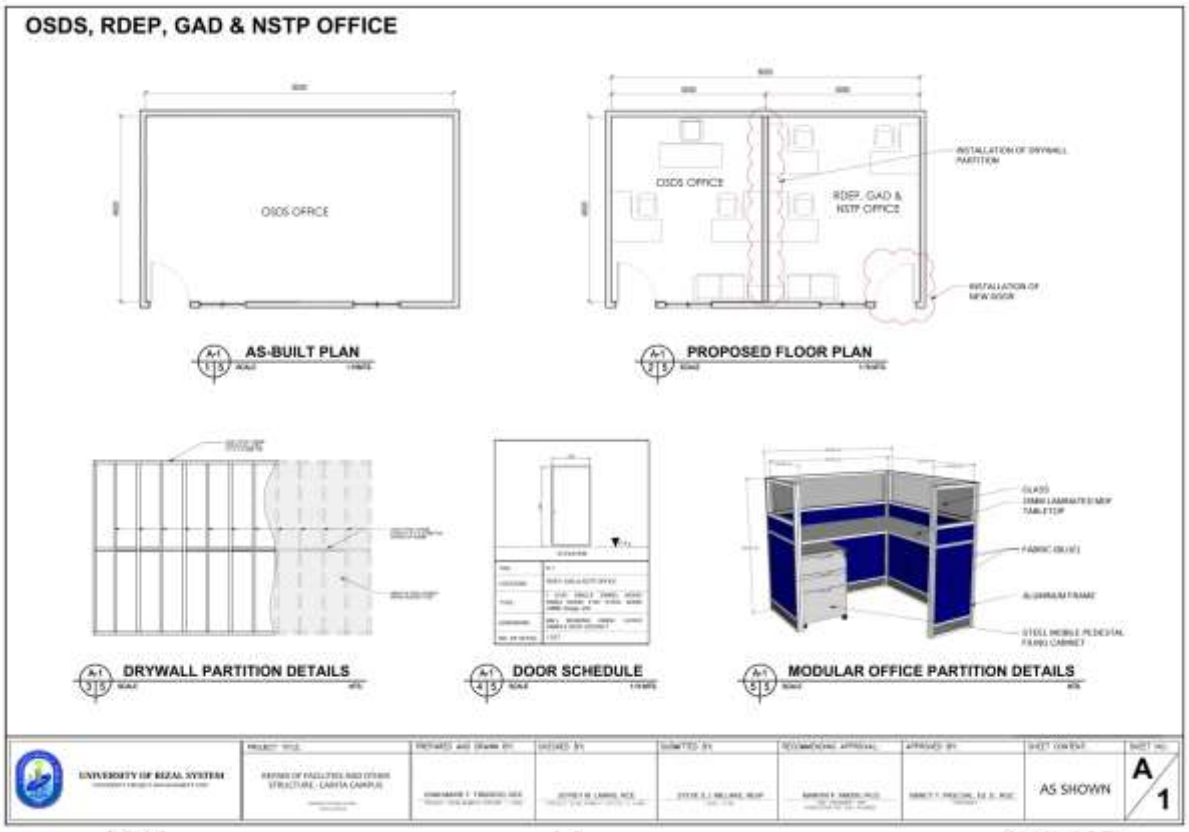
Lot 3(Repair of Function Hall)

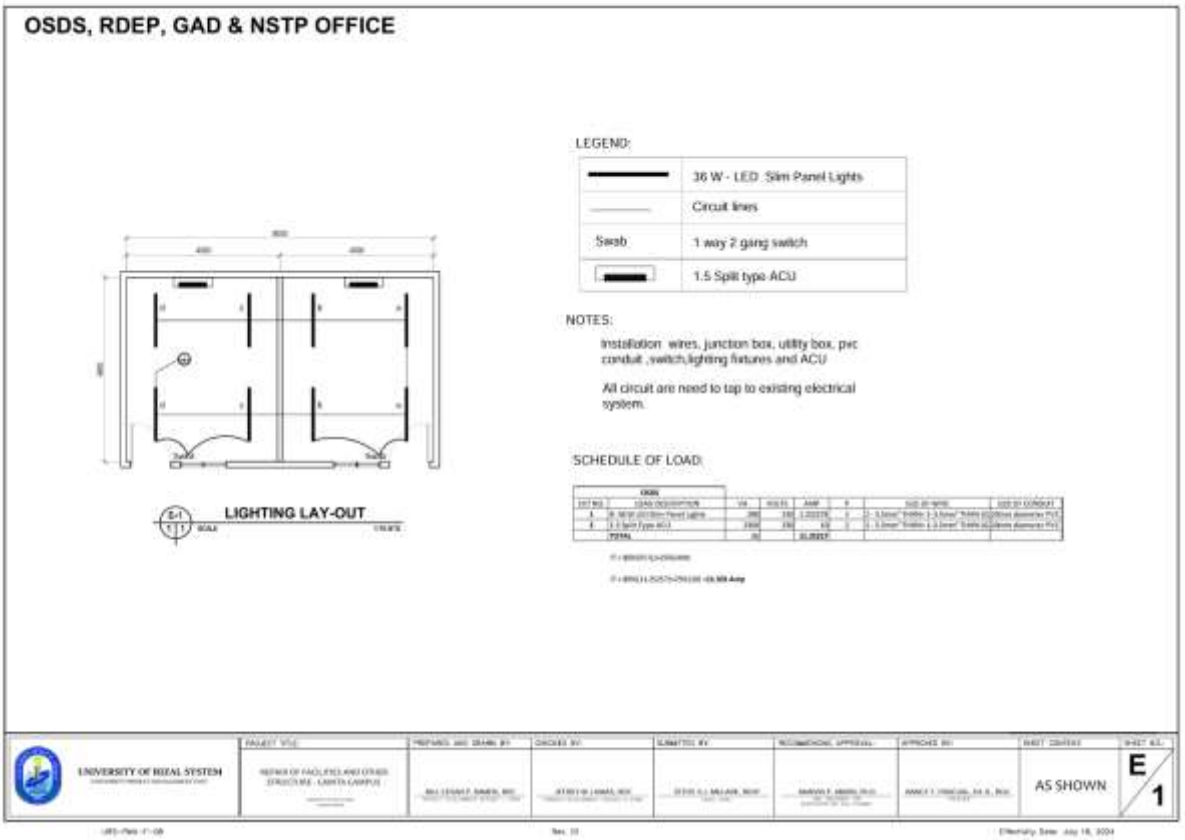


Lot 4 (Renovation of Function Hall)



Lot 5(Repair of Various Facilities and Other Structures- Cainta Campus)





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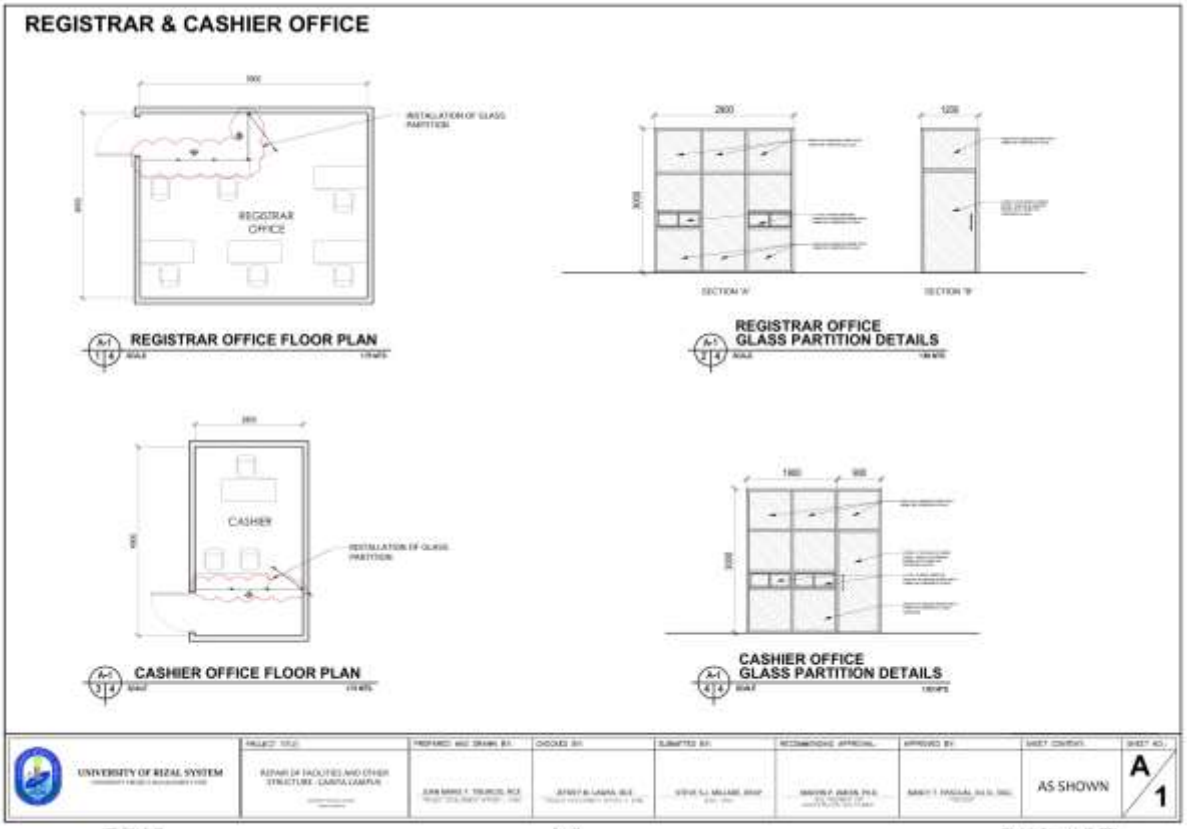

