

# **PHILIPPINE BIDDING DOCUMENTS**

## **Procurement of the Construction of Academic Building III**

**Philippine Science High School-  
Zamboanga Peninsula Region Campus**

Government of the Republic of the Philippines

**Sixth Edition  
July 2020**

# TABLE OF CONTENTS

<b>Section I. Invitation to Bid</b> .....	<b>7</b>
<b>Section II. Instructions to Bidders</b> .....	<b>10</b>
1. Scope of Bid .....	11
2. Funding Information .....	11
3. Bidding Requirements .....	11
4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices .....	11
5. Eligible Bidders .....	12
6. Origin of Associated Goods .....	12
7. Subcontracts.....	12
8. Pre-Bid Conference .....	14
9. Clarification and Amendment of Bidding Documents.....	14
10. Documents Comprising the Bid: Eligibility and Technical Components.....	14
11. Documents Comprising the Bid: Financial Component .....	15
12. Alternative Bids.....	15
13. Bid Prices .....	15
14. Bid and Payment Currencies .....	15
15. Bid Security .....	16
16. Sealing and Marking of Bids.....	16
17. Deadline for Submission of Bids .....	16
18. Opening and Preliminary Examination of Bids .....	16
19. Detailed Evaluation and Comparison of Bids.....	17
20. Post Qualification .....	17
21. Signing of the Contract.....	17
<b>Section III. Bid DataSheet</b> .....	<b>18</b>
<b>Section IV. General Conditions of Contract</b> .....	<b>24</b>
1. Scope of Contract .....	25
2. Sectional Completion of Works.....	25
3. Possession of Site .....	25
4. The Contractor's Obligations.....	25
5. Performance Security .....	26
6. Site Investigation Reports.....	26

7. Warranty .....	26
8. Liability of the Contractor .....	26
9. Termination for Other Causes .....	27
10. Dayworks .....	27
11. Program of Work .....	27
12. Instructions, Inspections and Audits.....	27
13. Advance Payment .....	27
14. Progress Payments.....	28
15. Operating and Maintenance Manuals.....	28
<b>Section V. Special Conditions of Contract .....</b>	<b>29</b>
<b>Section VI. Specifications .....</b>	<b>31</b>
<b>Section VII. Drawings.....</b>	<b>41</b>
<b>Section VIII. Bill of Quantities.....</b>	<b>49</b>
<b>Section IX. Checklist of Technical and Financial Documents .....</b>	<b>54</b>
Class "A" Documents .....	
Class "B" Documents .....	

# ***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***



## **Invitation to Bid for the Procurement of the Construction of Academic Building III**

1. The Philippine Science High School – Zamboanga Region Campus (PSHS-ZRC) through the **FY 2021 General Appropriations Act (GAA)** intends to apply the sum of **FORTY-FIVE MILLION PESOS (P45,000,000.00)** being the Approved Budget for the Contract (ABC) to payments under the contract for the project **Procurement of the Construction of Academic Building III** . Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The PSHS-ZRC now invites bids for the above Procurement Project. Completion of the Works required **Three Hundred Eighty (380) calendar days**. 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 PSHS-ZRC and inspect the Bidding Documents at the address given below from 8:00 a.m. to 5:00 p.m.
5. A complete set of Bidding Documents may be acquired by interested bidders starting **January 21, 2022 to February 14, 2022** from given address and websites 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 **Twenty-Five Thousand Pesos (P 25,000.00)**. The Procuring Entity shall allow the bidder to present its proof of payment for the bidding documents to the BAC Secretariat at the address given below.
6. The PSHS-ZRC will hold a **Pre-Bid Conference on February 2, 2022, 10:00 a.m.** at the **Lobby of the Dormitory Building I of PSHS-ZRC**, and through video conferencing via Google Meet, which shall be open to prospective bidders.
7. Bids must be duly received by the BAC Secretariat through (i) manual submission at the office address indicated below, (ii) online or electronic submission, or (iii) both on **February 14, 2022, on or before 10:00 in the morning**. 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 15.
9. Bid opening shall be **on February 14, 2022 at 10:01 in the morning** at the **Lobby of the Dormitory Building I of PSHS-ZRC**. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. The PSHS-ZRC (BAC) 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 IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
11. For further information, please refer to:

RRYAM A. JARALVE  
BAC Secretariat  
Infrastructure Projects

SMT Office  
PSHS-ZRC, Cogon, Dipolog City  
rajaralve@zrc.pshs.edu.ph  
Messenger: Rryam A. Jaralve

12. You may visit the following websites:

For downloading of Bidding Documents:

PSHS-ZRC Website- <http://zrc.pshs.edu.ph/category/bid/>

PhilGEPS Website- <https://philgeps.gov.ph/>

**(SGD.) EUNEY B. GUIA-ALCAREZ**  
Chairperson, BAC for Infrastructure

## ***Section II. Instructions to Bidders***

## **1. Scope of Bid**

The Procuring Entity, PSHS-ZRC invites Bids for the **Procurement of the Construction of Academic Building III** with Project Identification Number 2022-01-18.