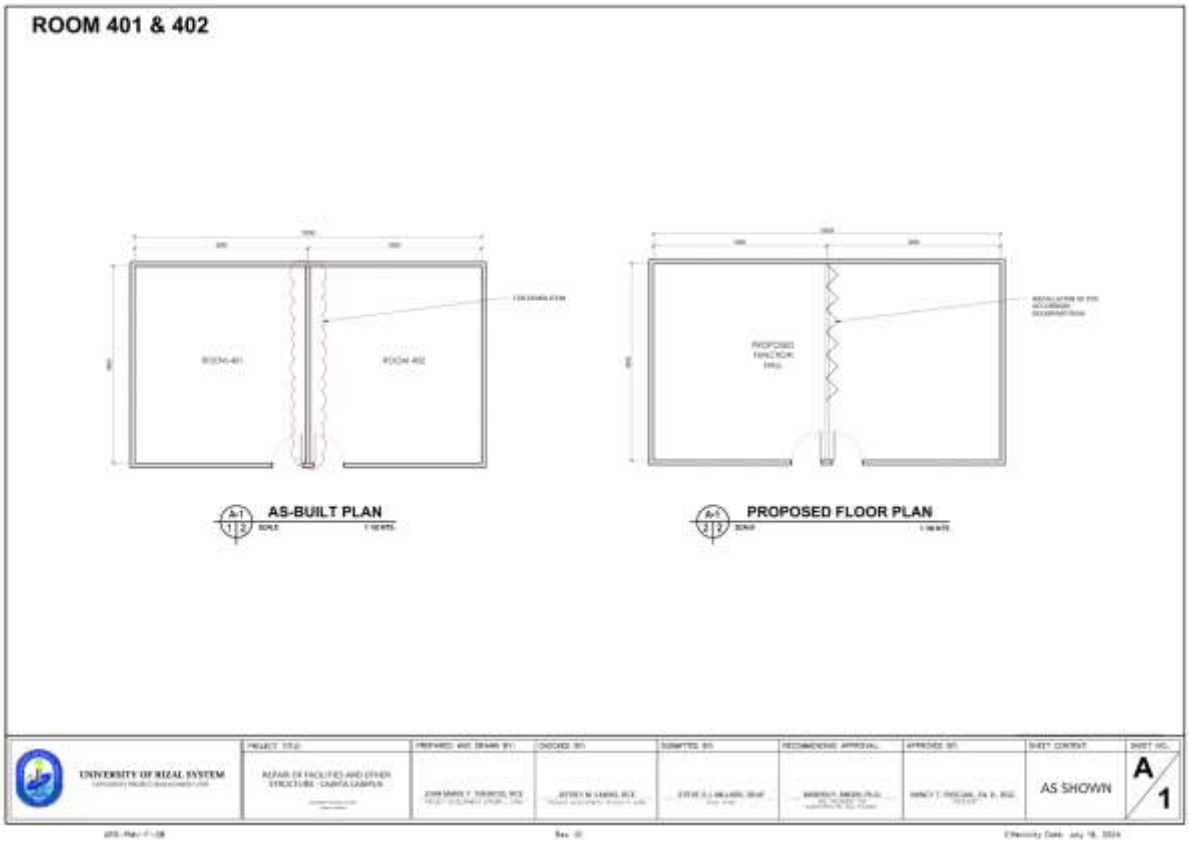

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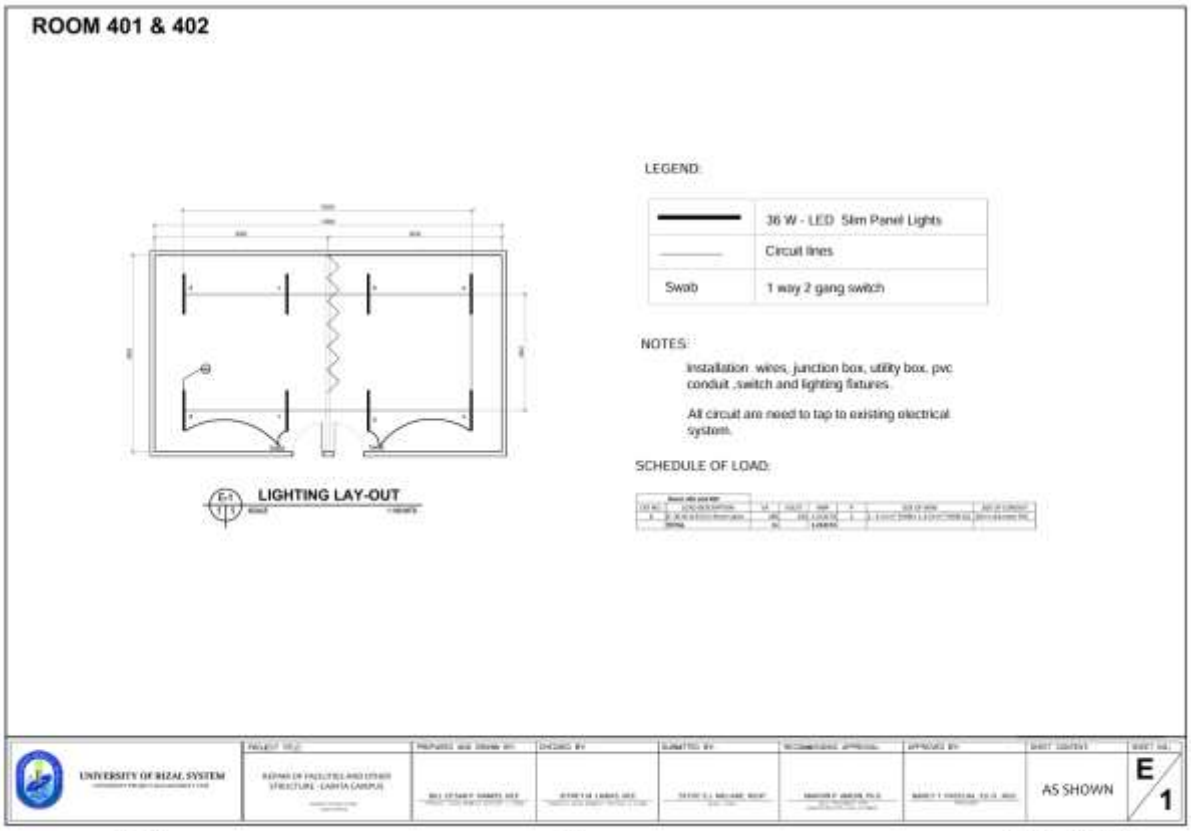
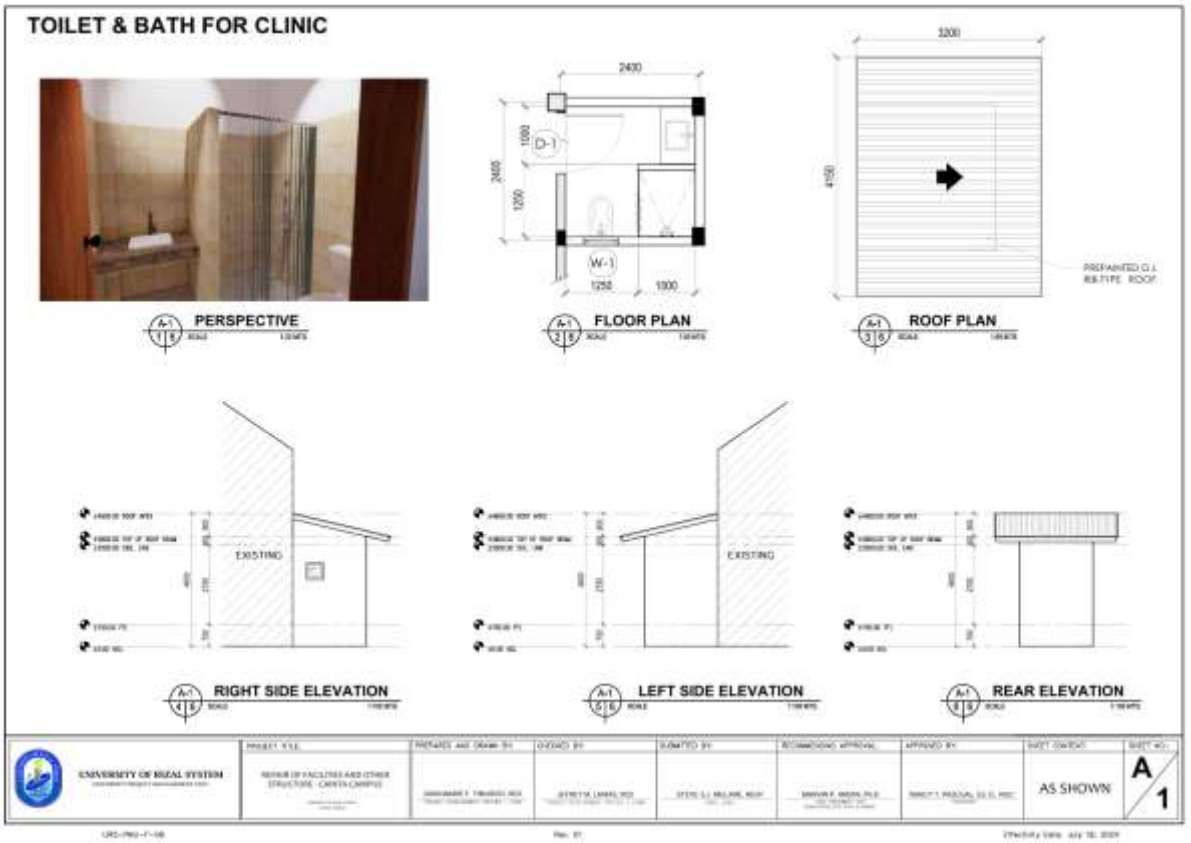
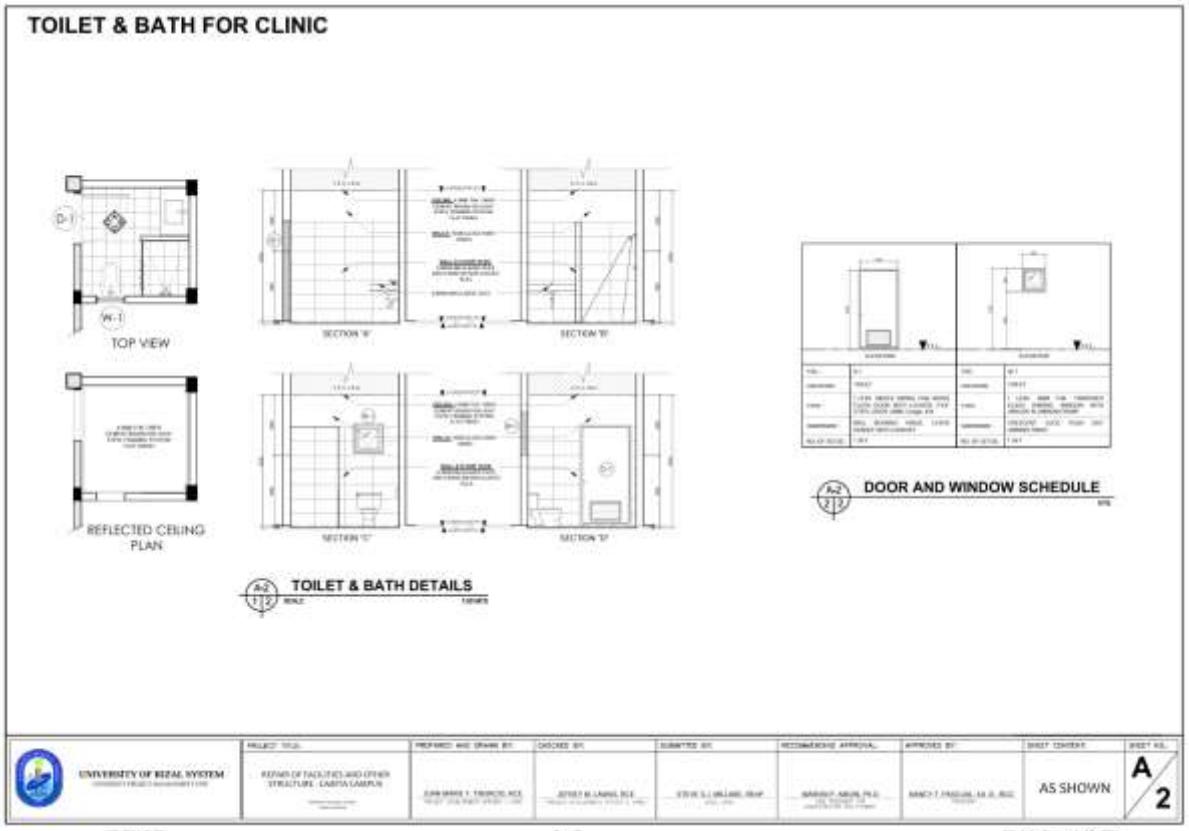
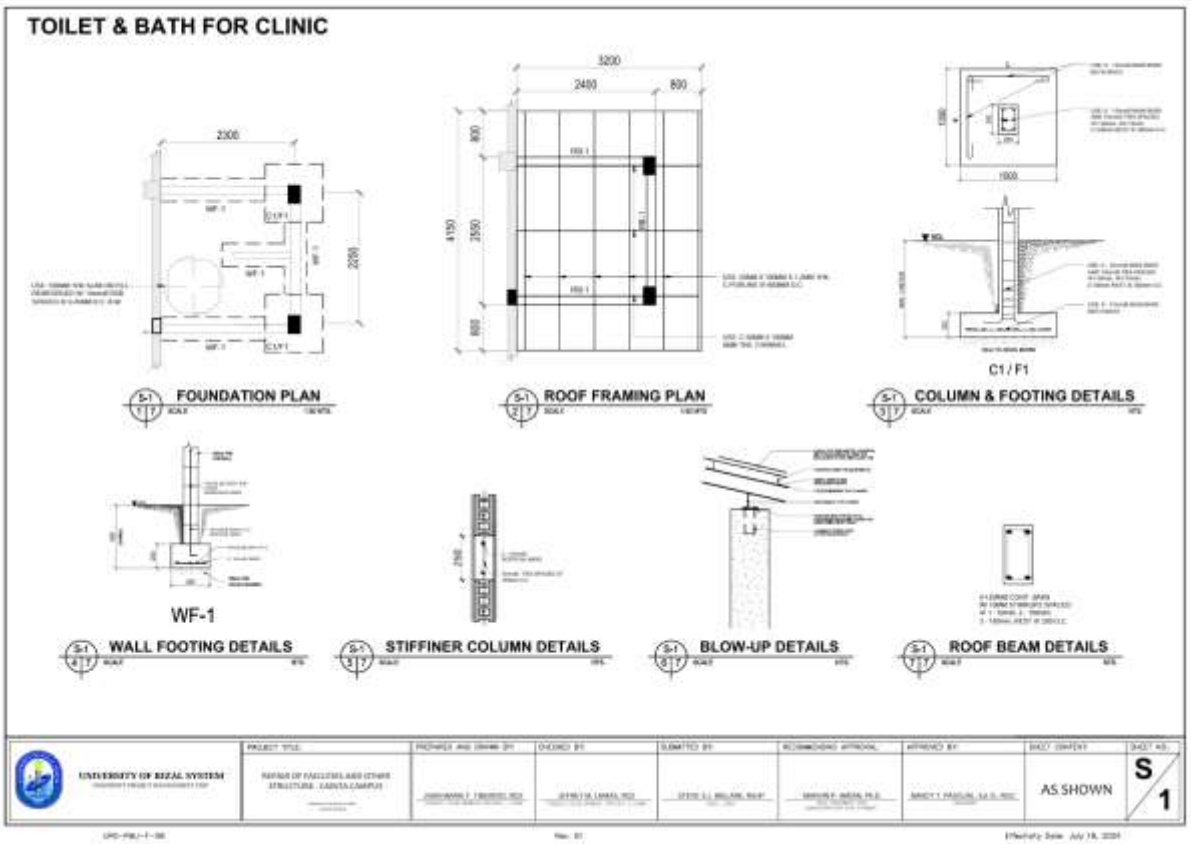




Lot 5(Repair of Various Facilities and Other Structures- Cainta Campus)