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 FY 2021 in the amount of **FORTY-FIVE MILLION PESOS (₱45,000,000.00)**

2.2. The source of funding NGA, the General Appropriations Act.

## **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.
  - a. The Procuring Entity has prescribed that subcontracting is allowed. The portions of Project and the maximum percentage allowed to be subcontracted are indicated in the **BDS**, which shall not exceed fifty percent (50%) of the contracted Works.
- 7.2. 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.
- 7.3. 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 at PSHS-ZRC, Cogon, Dipolog City through videoconferencing/webcasting 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 PCAB License is required, and in case of joint ventures, a valid special PCAB License, 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 **120 days after the date of the opening of bids**. 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 **three (3) copies** 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 16 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***

# Bid Data Sheet

ITB Clause																																					
5.2	Contracts similar to the Project refer to contracts which have the same major categories of work, which shall be <b>Procurement of the Construction of Academic Building III</b> using the Design and Build Scheme.																																				
7.1	Subcontracting is allowed. The portions of Project and the maximum percentage allowed to be subcontracted are indicated in the BDS, which shall not exceed fifty percent (50%) of the contracted Works.																																				
10.3	No additional requirement.																																				
10.4	<p>The key personnel must meet the required minimum years of experience set below:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><u>Key Personnel</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>General Experience</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>Relevant Experience</u></th> </tr> </thead> <tbody> <tr> <td colspan="3"><b>FOR DESIGN PERSONNEL</b></td> </tr> <tr> <td colspan="3"><b>A. Design Architect</b></td> </tr> <tr> <td colspan="3">The Design Architect must be duly-licensed with at least five (5) years of experience in the design of residential, academic or institutional facilities, and shall preferably be knowledgeable in the application of Green Design Technology in school construction.</td> </tr> <tr> <td colspan="3"><b>B. Structural Engineer</b></td> </tr> <tr> <td colspan="3">The Structural Engineer must be duly-licensed Civil Engineer with at least five (5) years of experience in structural design and shall preferably be knowledgeable in the application of Green Design Technology in school construction.</td> </tr> <tr> <td colspan="3"><b>C. Electrical Engineer</b></td> </tr> <tr> <td colspan="3">The Electrical Engineer must be a registered Professional Electrical Engineer with at least five (5) years of experience in the design of lighting, power distribution and preferably knowledgeable in developments in emergent efficient lighting technologies and energy management.</td> </tr> <tr> <td colspan="3"><b>D. Electronics Engineer</b></td> </tr> <tr> <td colspan="3">The Electronics Engineer must be a registered Professional Electronics Engineer with at least five (5) years of experience in the related field and knowledgeable in communication systems (specifically on structured and local area network cabling, PABX) and building management systems.</td> </tr> <tr> <td colspan="3"><b>E. Mechanical Engineer</b></td> </tr> <tr> <td colspan="3">The Mechanical Engineer must be a Professional Mechanical Engineer with at least five (5) years of experience in HVAC and fire protection systems and preferably knowledgeable in emergent, alternative energy-efficient HVAC technologies.</td> </tr> </tbody> </table>	<u>Key Personnel</u>	<u>General Experience</u>	<u>Relevant Experience</u>	<b>FOR DESIGN PERSONNEL</b>			<b>A. Design Architect</b>			The Design Architect must be duly-licensed with at least five (5) years of experience in the design of residential, academic or institutional facilities, and shall preferably be knowledgeable in the application of Green Design Technology in school construction.			<b>B. Structural Engineer</b>			The Structural Engineer must be duly-licensed Civil Engineer with at least five (5) years of experience in structural design and shall preferably be knowledgeable in the application of Green Design Technology in school construction.			<b>C. Electrical Engineer</b>			The Electrical Engineer must be a registered Professional Electrical Engineer with at least five (5) years of experience in the design of lighting, power distribution and preferably knowledgeable in developments in emergent efficient lighting technologies and energy management.			<b>D. Electronics Engineer</b>			The Electronics Engineer must be a registered Professional Electronics Engineer with at least five (5) years of experience in the related field and knowledgeable in communication systems (specifically on structured and local area network cabling, PABX) and building management systems.			<b>E. Mechanical Engineer</b>			The Mechanical Engineer must be a Professional Mechanical Engineer with at least five (5) years of experience in HVAC and fire protection systems and preferably knowledgeable in emergent, alternative energy-efficient HVAC technologies.		
<u>Key Personnel</u>	<u>General Experience</u>	<u>Relevant Experience</u>																																			
<b>FOR DESIGN PERSONNEL</b>																																					
<b>A. Design Architect</b>																																					
The Design Architect must be duly-licensed with at least five (5) years of experience in the design of residential, academic or institutional facilities, and shall preferably be knowledgeable in the application of Green Design Technology in school construction.																																					
<b>B. Structural Engineer</b>																																					
The Structural Engineer must be duly-licensed Civil Engineer with at least five (5) years of experience in structural design and shall preferably be knowledgeable in the application of Green Design Technology in school construction.																																					
<b>C. Electrical Engineer</b>																																					
The Electrical Engineer must be a registered Professional Electrical Engineer with at least five (5) years of experience in the design of lighting, power distribution and preferably knowledgeable in developments in emergent efficient lighting technologies and energy management.																																					
<b>D. Electronics Engineer</b>																																					
The Electronics Engineer must be a registered Professional Electronics Engineer with at least five (5) years of experience in the related field and knowledgeable in communication systems (specifically on structured and local area network cabling, PABX) and building management systems.																																					
<b>E. Mechanical Engineer</b>																																					
The Mechanical Engineer must be a Professional Mechanical Engineer with at least five (5) years of experience in HVAC and fire protection systems and preferably knowledgeable in emergent, alternative energy-efficient HVAC technologies.																																					

**F. Master Plumber**

The Master Plumber must be duly-licensed with at least five (5) years of experience in the design of building water supply and distribution, plumbing, and preferably knowledgeable in waste water management/treatment, and emergent, alternative effluent collection and treatment systems.

The key professionals listed are required. The DESIGN & BUILD contractor may, as needed and at its own expense, add additional professionals and/or support personnel for the optimal performance of all Architectural and Engineering Design Services, as stipulated in this Scope of Work for the Project. Prospective bidders shall attach each individual's resume and PRC license of the (professional) staff.

**FOR CONSTRUCTION PERSONNEL**

The key professionals and the respective qualifications of the CONSTRUCTION PERSONNEL shall be as follows:

**A. Project Manager**

The Project Manager shall be a licensed architect or civil engineer with at least five (5) years relevant experience on similar and comparable projects in different locations. The Project Manager should have a proven record of managerial capability through the directing/managing of major civil engineering works, including projects of a similar magnitude.

**B. Project Engineer/Architect**

The Project Engineer/Architect shall be a licensed architect or civil engineer with at least five (5) years of experience in similar and comparable projects and shall preferably be knowledgeable in the application of rapid construction technologies.

**C. Materials Engineer**

The Materials Engineer must be duly accredited with at least five (5) years of experience in similar and comparable projects and shall preferably be knowledgeable in the application of rapid construction technologies.

**D. Electrical Engineer**

The Electrical Engineer must be a registered Electrical Engineer with at least five (5) years of experience in the design of lighting, power distribution and preferably knowledgeable in developments in emergent efficient lighting technologies and energy management.

**E. Electronics Engineer**

The Electronics Engineer must be a registered Electronics Engineer with at least five (5) years of experience in the related field, knowledgeable in communication systems (specifically

structured and local area network cabling), building management systems.

***F. Mechanical Engineer***

The Mechanical Engineer must be duly-licensed with at least five (5) years of experience in similar and comparable projects in the installation of HVAC and fire protection.

***G. Master Plumber***

The Master Plumber must be duly-licensed with at least five (5) years of experience in similar and comparable projects in the installation of building water supply and distribution, and plumbing.

***H. Foreman***

The Foreman must have at least five (5) years of experience in similar and comparable projects and shall preferably be knowledgeable in the application of Green Building technologies.

***I. Safety Officer***

The safety officer must be an accredited safety practitioner by the Department of Labor and Employment (DOLE) and has undergone the prescribed 40-hour Construction Safety and Health Training (COSH).

The above key personnel listed are required. The DESIGN & BUILD contractor may, as needed and at its own expense, add additional professionals and/or support personnel for the optimal performance of all Construction Services, as stipulated in this Scope of Work for the PROJECT. Prospective bidders shall attach each individual's resume and PRC license of the (professional) staff, proof of qualifications, and related documents as necessary.

10.5	<p>The minimum major equipment requirements are the following:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><u>Equipment</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>Capacity</u></th> <th style="text-align: left; border-bottom: 1px solid black;"><u>Number of Units</u></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	<u>Equipment</u>	<u>Capacity</u>	<u>Number of Units</u>			
<u>Equipment</u>	<u>Capacity</u>	<u>Number of Units</u>					
12	<p>Value engineering analysis of design and construction method. Prospective bidders shall prepare a value engineering analysis report of their proposed design and construction method to be applied for the PROJECT.</p> <p>Importance shall be made on the following criteria:</p> <ul style="list-style-type: none"> <li>➤ Cost-saving, measured on a per square meter average figure</li> <li>➤ Time-saving in design and construction duration, measured using the HOPE approved PERT-CPM of the project.</li> <li>➤ Operational efficiency to take advantage of natural lighting and ventilation in some areas and use of efficient toilet.</li> </ul> <p>It shall be submitted following the requirements found in the attached Scope of Works of the aforesaid project.</p>						
15.1	<p>The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:</p> <ol style="list-style-type: none"> <li>a. The amount of not less than <b>Nine Hundred Thousand Pesos (P 900,000.00)</b>, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;</li> <li>b. The amount of not less than <b>Two Million Two Hundred Fifty Thousand Pesos (P 2,250,000.00)</b>, if bid security is in Surety Bond.</li> </ol>						
19.2	<p>Partial bids is not allowed.</p>						
20	<p>List of licenses and permits relevant of the project is indicated in the <b>Scope of Works for the Procurement of the Construction of Academic Building III</b> .</p>						