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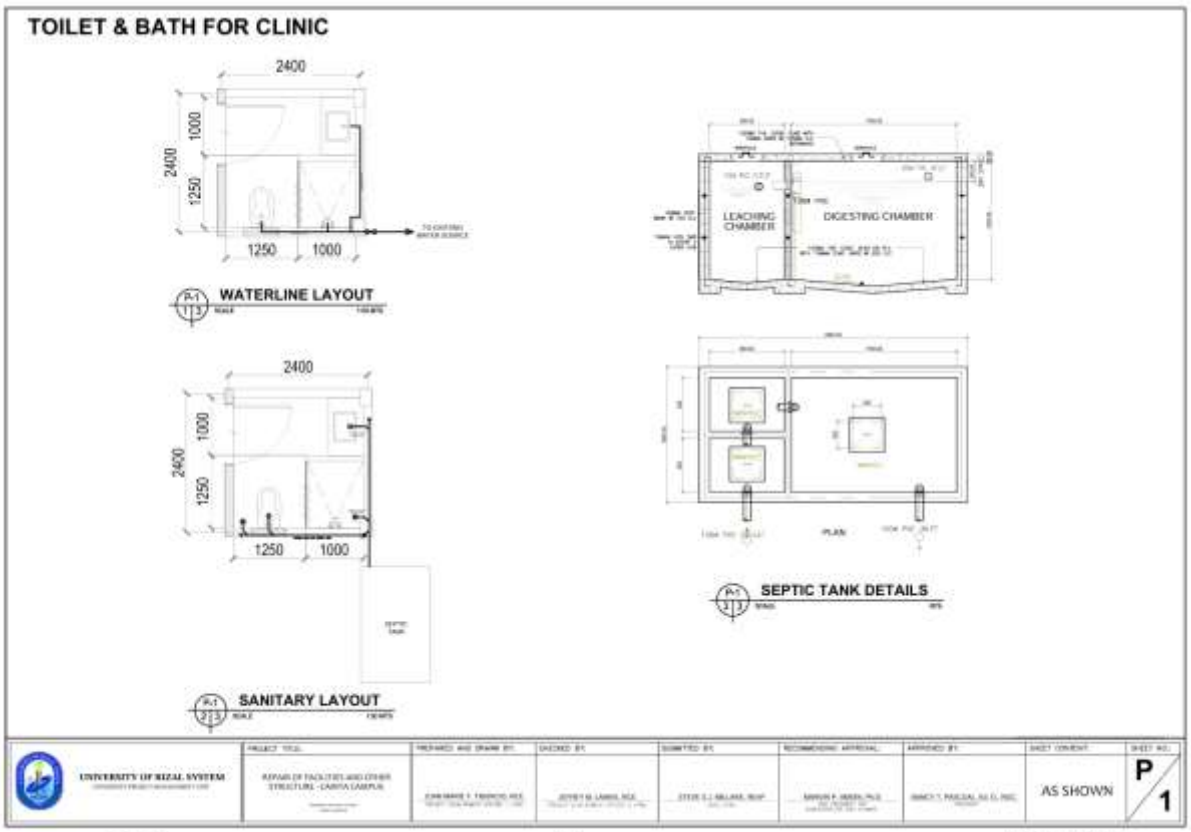

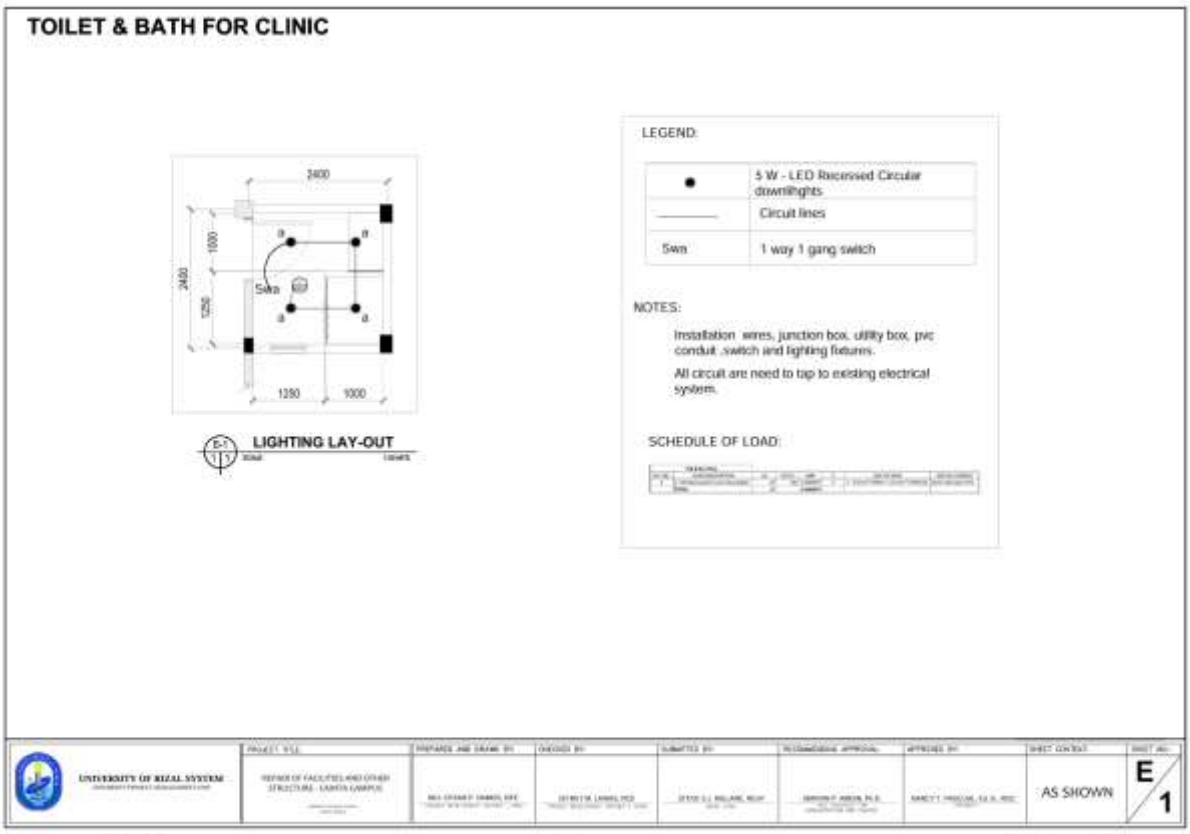

Section VIII. Bill of Quantities

Notes on the Bill of Quantities

Objectives

The objectives of the Bill of Quantities are:

a. to provide sufficient information on the quantities of Works to be performed to enable Bids to be prepared efficiently and accurately; and

b. when a Contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Works executed.

In order to attain these objectives, Works should be itemized in the Bill of Quantities in sufficient detail to distinguish between the different classes of Works, or between Works of the same nature carried out in different locations or in other circumstances which may give rise to different considerations of cost. Consistent with these requirements, the layout and content of the Bill of Quantities should be as simple and brief as possible.

Daywork Schedule

A Daywork Schedule should be included only if the probability of unforeseen work, outside the items included in the Bill of Quantities, is high. To facilitate checking by the Entity of the realism of rates quoted by the Bidders, the Daywork Schedule should normally comprise the following:

a. A list of the various classes of labor, materials, and Constructional Plant for which basic daywork rates or prices are to be inserted by the Bidder, together with a statement of the conditions under which the Contractor will be paid for work executed on a daywork basis.

b. Nominal quantities for each item of Daywork, to be priced by each Bidder at Daywork rates as Bid. The rate to be entered by the Bidder against each basic Daywork item should include the Contractor's profit, overheads, supervision, and other charges.

Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the

SCC should state the manner in which they will be used, and under whose authority (usually the Procuring Entity's Representative's).

The estimated cost of specialized work to be carried out, or of special goods to be supplied, by other contractors should be indicated in the relevant part of the Bill of Quantities as a particular provisional sum with an appropriate brief description. A separate procurement procedure is normally carried out by the Procuring Entity to select such specialized contractors. To provide an element of competition among the Bidders in respect of any facilities, amenities, attendance, etc., to be provided by the successful Bidder as prime Contractor for the use and convenience of the specialist contractors, each related provisional sum should be followed by an item in the Bill of Quantities inviting the Bidder to quote a sum for such amenities, facilities, attendance, etc.

Signature Box

A signature box shall be added at the bottom of each page of the Bill of Quantities where the authorized representative of the Bidder shall affix his signature. Failure of the authorized representative to sign each and every page of the Bill of Quantities shall be a cause for rejection of his bid.

These Notes for Preparing a Bill of Quantities are intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They should not be included in the final documents.

BILL OF QUANTITIES FOR REPAIR OF EARTS-MORONG CAMPUS (LOT 1)