21	Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.
----	---

## ***Section IV. General 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***

# Special Conditions of Contract

GCC Clause	
2	Completion of works shall be within <b>380 calendar days</b>
4.1	<b>Expected</b> period shall not exceed three hundred eighty (380) calendar days from the date of the issuance of the Notice to Proceed (NTP)
6	None
7.2	The warranty against Structural Defects/Failures is Fifteen (15) years.
10	Dayworks are applicable at the rate shown in the Contractor's original Bid.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within fourteen (14) calendar days after the issuance of the Notice to proceed for approval by the procuring entity.
11.2	The period between Program of Work updates is 15 days.  The amount to be withheld for late submission of an updated Program of Work is 1% of billed amount.
13	The amount of the advance payment shall not exceed 15% of the total contract price and schedule of payment.
14	Materials and equipment delivered on the site and not completely put in place or used in the project shall <b>not</b> be included for payment.
15.1	The date by which operating and maintenance manuals are required is upon completion of the project.  The date by which "as built" drawings are required is upon completion of the project.
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 as required in the IRR of RA 9184.

## ***Section VI. Specifications***

## I. PROJECT DESCRIPTION AND LOCATION

The proposed Construction of Academic Building III project, on a design and build scheme, will be of three-storey with a basement. The basement however will be an open space. A portion in the basement shall be constructed with a retaining wall. Figure 1 shows the Design Perspective.

The project is located across the Academic Building I and beside the Academic Building II. See Annex A (Campus Master Plan).

The construction of the project requires 380 calendar days and it is expected that the entire building will be fully utilized after completion.

**A maximum of 3% of the contract cost shall be allocated for the design, and the remaining is for the construction.**

## II. SCOPE OF WORK

### 1. DESIGN

The building shall be **17 meters wide and 35 meters long**, and **SHALL FOLLOW THE DESIGN AND AESTHETICS OF THE ALREADY COMPLETED ACADEMIC BUILDING I to provide symmetry of the two (2) academic buildings**, but shall incorporate revisions as specified in this Scope of Work. The building floor elevations should be leveled with the adjacent Academic Building II floor elevations. The building structure of this project shall consider the possible future conversion of the open basement floor into a living space basement with 3.0m floor to floor elevation.



Figure 1 Design Perspective

#### a. ARCHITECTURAL

The building shall have the following minimum standards and its corresponding dimensions below.



Attached Floor Plans can be referred to supplement these requirements.

Rooms	Location	Quantity	Minimum Requirement	
			Space	Dimension
Classrooms	2 <sup>nd</sup> to 3 <sup>rd</sup> floors	10	70 sq.m. , 2.1 sq.m./ person	10m x 7m
SMT Faculty Office	1 <sup>st</sup> Floor	1	105 sq.m.	15m x 7m
Humanities Faculty Office	1 <sup>st</sup> Floor	1	105 sq.m.	15m x 7m
CID Chief's Office	1 <sup>st</sup> Floor	1	21 sq.m.	3m x 7m
Assistant CID Chief's Office	1 <sup>st</sup> Floor	1	21 sq.m.	3m x 7m
Pantry	1 <sup>st</sup> Floor	1	21 sq.m.	3m x 7m
Mini-conference room	1 <sup>st</sup> Floor	1	32.2 sq.m.	4.6m x 7m
C.R. (separate for male and female and separate for employees and for students)	1 <sup>st</sup> Floor	2 for female 2 for male	22.4 sq.m.	3.2m x 7m
C.R. (separate for male and for female)	2 <sup>nd</sup> and 3 <sup>rd</sup> floors	1 male and 1 female per floor	22.4 sq.m.	3.2m x 7m

The following are the features and fixtures for each particular room:

Area	Features
Classroom	<ul style="list-style-type: none"> <li>• laminated white board (same as that in the Academic Building II)</li> <li>• five (5) pieces 3-gang electrical outlet</li> <li>• 2 pieces each on the left and on the right walls, and 1 piece at the front wall</li> <li>• one (1) piece cable television outlet</li> <li>• two (2) data outlets for internet connection.</li> <li>• with wirings for four (4) units ceiling fan</li> <li>• provision of HDMI cable/wiring for ceiling mounted projector</li> </ul>
Humanities and SMT Office	<ul style="list-style-type: none"> <li>• eight (8) pieces 3-gang electrical outlet</li> <li>• one (1) piece telephone outlet</li> <li>• four (4) pieces data outlet for internet connection.</li> </ul>
CID Chief's Office and Assistant CID Office	<ul style="list-style-type: none"> <li>• two (2) pieces 3-gang electrical outlet</li> <li>• one (1) piece telephone outlet</li> <li>• two (2) pieces data outlet for internet connection</li> </ul>
Mini Conference Room	<ul style="list-style-type: none"> <li>• two (2) pieces 3-gang electrical outlet</li> <li>• one (1) piece telephone outlet</li> </ul>

	two (2) pieces data outlet for internet connection
Control Room	<ul style="list-style-type: none"> <li>• Data steel rack(s)</li> <li>• All internet, CCTV, Telephone cables will be found here</li> </ul>
Toilet	<ul style="list-style-type: none"> <li>• provided with mirrors in the sink areas</li> <li>• with phenolic toilet partition wood grain design nylon series (same as that in Academic Building II)</li> <li>• provided with one cubicle for PWDs</li> <li>• storage provision to keep the cleaning tools, equipment and materials</li> </ul>
Pantry	<ul style="list-style-type: none"> <li>• Provision of cabinets above and below sink.</li> </ul>

#### Tile Works

- Classrooms, Offices, Mini Conference Room and hallway floors shall be porcelain tile finish
- Stairs' floor finish shall be porcelain tiles with groove
- Toilets shall be of unglazed porcelain tile finish

#### Ceiling Works

- Ceilings shall be made of Fiber Board Cement – Hardiflex or approved of equal or better quality
- Lobbies shall have unique lobby design

#### Doors and Windows

- All doors in the offices and the classrooms should be pulled from the outside or pushed from the inside to open
- Classroom doors shall be made of wood panel door with clear glass design with stopper
- Glass partition with sliding door in between the Humanities Office and SMT Office
- Partition with sliding door in between the Mini-Conference Room and the CID Office, CID Office and Assistant CID Office, and Assistant CID Office and Pantry. See attached Floor Plan.
- All classrooms in second to third floors, and all offices/rooms in the first floor should be half-glass, half-concrete design along the hallway.
- Sliding door glass shall be tempered glass
- Window glass shall be standard glass

#### Painting

- Colors shall be the same as those applied in Academic Building I

#### Roofing

- Provision of fixed access ladder at third floor level going to the rooftop for repair and maintenance purposes. See Annex D (Fixed Access Ladder)

#### b. PLUMBING, DRAINAGE AND WATER DISTRIBUTION SYSTEMS

- Potable waterline shall be designed with cistern tank system. A bypass line shall be installed in the system to have continuous supply of water in case of power interruption or pump damage. Water closets shall be flush valve type and provided with bidets.
- Preferred design for routing of rain water pipes would be to provide false column/pipe chase to hide the pipe or route the pipe where it is more practicable and accessible for repairs.
- Trench Drain shall be installed to drain groundwater from building foundation.

- Septic tank and piping shall be designed/constructed at a location approved by the master plumber and the procuring entity.
- c. FIRE SPRINKLER SYSTEM AND FIRE DETECTION & ALARM SYSTEM
- Fire Sprinkler system, and fire detection and alarm system shall be installed.
  - These systems shall have complete design and compliant to Republic Act No. 9514 Fire Building Code. Design parameters should cover the Basement up to the Third Floor. This design shall then be used in the construction and complete implementation in the Ground until the 3<sup>rd</sup> Floor. The Basement will only have provisions for a short length of cross main pipe and a closing valve considering that this is an open space. For cost estimate purposes, it is suggested to refer first to the BFP for the appropriate/approved provision setup for the Basement requirement.
- d. EXHAUST AND AIRCONDITIONING
- Compute/Design the exhaust fans and ACUs capacities according to the sizes of the rooms.
  - Install appropriate sizes and other specifications of pipes and fittings, including refrigerant pipes, insulation and vapor barriers, drain, control wirings, circuit breakers and other controls necessary, to get these ready for the installation of ACUs and outdoor condenser units that are fit for each identified room. Outdoor condenser units shall be designed to be installed in areas nearest to the ACUs, where these will not impair the aesthetics of the building and will not obstruct the mobility of people.
  - Provision of ACUs, ceiling fans and exhaust fans are not included.
- e. ELECTRICAL
- Provide wirings, outlets, pipings and foundation or mounting pad for Split-type Air-Conditioning Units (ACUs) per office, including the Mini-Conference Room. Provide wirings for window type ACU in Server Room.
  - Provide emergency line to the generator panel box near the Academic Building I.
  - Design and type of lighting fixtures shall be subject for procuring entity's approval.
- f. INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) PROVISION
- ICT plan includes:
    - Voice Communication (Telephone) System at the Mini-Conference Room & offices;
    - Data Communication System (Internet);
    - Cable Television System; and
    - CCTV Television System.
  - All cables to be used shall be CAT 6 UTP cable.
  - Design for the location of CCTV cameras shall consider a clear view of the areas and the people in those areas. These can be designed:
    - one (1) at the basement lobby;
    - one (1) at the ground floor entrance;
    - two (2) units at each hallway in the basement and in all floors
- Note: ICT system shall be designed in a way that it shall be ready for future provision of fiber optic connection around the building.
- g. BASEMENT
- The wall facing the Academic Building II and its adjoining walls shall be designed and constructed as retaining walls/concrete poured walls. See Annex B (Topographic Survey) for design and cost estimate purposes.
  - Floor layout should include steps to have direct access in going inside and outside the

area if required.