CONTRACTOR:								
	BILL OF QUANTITIES							
Project:	Repair of Roofing of Eulogio Amang RodRiguez Tanghalang Sining(EARTS)-Morong Campus							
Location:	URS Morong Campus							
ITEM	WORK DESCRIPTION	QTY	UNIT	UNIT COST (P)		COST		TOTAL (P)
				MATERI	LABOR	MATERIA	LABOR	
I	**GENERAL REQUIREMENTS**							
	Project Billboard/ Sign Board	1.00	lot	-	-	-	-	-
	Temporary Facility	1.00	lot	-	-	-	-	-
	Mobilization/Demobilization	1.00	lot	-	-	-	-	-
	Permits & Clearances	1.00	lot	-	-	-	-	-
	Occupational Safety and Health Program	1.00	lot	-	-	-	-	-
	SUB-TOTAL I							-
II	**ROOFING WORKS**							
a.	**Removal of Existing Roof Panel**							
	Skilled Worker	120.00	manhour	-	-	-	-	-
	Unskilled Worker	200.00	manhour	-	-	-	-	-
b.	**Installation of Roof Panel including accessories**							
	Long Span Rib Type, 0.5mm thk x 10m(in 3 lengths)	849.00	l.m.	-	-	-	-	-
	Wall Capping, 0.5mmx36"x8'	42.00	pc	-	-	-	-	-
	10mm Single Sided Roof insulation	18.00	roll	-	-	-	-	-
	Tekscrew	6,500.00	pc	-	-	-	-	-
	Blind Rivets	2.00	box	-	-	-	-	-
	Polyurethane Sealant	10.00	cartridge	-	-	-	-	-
	Skilled Worker	192.00	manhour	-	-	-	-	-
	Unskilled Worker	288.00	manhour	-	-	-	-	-
c.	**Waterproofing of Concrete Gutter and Concrete Canopy**							
	Cementitious type waterproofing compound, 18 kg pail	3.00	pail	-	-	-	-	-
	Skilled Worker	32.00	manhour	-	-	-	-	-
	Unskilled Worker	64.00	manhour	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
d.	**Leak Testing**							
	Skilled Worker	8.00	manhour	-	-	-	-	-
	Unskilled Worker	8.00	manhour	-	-	-	-	-
e.	**Repainting of Roof Frames(Trusses and Purlins)**							
	Rust Converter	20.00	gal	-	-	-	-	-
	Epoxy Primer,(gray), with catalyst	20.00	gal	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
	Skilled Worker	96.00	manhour	-	-	-	-	-
	Unskilled Worker	96.00	manhour	-	-	-	-	-
f.	**Replacement of Damaged Ceiling**							
	Replacement of ceiling frame and panels							
	4' x 8' Ficem Board / Gypsum / Ordinary Plywood	10.00	pc	-	-	-	-	-
	Double Furring, 0.6MM thk x 5.0m	15.00	pc	-	-	-	-	-
	Carrying Channel,10mm thk x 5.0m	15.00	pc	-	-	-	-	-
	Rivet	200.00	pc	-	-	-	-	-
	Metal Screw	175.00	pc	-	-	-	-	-
	Skilled Worker	96.00	manhour	-	-	-	-	-
	Unskilled Worker	96.00	manhour	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
	Repainting of Ceiling							
	Skilled Worker	16.00	manhr	-	-	-	-	-
	Unskilled Worker	16.00	manhr	-	-	-	-	-
	Flat Latex Paint	1.00	tin	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
g.	**Scaffolding Works**							
	Assembly/Disassembly of Scaffolds	96.00	manhour	-	-	-	-	-
	SUB-TOTAL II							-
					a	**TOTAL DIRECT COST**		-
					b	**PROFIT(8%)**		-
					c	**OCM(10%)**		-
					d	**VAT(5% of a+b+c)**		-
						TOTAL PROJECT COST		-

BILL OF QUANTITIES FOR REPAIR OF GYM-MORONG CAMPUS (LOT 2)

CONTRACTOR:								
BILL OF QUANTITIES								
Project:	Rehabilitation of Floor,Benches, Wall, Male and Female T&B of Gymnasium-Morong Campus							
Location:	URS Morong Campus							
ITEM	**WORK DESCRIPTION**	**QTY**	**UNIT**	**UNIT COST (P)**		**COST**		**TOTAL (P)**
				MATERIAL	**LABOR**	**MATERIAL**	**LABOR**	
I	**GENERAL REQUIREMENTS**							
	Project Billboard/ Sign Board	1.00	lot	-	-	-	-	-
	Temporary Facility	1.00	lot	-	-	-	-	-
	Mobilization/Demobilization	1.00	lot	-	-	-	-	-
	Permits & Clearances	1.00	lot	-	-	-	-	-
	Occupational Safety and Health Program	1.00	lot	-	-	-	-	-
	SUB-TOTAL I							**-**
II	**CIVIL WORKS**							
a.	**Floor Correction**							
	Rapid Setting Repair Mortar for Pavement and Floors,25 kg/bag	3.00	bag	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
b.	**Floor Painting** *(Area=683.60 sq.m.)*							
	Paint Reducer	9.00	gal	-	-	-	-	-
	Acrylic Chlorinated Rubber-Based Floor Coating	55.00	gal	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
c.	**Painting of Benches** *(Area=201564 sq.m.)*							
	Surface Cleaning	1.00	lot	-	-	-	-	-
	Masonry Putty	5.00	gal	-	-	-	-	-
	Semi Gloss Latex, Paint	5.00	tin	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
d.	**Painting of Low Wall and Dugout Façade** *(205.84sq.m.)*							
	Binder for Chalky Paint and Skimcoat	2.00	gal	-	-	-	-	-
	Putty for filling, patching and build up of concrete	2.00	gal	-	-	-	-	-
	Top Coat, Semi Gloss Latex	6.00	tin	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
e.	**Repainting of Wall** *(Area=632.544 sq.m.)*							
	Surface Cleaning	1.00	lot	-	-	-	-	-
	Masonry Putty	10.00	gal	-	-	-	-	-
	Semi Gloss Latex, White Paint	10.00	tin	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
f.	**Rehabilitation of Common Male Toilet**							
	e.1Chipping,Demolition & Disposal Works	-	-	-	-	-	-	-
	Removal of Tiles,Plumbing and Electrical Fixtures	1.00	lot	-	-	-	-	-
	e.2 Waterline & Sewerline Works	-	-	-	-	-	-	-
	PVC Pipe 3" Series 600	2.00	pc	-	-	-	-	-
	PVC Pipe 2" Series 600	4.00	pc	-	-	-	-	-
	PVC Wye Reducer 3"x2"	5.00	pc	-	-	-	-	-
	PVC Elbow 3"x90deg	2.00	pc	-	-	-	-	-
	PVC Elbow 3"x45deg	3.00	pc	-	-	-	-	-
	PVC Clean Out 3"	3.00	pc	-	-	-	-	-
	PVC Clean Out 2"	2.00	pc	-	-	-	-	-
	PVC Elbow 2x90"	10.00	pc	-	-	-	-	-
	PVC P-Trap 2"	2.00	pc	-	-	-	-	-
	PVC Pipe Solvent Cement, 200cc	3.00	can	-	-	-	-	-
	PPR Pipe PN 20, 20mm x 3meters	5.00	pc	-	-	-	-	-
	PPR 90deg Female Threaded Elbow,PN20 ,20mmx20mm	7.00	pc	-	-	-	-	-
	PPR Tee Equal PN20,20mm	5.00	pc	-	-	-	-	-
	PPR Plain Elbow PN20,20mm	4.00	pc	-	-	-	-	-
	PPR Stop Valve,PN20 Series,20mm	2.00	pc	-	-	-	-	-
	Wall Faucet, G.I.	1.00	pc	-	-	-	-	-
	Urinal with Sensor	2.00	sets	-	-	-	-	-
	One Piece Water Closet	2.00	sets	-	-	-	-	-
	Wash Basin	2.00	sets	-	-	-	-	-
	Lavatory Faucet	2.00	sets	-	-	-	-	-
	Three Way Angle Valve	2.00	sets	-	-	-	-	-
	Two Way Angle Valve	2.00	sets	-	-	-	-	-
	Flexible Supply Hose 1/2x12x14"	2.00	sets	-	-	-	-	-
	Hand Bidet Set	2.00	sets	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
	Rough In Restoration	1.00	lot	-	-	-	-	-
	e.3 Tiling Works	-	-	-	-	-	-	-
	Wall Tile, 30x60cm, Matte	160.00	pc	-	-	-	-	-
	Floor Tile, 30x60cm, Matte	100.00	pc	-	-	-	-	-
	Tile Adhesive,Heavy Duty,25 kg bag	6.00	bag	-	-	-	-	-
	Tile Grout,2 kg bag	7.00	bag	-	-	-	-	-
	Tile Adhesive Additive	6.00	gal	-	-	-	-	-
	e.4 Carpentry and Glass Works	-	-	-	-	-	-	-
	Removal of Existing Door	1.00	set	-	-	-	-	-
	Marine Flush Door with Louver and Jamb (0.70x2.10m)	1.00	set	-	-	-	-	-
	Facial Mirror, 700x1300mm	1.00	set	-	-	-	-	-
	e.5 Painting Works			-	-	-	-	-

	Painting of Door and Jamb	100	lot	-	-	-	-	-
	e.5.1 Painting of Ceiling(Area=16.45sq.m.)	-	-	-	-	-	-	-
	Glazing Putty	3.00	liter	-	-	-	-	-
	Quick Drying Enamel	4.00	liter	-	-	-	-	-
	Paint Thinner	3.00	liter	-	-	-	-	-
	Consumables	100	lot	-	-	-	-	-
	e.5.2 Painting of Wall(Area=13.20sq.m.)	-	-	-	-	-	-	-
	Masonry Putty	2.00	liter	-	-	-	-	-
	Flat Latex Paint	2.00	gal	-	-	-	-	-
	Consumables	100	lot	-	-	-	-	-
g.	**Rehabilitation of Common Female Toilet**							
	e.1 Chipping,Demolition & Disposal Works	-	-	-	-	-	-	-
	Removal of Tiles,Plumbing and Electrical Fixtures	100	lot	-	-	-	-	-
	e.2 Waterline & Sewerline Works	-	-	-	-	-	-	-
	PVC Pipe 3" Series 600	2.00	pc	-	-	-	-	-
	PVC Pipe 2" Series 600	4.00	pc	-	-	-	-	-
	PVC Wye Reducer 3"x2"	4.00	pc	-	-	-	-	-
	PVC Elbow 3"x90deg	2.00	pc	-	-	-	-	-
	PVC Elbow 3"x45deg	3.00	pc	-	-	-	-	-
	PVC Clean Out 3"	2.00	pc	-	-	-	-	-
	PVC Clean Out 2"	2.00	pc	-	-	-	-	-
	PVC Elbow 2x90"	6.00	pc	-	-	-	-	-
	PVC P-Trap 2"	2.00	pc	-	-	-	-	-
	PVC Pipe Solvent Cement, 200cc	3.00	can	-	-	-	-	-
	PPR Pipe PN 20, 20mm x 3meters	5.00	pc	-	-	-	-	-
	PPR 90deg Female Threaded Elbow,PN20 ,20mmx20mm	7.00	pc	-	-	-	-	-
	PPR Tee Equal PN20,20mm	5.00	pc	-	-	-	-	-
	PPR Plain Elbow PN20,20mm	4.00	pc	-	-	-	-	-
	PPR Stop Valve,PN20 Series,20mm	2.00	pc	-	-	-	-	-
	Wall Faucet, G.I.	100	pc	-	-	-	-	-
	One Piece Water Closet	3.00	sets	-	-	-	-	-
	Wash Basin	2.00	sets	-	-	-	-	-
	Lavatory Faucet	2.00	sets	-	-	-	-	-
	Three Way Angle Valve	3.00	sets	-	-	-	-	-
	Two Way Angle Valve	2.00	sets	-	-	-	-	-
	Flexible Supply Hose 1/2x1/2x14"	3.00	sets	-	-	-	-	-
	Hand Bidet Set	3.00	sets	-	-	-	-	-
	Consumables	100	lot	-	-	-	-	-
	Rough In Restoration	100	lot	-	-	-	-	-
	e.3 Tiling Works	-	-	-	-	-	-	-
	Wall Tile, 30x60cm, Matte	118.00	pc	-	-	-	-	-
	Floor Tile, 30x30cm, Matte	105.00	pc	-	-	-	-	-
	Tile Adhesive,Heavy Duty,25 kg bag	6.00	bag	-	-	-	-	-
	Tile Grout,2 kg bag	7.00	bag	-	-	-	-	-
	Tile Adhesive Additive	6.00	gal	-	-	-	-	-
	e.4 Carpentry and Glass Works	-	-	-	-	-	-	-
	Removal of Existing Door	100	set	-	-	-	-	-
	Marine Flush Door with Louver and Jamb (0.70x2.10m)	100	set	-	-	-	-	-
	Facial Mirror, 700x1300mm	100	set	-	-	-	-	-
	e.5 Painting Works			-	-	-	-	-
	Painting of Door and Jamb	100	lot	-	-	-	-	-
	e.5.1 Painting of Ceiling(Area=14.46sq.m.)	-	-	-	-	-	-	-
	Glazing Putty	3.00	liter	-	-	-	-	-
	Quick Drying Enamel	4.00	liter	-	-	-	-	-
	Paint Thinner	3.00	liter	-	-	-	-	-
	Consumables	100	lot	-	-	-	-	-
	e.5.2 Painting of Wall(Area=14.85sq.m.)	-	-	-	-	-	-	-
	Masonry Putty	2.00	liter	-	-	-	-	-
	Flat Latex Paint	2.00	gal	-	-	-	-	-
	SUB-TOTAL I							**-**
II.	**Electrical Works**							
a.	**Lighting Fixtures**							
	150W LED High Bay Lights	30.00	pcs	-	-	-	-	-
	18 W LED Slim Panel Lights	4.00	pcs	-	-	-	-	-
	12 W LED Flat Bulb	4.00	pcs	-	-	-	-	-
b.	**Switches, Convenience outlet Device and Box**							
	1way 2 Gang Switch	4.00	pcs	-	-	-	-	-
c.	**Wire and Conduit**							
	3.5mm² THHN wire	50.00	m	-	-	-	-	-
d.	**Consumables**							
	Electrical Tape	5.00	pcs	-	-	-	-	-
	Hanggers and Support	100	lot	-	-	-	-	-
	SUB-TOTAL II							**-**
					a	**TOTAL DIRECT COST**		**-**
					b	**PROFIT(8%)**		-
					c	**OCM(10%)**		-
					d	**VAT(5% of a+b+c)**		-
						TOTAL PROJECT COST		**-**

BILL OF QUANTITIES FOR REPAIR OF FUNCTION HALL-MORONG CAMPUS (LOT 3)

CONTRACTOR:								
	BILL OF QUANTITIES							
Project:	Rehabilitation of Function Hall-Morong Campus							
Location:	URS Morong Campus							
ITEM	**WORK DESCRIPTION**	**QTY**	**UNIT**	**UNIT COST (P)**		**COST**		**TOTAL (P)**
				MATERIAL	**LABOR**	**MATERIAL**	**LABOR**	
I	**GENERAL REQUIREMENTS**							
	Project Billboard/Sign Board	1.00	lot	-	-	-	-	-
	Temporary Facility	1.00	lot	-	-	-	-	-
	Mobilization/Demobilization	1.00	lot	-	-	-	-	-
	Permits & Clearances	1.00	lot	-	-	-	-	-
	Occupational Safety and Health Program	1.00	lot	-	-	-	-	-
	SUB-TOTAL I							-
II	**CIVIL WORKS**							
a.	**Tile Works-Hall**							
	Removal and Disposal of Existing Tiles							
	Skilled Worker	32.00	manhour	-	-	-	-	-
	Unskilled Worker	48.00	manhour	-	-	-	-	-
	Installation of Tiles							
	60x120 cm White Porcelain Tiles,Polished	540.00	pc	-	-	-	-	-
	Tile Adhesive,Heavy Duty,25 kg bag	72.00	bag	-	-	-	-	-
	Tile Grout,2 kg bag	90.00	bag	-	-	-	-	-
	Tile Adhesive Additive	38.00	gal	-	-	-	-	-
	Skilled Worker	192.00	manhour	-	-	-	-	-
	Unskilled Worker	360.00	manhour	-	-	-	-	-
b.	**Installation of Combi Blinds**							
	Combi Blinds, Woodgrain	574.00	sq.ft.	-	-	-	-	-
c.	**Replacement of Main Door Panel**							
	Removal of Existing Door Panel	4.00	manhour	-	-	-	-	-
	Frameless Glass Door, Tempered Glass, 12mm thick incl accessories	2.00	set	-	-	-	-	-
f.	**Replacement of Damaged Urinal**			-	-	-	-	-
	Top Inlet Urinal Wall Mount Water Sense Urinal	1.00	set	-	-	-	-	-
g.	**Replacement of Busted Lighting Fixtures**			-	-	-	-	-
	9 watts LED Bulb Type	15.00	pcs	-	-	-	-	-
	SUB-TOTAL II							-
					a	**TOTAL DIRECT COST**		-
					b	**PROFIT(8%)**		-
					c	**OCM(10%)**		-
					d	**VAT(5% of a+b+c)**		-
						TOTAL PROJECT COST		-

BILL OF QUANTITIES FOR RENOVATION OF FUNCTION HALL-RODRIGUEZ CAMPUS (LOT 4)

Contractor

BILL OF QUANTITIES

Project: Renovation of Function Hall
Location: URS Rodriguez Campus

ITEM	WORK DESCRIPTION	QUANTITY	UNIT	UNIT COST (PHP)		COST (PHP)		TOTAL (PHP)
				MATERIAL	LABOR	MATERIAL	LABOR	
I	**GENERAL REQUIREMENTS**							
	Project Billboard/ Sign Board	1.00	lot	-	-	-	-	-
	Temporary Facility	1.00	lot	-	-	-	-	-
	Mobilization/Demobilization	1.00	lot	-	-	-	-	-
	Occupational Safety and Health Program	1.00	lot	-	-	-	-	-
	SUB-TOTAL I							-
II	**FUNCTION HALL ENCLOSURE**							
a.	**Dry Wall Partition**							
	6mm Fiber Cement Board	7.00	pcs	-	-	-	-	-
	Metal Tracks	10.00	pcs	-	-	-	-	-
	Metal Studs	9.00	pcs	-	-	-	-	-
	Blind Rivet	3.00	boxes	-	-	-	-	-
	1" Metal Screw	40.00	pcs	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
b.	**Painting Works**							
	Flat Latex	3.00	liter	-	-	-	-	-
	Semi-gloss Latex	5.00	liter	-	-	-	-	-
	Skimcoat	1.00	bag	-	-	-	-	-
	All-purpose Epoxy A&B	1.00	liter	-	-	-	-	-
	Mesh Tape	1.00	pc	-	-	-	-	-
	Paint Brush	1.00	pc	-	-	-	-	-
	Paint Roller	1.00	pc	-	-	-	-	-
	Sanding paper	5.00	pcs	-	-	-	-	-
	Rugs, Cotton	0.50	kgs	-	-	-	-	-
c.	**Glass Partition**							
	Frameless glass partition; 12mm thk tempered glass and frosted sticker with complete accessories (installation included)	20.28	sq.m	-	-	-	-	-
d.	**Doors**							
	1.00m x 2.10m Single swing door; 12mm thk tempered glass and frosted sticker with complete accessories (installation included)	2.00	sets	-	-	-	-	-
	SUB-TOTAL II							-
TOTAL DIRECT COST								-
OVERHEAD, CONTINGENCIES AND MISCELLANEOUS (OCM)						10%	of DC	-
CONTRACTOR'S PROFIT						8%	of DC	-
VAT (5% OF THE SUM OF DC, OCM AND PROFIT)						5%	of DC, OCM, PROFIT	-
TOTAL PROJECT COST								-