- Waterproofing method to be used shall be integral waterproofing (Sika Cement Admixtures – Sika Control WT-220 PH), application of cold water proof liner (MACBARRR Water Proofing Liner) on exterior walls and installation of buried perforated drain pipe – 6.0-inch pipe with holes along the wall length, filled with gravel around and wrapped with filter cloth. Damp proofing film shall be installed beneath the slab on grade to stop damp from rising up to the basement.
- Construction of basement shall consider the possible conversion of this open space into classrooms. Hence, grade beams shall be provided with reinforcement in preparation to masonry wall for the later phase development.

#### h. FORMWORKS AND SCAFFOLDINGS

- Formwork material shall be phenolic board or approved equivalent. It should be considered in the costing that such material could be usable for up to three (3) times during construction.
- Scaffolding shall be steel G.I. pipes and cost to be charged for these shall only be for RENTAL.

The building design shall conform to the provisions of the National Building Code of the Philippines (RA 6541), Civil Engineering Law (RA 544), National Structural Code of the Philippines, Electrical Engineering Law (RA 7920), Mechanical Engineering Law (RA 5336), National Plumbing Code of the Philippines, Fire Code of the Philippines (RA 9514) and other laws and regulations covering environmental concerns and local ordinances and regulations.

## 2. CONSTRUCTION

The construction implementation of the project shall be performed as described in Section III.1 Design Requirements and below relevant works:

### a. SITE WORKS

- i. Includes handling, transportation and disposal of excavated materials considered not suitable for embankment/backfill at the Contractor's cost.
- ii. Once the basement slab has been constructed, the areas beyond the retaining wall or without retaining wall shall be excavated to a finished grade 0.30m below the open basement slab, 1.0m away from the building edge to prevent storm water from entering the basement and to protect the structure from soil erosion. The slope grade minimum 5% shall be applied. This work shall adapt the method of perforated drain pipe installation.
- iii. The Contractor shall provide all necessary means for dewatering excavations and maintain it free from all water, including groundwater or storm water.

### b. PLUMBING/SANITARY WORKS

- i. The Potable Water System should provide a branch line for potable water distribution in Open Foundation Level.
- ii. Installation of downspouts to catch basin and tap to the nearest existing drainage system

### c. MECHANICAL WORKS

- i. The Fire Sprinkler System should provide a cross main pipe for future system distribution in Open Foundation Level.

### d. ELECTRICAL WORKS

- i. Include installation of lighting fixtures and emergency lights in Basement.

- ii. Electrical pipe conduits are designed to be embedded in structural members and walls.
- e. ICT
  - i. Complete Fire Detection and Alarm System. Supply and installation of wirings, fixtures and other accessories at 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Floor.
  - ii. Installation of CCTV, CATV, voice & data and Wi-Fi system conduits, cables, outlets and steel rack cabinets. System units are not to be provided in this work.
  - iii. ICT pipe conduits are designed to be embedded in structural members and walls.
  - iv. Cables shall all be properly labelled/with identification marks.

**Note:** Mock-up is required for every installation of works after the approval by the procuring entity of materials to be used/installed in the project. This will be done to avoid rework.

### 3. BILL OF QUANTITIES –

#### BILL OF QUANTITIES AND ESTIMATE GUIDE

Enumerated under "Remarks" are items that should also be included aside from the requirements mentioned under Section III.1 Design and Section III.2 Construction. Should there be items that are required but are not found hereunder, such items should be covered and included in the Bid. The Contractor is responsible for completing the project in accordance with the Plans and Specifications found in this Scope of Work.