BILL OF QUANTITIES FOR REPAIR OF FACILITIES AND OTHER STRUCTURES-CAINTA CAMPUS (LOT 5)

Contractor

BILL OF QUANTITIES

Project: Repair of Facilities and Other Structure - Cainta Campus

Location: URS Cainta Campus

ITEM	WORK DESCRIPTION	QUANTITY	UNIT	UNIT COST (PHP)		COST (PHP)		TOTAL (PHP)
				MATERIAL	LABOR	MATERIAL	LABOR	
I	**GENERAL REQUIREMENTS**							
	Project Billboard/ Sign Board	1.00	lot	-	-	-	-	-
	Temporary Facility	1.00	lot	-	-	-	-	-
	Mobilization/Demobilization	1.00	lot	-	-	-	-	-
	Permits & Clearances	1.00	lot	-	-	-	-	-
	Occupational Safety and Health Program	1.00	lot	-	-	-	-	-
	SUB-TOTAL I							**-**
II	**OSDS Office**							
a.	**Siteworks**							
	Demolition	1.00	lot	-	-	-	-	-
	Removal of Ceiling	1.00	lot	-	-	-	-	-
	Hauling	1.00	lot	-	-	-	-	-
b.	**Dry Wall Partition**							
	6mm Fiber Cement Board	12.00	pcs	-	-	-	-	-
	Metal Tracks	6.00	pcs	-	-	-	-	-
	Metal Studs	19.00	pcs	-	-	-	-	-
	Blind Rivet	3.00	boxes	-	-	-	-	-
	1" Metal Screw	60.00	pcs	-	-	-	-	-
c.	**Door**							
	Solid Panel Door	1.89	sq.m	-	-	-	-	-
	Lever type lockset	1.00	set	-	-	-	-	-
	S/S Heavy Duty Hinge	3.00	sets	-	-	-	-	-
	Steel Jamb	5.40	lm	-	-	-	-	-
d.	**Ceiling Works**							
	4.5mm Fiber Cement Board	15.00	pcs	-	-	-	-	-
	Metal Furring	44.00	pcs	-	-	-	-	-
	Carrying Channel	14.00	pcs	-	-	-	-	-
	Hanger Rod	39.00	pcs	-	-	-	-	-
	Channel Clip	231.00	pcs	-	-	-	-	-
	Wall Angle	10.00	pcs	-	-	-	-	-
	Blind Rivet	2.00	boxes	-	-	-	-	-
	1" Metal Screw	154.00	pcs	-	-	-	-	-
e.	**Painting Works**							
	Flat Latex	11.00	liter	-	-	-	-	-
	Semi-gloss Latex	38.00	liter	-	-	-	-	-
	Masonry Putty	12.00	liter	-	-	-	-	-
	Skimcoat	1.00	bag	-	-	-	-	-
	All-purpose Epoxy A&B	1.00	liter	-	-	-	-	-
	Varnish	1.00	liter	-	-	-	-	-
	Mesh Tape	4.00	pcs	-	-	-	-	-
	Paint Brush	3.00	pcs	-	-	-	-	-
	Paint Roller	3.00	pcs	-	-	-	-	-
	Sanding paper	25.00	pcs	-	-	-	-	-
	Rugs, Cotton	0.50	kgs	-	-	-	-	-
f.	**Modular Cubicle**							
	L-Shape L1.30m x W0.65m x H120m Fabric with glass partion; 25mm Laminated MDF Tabletop; Steel mobile pedestal filing cabinet with 3 drawers and centralized lock	5.00	seats	-	-	-	-	-
g.	**Downspout**							
	Repair Downspout	1.00	lot	-	-	-	-	-
	uPVC 90 deg elbow, 3", Series 1000	1.00	pc	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
	SUB-TOTAL II							**-**

III	**Registrar's Office**							
	4.10m x 3.00m glass partition with 2 transaction window and 1.20m x 2.10m Single swing door; 12mm thk tempered glass partition on analok aluminum frame with complete accessories (installation included)	1.00	lot	-	-	-	-	-
	SUB-TOTAL III							**-**
IV	**Cashier's Office**							
	2.80m x 3.00m glass partition with 2 transaction window and 0.90m x 2.10m Single swing door; 12mm thk tempered glass partition on analok aluminum frame with complete accessories (installation included)	1.00	lot	-	-	-	-	-
	SUB-TOTAL IV							**-**
V	**Room 401 & 402**							
a.	**Siteworks**							
	Demolition of Existing wall	1.00	lot	-	-	-	-	-
	Removal of Ceiling	1.00	lot	-	-	-	-	-
	Hauling	1.00	lot	-	-	-	-	-
b.	**Painting Works**							
	Masonry Putty	18.00	liter	-	-	-	-	-
	Semi-gloss Latex	52.00	liter	-	-	-	-	-
	Paint Brush	2.00	pcs	-	-	-	-	-
	Paint Roller	2.00	pcs	-	-	-	-	-
	Sanding paper	25.00	pcs	-	-	-	-	-
	Rugs, Cotton	0.50	kgs	-	-	-	-	-
	Flat Latex	13.00	liter	-	-	-	-	-
	Semi-gloss Latex	22.00	liter	-	-	-	-	-
	Skimcoat	7.00	bag	-	-	-	-	-
	All-purpose Epoxy A&B	1.00	liter	-	-	-	-	-
	Mesh Tape	3.00	pcs	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
c.	**Ceiling Works**							
	4.5mm Fiber Cement Board	30.00	pcs	-	-	-	-	-
	Metal Furring	93.00	pcs	-	-	-	-	-
	Carrying Channel	30.00	pcs	-	-	-	-	-
	Hanger Rod	82.00	pcs	-	-	-	-	-
	Channel Clip	490.00	pcs	-	-	-	-	-
	Wall Angle	20.00	pcs	-	-	-	-	-
	Blind Rivet	4.00	boxes	-	-	-	-	-
	1" Metal Screw	327.00	pcs	-	-	-	-	-
d.	**Accordion Door/Partition**							
	PVC Accordion Door/Partition with complete accessories including installation	1.00	lot	-	-	-	-	-
	SUB-TOTAL V							**-**
VI	**Toilet & Bath for Clinic**							
a.	**Siteworks**							
	Structure Excavation	1.00	lot	-	-	-	-	-
	Embankment from Structure Excavation	1.00	lot	-	-	-	-	-
	Gravel Bedding	2.00	cu.m	-	-	-	-	-
	Soil Poisoning	1.00	liter	-	-	-	-	-
	Demolition	1.00	lot	-	-	-	-	-
b.	**Concrete Works**							
	Cement	28.00	bags	-	-	-	-	-
	Sand	2.00	cu.m	-	-	-	-	-
	Gravel	3.00	cu.m	-	-	-	-	-
	12mmØ RSB	41.00	pcs	-	-	-	-	-
	10mmØ RSB	45.00	pcs	-	-	-	-	-
	#16 G.I. wire	6.00	kgs	-	-	-	-	-
c.	**Formworks**							
	Phenolic Board (0.019x1.2x2.4)	3.00	pcs	-	-	-	-	-
	Good Lumber	48.00	bd.ft	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
d.	**Masonry Works**							
	150mm thk CHB	396.00	pcs	-	-	-	-	-
	Cement	56.00	bags	-	-	-	-	-
	Sand	2.00	cu.m	-	-	-	-	-
	10mmØ RSB	27.00	pcs	-	-	-	-	-
	#16 G.I. wire	1.50	kgs	-	-	-	-	-
e.	**Roof Works**							
	Steel Works							
	50mmx 100mm C-Channel, 6mm thk.	189.33	kgs	-	-	-	-	-
	50mmx 100mm C-Purlins, 1.2mm thk.	73.08	kgs	-	-	-	-	-
	50mm x 50mm Angle Bar, 3mm thk.	13.80	kgs	-	-	-	-	-
	Base Plate, 10mm thk.	11.65	kgs	-	-	-	-	-
	Anchor Bolt, 16mmø	24.00	pcs	-	-	-	-	-
	Acetylene	3.00	kgs	-	-	-	-	-
	Oxygen	5.00	kgs	-	-	-	-	-
	Welding Rod	7.00	kgs	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
	Tinsmithry Works							
	Prepainted Rib Type Metal Sheets (Long	13.94	sq.m	-	-	-	-	-

f.	**Ceiling Works**							
	4.5mm Fiber Cement Board	2.00	pcs	-	-	-	-	-
	Metal Furring	6.00	pcs	-	-	-	-	-
	Carrying Channel	2.00	pcs	-	-	-	-	-
	Hanger Rod/Bars	6.00	pcs	-	-	-	-	-
	Channel Clip	31.00	pcs	-	-	-	-	-
	Wall Angle	2.00	pcs	-	-	-	-	-
	Blind Rivet	1.00	box	-	-	-	-	-
	1" Metal Screw	21.00	pcs	-	-	-	-	-
g.	**Tile Works**							
	300mm x 300mm Non glazed tiles	60.00	pcs	-	-	-	-	-
	300mm x 600mm Glazed tiles	123.00	pcs	-	-	-	-	-
	600mm x 600mm Glazed tiles	5.00	pcs	-	-	-	-	-
	Cement	9.00	bags	-	-	-	-	-
	Sand	1.00	cu.m	-	-	-	-	-
	Tile Adhesive	4.00	bags	-	-	-	-	-
	Tiles grout	4.00	bags	-	-	-	-	-
h.	**Painting Works**							
	Skimcoat	7.00	bags	-	-	-	-	-
	Flat Latex	7.00	liter	-	-	-	-	-
	Semi-gloss Latex	11.00	liter	-	-	-	-	-
	Masonry Putty (Spot)	6.00	liter	-	-	-	-	-
	Glazing Putty	1.00	liter	-	-	-	-	-
	Flat Wall Enamel	1.00	liter	-	-	-	-	-
	Quick Dry Enamel	1.00	liter	-	-	-	-	-
	Paint Thinner	2.00	liter	-	-	-	-	-
	Epoxy Primer	1.00	liter	-	-	-	-	-
	Epoxy Paint	1.00	liter	-	-	-	-	-
	Epoxy Reducer	1.00	liter	-	-	-	-	-
	Mesh Tape	1.00	pc	-	-	-	-	-
	Paint Brush	4.00	pcs	-	-	-	-	-
	Paint Roller	4.00	pcs	-	-	-	-	-
	Sanding paper	25.00	pcs	-	-	-	-	-
	Rugs, Cotton	0.50	kgs	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
i.	**Door**							
	Flush Hollow Core Door with Louver	2.10	sq.m	-	-	-	-	-
	Lever type lockset	1.00	set	-	-	-	-	-
	S/S Heavy Duty Hinge	3.00	sets	-	-	-	-	-
	Steel Jamb	5.30	lm	-	-	-	-	-
j.	**Window**							
	600mm x 600mmm Awning Window; 6mm thk. Tempered Glass with Analok Aluminum Frame	1.00	lot	-	-	-	-	-
k.	**Plumbing Works**							
	Plumbing Fixtures and Accessories							
	One Piece Water closet, complete w/ fittings & accs.	1.00	set	-	-	-	-	-
	Countertop Lavatory, complete w/ fittings & accs.	1.00	set	-	-	-	-	-
	Vanity Mirror	1.00	set	-	-	-	-	-
	Faucet with Telephone shower	1.00	set	-	-	-	-	-
	Soap Holder	1.00	pc	-	-	-	-	-
	Tissue Holder	1.00	pc	-	-	-	-	-
	Bidet	1.00	pc	-	-	-	-	-
	Faucet	1.00	pc	-	-	-	-	-
	Floor Drain	2.00	pc	-	-	-	-	-
	Grab Bar	1.00	set	-	-	-	-	-
	Cold Waterline							
	20 mm Ø PPR Pipe PN20	5.00	pcs	-	-	-	-	-
	20 mm Ø PPR Tee PN20	3.00	pcs	-	-	-	-	-
	20 mm Ø PPR Elbow, 90deg PN20	7.00	pcs	-	-	-	-	-
	20 mm Ø Gate Valve	1.00	pc	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-

	Sewer Line & Vent System							
	uPVC Pipe, 4", Series 1000 (3meters)	4.00	pcs	-	-	-	-	-
	uPVC Pipe, 2", Series 1000	2.00	pcs	-	-	-	-	-
	uPVC Wye, 4"x4", Series 1000	4.00	pcs	-	-	-	-	-
	uPVC Wye, 4"x2", Series 1000	4.00	pcs	-	-	-	-	-
	uPVC Clean out set, 4", Series 1000	2.00	pcs	-	-	-	-	-
	uPVC 45 deg elbow, 4", Series 1000	4.00	pcs	-	-	-	-	-
	uPVC 45 deg elbow, 2", Series 1000	4.00	pcs	-	-	-	-	-
	uPVC Tee, 2"x2", Series 1000	2.00	pcs	-	-	-	-	-
	uPVC Tee, 4"x2", Series 1000	2.00	pcs	-	-	-	-	-
	uPVC 90 deg elbow, 2", Series 1000	2.00	pcs	-	-	-	-	-
	uPVC P-Trap, 2", Series 1000	3.00	pcs	-	-	-	-	-
	Consumables	1.00	lot	-	-	-	-	-
	Septic Tank							
	150mm thk CHB	319.00	pcs	-	-	-	-	-
	Cement	26.00	bags	-	-	-	-	-
	Sand	6.00	cu.m	-	-	-	-	-
	Gravel	11.00	cu.m	-	-	-	-	-
	10mmØ RSB	33.00	pcs	-	-	-	-	-
	12mmØ RSB	7.00	pcs	-	-	-	-	-
	#16 G.I. wire	2.00	kgs	-	-	-	-	-
	SUB-TOTAL VI							**-**
VII	**Electrical Works(OSDS, Room 401 and 402, toilet and bowl for clinic)**							
a.	**Lighting fixtures**							
	36 W - Slim Panel Lights	16.00	pcs	-	-	-	-	-
	5W - Recessed Circular downlights	4.00	pcs	-	-	-	-	-
b.	**Device/ Switches**							
	1 way 1 gang switch	1.00	pcs	-	-	-	-	-
	1 way 2 gang switch	4.00	pcs	-	-	-	-	-
	Nema 3R w/ 20AT 2P, MCCB	3.00	assy.	-	-	-	-	-
c.	**Wires and Conduits**							
	3.5mm2 THHN	2.00	box	-	-	-	-	-
	5.5mm2 THHN	1.00	box	-	-	-	-	-
	20mm diameter PVC Conduit	28.00	pcs	-	-	-	-	-
d.	**Utility box and Junction Box**							
	U. Box	10.00	pcs	-	-	-	-	-
	J. Box	12.00	pcs	-	-	-	-	-
	Pvc Adaptors	1.00	lot	-	-	-	-	-
e.	**Consumables**							
	PVC Solvent 400cc	1.00	can	-	-	-	-	-
	Electrical tape	10.00	pcs	-	-	-	-	-
f.	**Chipping and Restoration works**							
	Chipping and Restoration works	1.00	lot	-	-	-	-	-
g.	**Airconditioning Unit**							
	1.5hp Split-type Inverter Airconditioning Unit with complete accessories/ breaker	1.00	pc	-	-	-	-	-
	SUB-TOTAL VII							**-**
TOTAL DIRECT COST								**-**
OVERHEAD, CONTINGENCIES AND MISCELLANEOUS (OCM)						12%	of DC	-
CONTRACTOR'S PROFIT						8%	of DC	-
VAT (5% OF THE SUM OF DC, OCM AND PROFIT)						5%	of DC, OCM, PROFIT	-
TOTAL PROJECT COST								**-**

Section IX. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or

b. any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

The BAC shall be checking the submitted documents of each Bidder against this checklist to ascertain if they are all present, using a non-discretionary "pass/fail" criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE	
Class "A" Documents	
Legal Documents	
☐	(a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) in accordance with Section 8.5.2 of the IRR;
Technical Documents	
☐	(b) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
☐	(c) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules; **and**
☐	(d) Special PCAB License in case of Joint Ventures **and** registration for the type and cost of the contract to be bid; **and**
☐	(e) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission **or** original copy of Notarized Bid Securing Declaration; **and**
	(f) Project Requirements, which shall include the following:
☐	a. Organizational chart for the contract to be bid;
☐	b. List of contractor's key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;
☐	c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**
☐	(g) Original duly signed Omnibus Sworn Statement (OSS) **and** if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.
Financial Documents	
☐	(h) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).
Class "B" Documents	

☐	(i)	If applicable, duly signed joint venture agreement (JVA) in accordance with RA No. 4566 and its IRR in case the joint venture is already in existence **or** duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.
II. FINANCIAL COMPONENT ENVELOPE		
☐	(j)	Original of duly signed and accomplished Financial Bid Form; **and**
Other documentary requirements under RA No. 9184		
☐	(k)	Original of duly signed Bid Prices in the Bill of Quantities; **and**
☐	(l)	Duly accomplished Detailed Estimates Form, including a summary shee indicating the unit prices of construction materials, labor rates, and equipmen rentals used in coming up with the Bid; **and**
☐	(m)	Cash Flow by Quarter.


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