ITEM NO.	DESCRIPTION OF WORKS	UNIT	REMARKS
<b>I.</b>	<b>GENERAL REQUIREMENTS</b>		
	Detailed Design Fees		
	Mobilization/Demobilization	lot	
	Temporary Facilities	lot	Provide adequate and complete facilities for male and female employees
	Permits and clearances	lot	Include deposits, building permit fees, process of certificate of occupancy, clearances and other additional fees
	Construction Safety and Health	lot	Includes Safety Guideline for the Implementation of Infrastructure Projects During the COVID-19 Public Health Crisis and Construction Safety and Health Program Certificate from DOLE.
	Project Identification and Sign	lot	
<b>II.</b>	<b>SITE WORKS</b>		
	Survey and Test		Conduct Soil Boring Test
	Clearing and Grubbing	sq.m.	
	Excavation	cu.m	Includes manual and mechanical excavation works and excavation support system
	Fill/Backfill with Compaction	cu.m.	
	Gravel Bedding	cu.m.	
	Soil Treatment	sq.m.	Includes soil poisoning below structure and building premises
<b>III.</b>	<b>STRUCTURAL WORKS</b>		

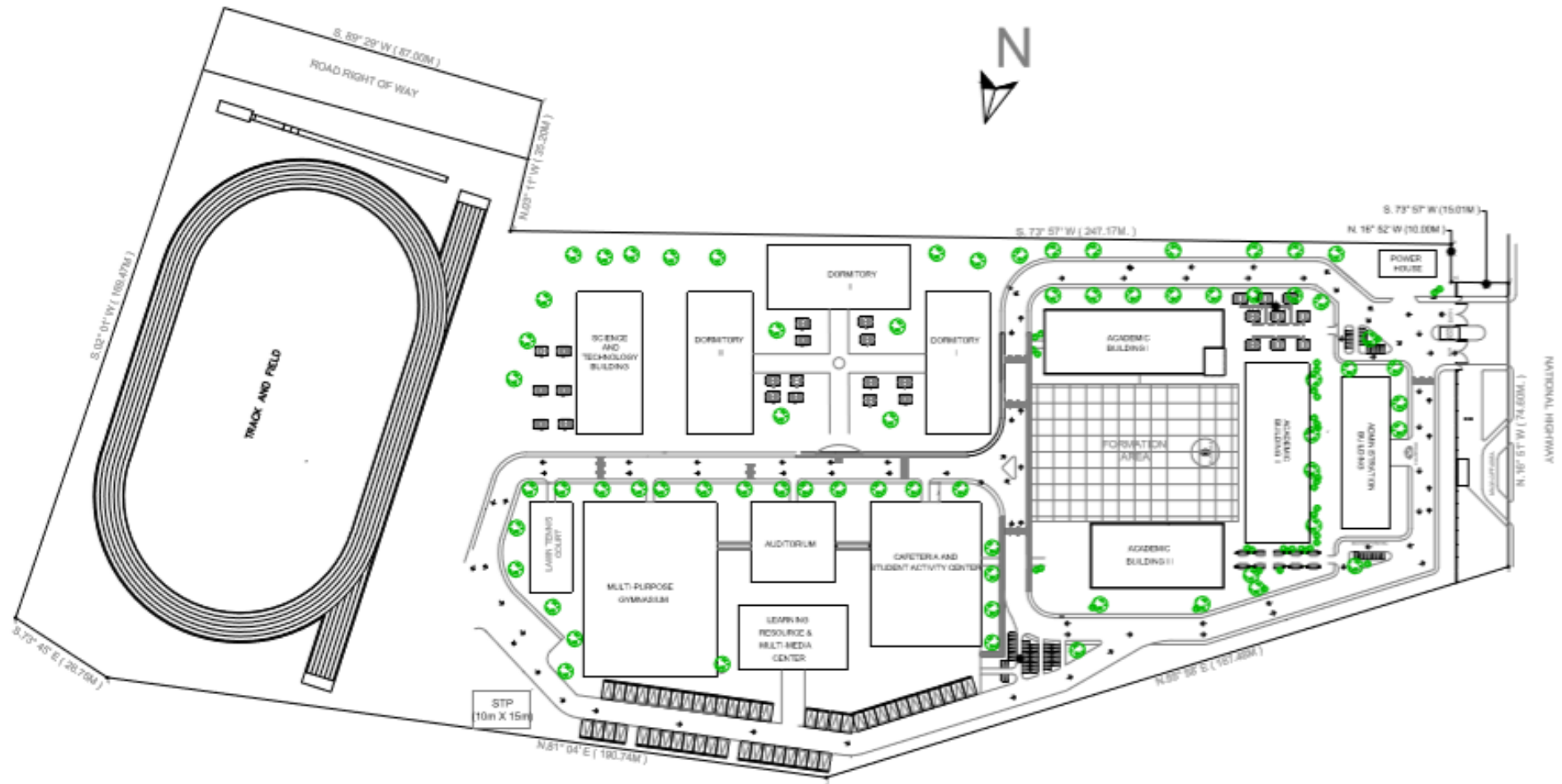
	CONCRETE		Min. Compressive Strength 1. Foundation, Retaining Wall, Beams, Columns, Suspended Slab, Slab on Grade - 4,000 psi 2. all others - 2,500 psi
	Column Footing	cu.m.	Application of lean concreting aside from gravel bedding
	Grade Beam and Slab on Grade	cu.m.	1. Includes provision of masonry reinforcement on grade beam and slab on grade in preparation for the later phase development at Semi Basement 2. With integral water proofing
	Wall Footing	cu.m.	
	Columns	cu.m.	
	Beams and Girders	cu.m.	
	Roof Beams	cu.m.	
	Suspended Slab	cu.m.	
	Stairs and Canopy	cu.m.	Application of drip inducer on canopy for water shedding.
	Basement Wall	cu.m.	1. With integral waterproofing 2. See Attached Basement Floor Plan
	REBAR WORKS		
	Def Bars Grade 40	kgs.	All reinforcement for reinforced concrete structural members including gutters, parapets and canopies
	TESTING (Concrete and Rebars)	lot	Includes all laboratory testing of materials for concrete and reinforcements and all filed quality tests with guarantee
	FORMWORKS & SCAFFOLDINGS	sq.m.	Includes table forms and scaffolds, oil, ties, keyway, chain, expansion joint, wedges, block-outs, shoring, purlins, pins, clamps, reglets, insets, rental of form system. Scaffolding shall be steel/G.I. pipes and cost shall be RENTAL
	MASONRY		Includes all CHB units and other masonry wall system. Includes miscellaneous masonry accessories
	STEEL WORKS/METALS		
	Roof Framing	kgs.	Structural steel sections for trusses, purlins, sag rods, clips, cross bracings
	Pre-Painted Roofing	ln.m.	RED pre painted roofing sheets. Refer to existing Academic Building 1 roofing as reference
	Stainless Steel Hand & Grab Rails, Railings	lot	1. Complete staircase stainless steel handrails from Semi Basement up to Third Floor; 2-inch diameter stainless steel pipes. 2. Toilet Grab Rails - stainless steel 3. Ramp railings - stainless steel
<b>IV.</b>	<b>ARCHITECTURAL WORKS</b>		
	CARPENTRY		
	Laminated White Board	units	One unit per classroom
	Storage/Cabinets	lot	Installation of above and below cabinets at CID Office and Pantry
	Toilet Partition, all included	lot	Includes storage for cleaning tools
	THERMAL & MOIST PROTECTION		
	Semi Basement Damp proofing and Waterproofing	lot	1. Application of cold waterproof liner on exterior wall 2. Application of damp proof film/sheet beneath the semi basement slab
	Slab, Deck, Canopy & Gutter Waterproofing	sq.m.	First to Third Floor toilets, canopies, gutters and walls exposed to rain to prevent seepage.

	Cistern Epoxy Waterproofing	sq.m.	
	DOORS AND WINDOWS		
	Sliding Tempered Glass Doors	lot	Installation at First Floor CID Office, Assist CID Office and Pantry. See Floor Plan
	Flush Hollow Core Doors (plywood & mahogany) including hardware	sets	For EE and Mechanical Room
	Solid Panel Doors with glass, including hardware and stopper	sets	Supply and install all wood panel doors with 4mm thick glass panel with door jambs and head. Include keyed door knobs and locksets. Applicable to all classrooms, offices, mini-conference room and pantry.
	PVC Panel Doors with Louvers	sets	Supply and install pvc panel doors (high quality) with louvers
	Fixed-Sliding Windows	sq.m.	Installation at First, Second and Third Floor - Interior
	Double Casement Windows	sq.m.	Installation at First, Second and Third Floor - Exterior
	Awning Windows	sq.m.	Installation at First, Second and Third Floor - Exterior
	FINISHES		
	Ceiling on Light Gauge Metal Frame	sq.m.	1. Installation at First, Second and Third Floor 2. Hardiflex or approved equal
	Vitrified Ceramic Wall & Floor Tiles	sq.m.	Installation at First, Second and Third Floor
	Porcelain Floor Tiles	sq.m.	Installation at First, Second and Third Floor - lobby, hallway, stairs, office and classrooms.
	PAINTING		
	Exterior and Interior Concrete Walls	sq.m.	Entire Building
	Ceiling	sq.m.	1. Complete works at First, Second and Third Floor 2. Control Room in Basement
<b>V.</b>	<b>PLUMBING AND SANITARY WORKS</b>		
	EQUIPMENT		
	Water Pressure Booster System	unit	1. For use of potable water supply system includes controller with complete accessories installed 2. For use with sprinkler system includes controller with complete accessories installed
	SANITARY & DRAINAGE		
	Plumbing Pipes and Fittings	lot	Includes pipes and fittings for sanitary, waste and ventilations systems, all fittings, traps, drains, cleanouts. Includes plumbing drains, traps, cleanouts, etc.
	Plumbing Fixtures	lot	1. Supply and installation and testing of all plumbing fixtures 2. Includes supply and installation of 4 units hose bibb at Semi Basement
	Storm Drain and Catch Basin and Trench Drain	lot	Complete piping installation from roof to catch basin to rain water tank with overflow pipe that will convey rainwater to the nearest drainage system.
	Septic Tank	lot	Provide septic tank conforming to National Plumbing Code of the Philippines. Includes laying out of pipe from overflow to the nearest sanitary sewer system
	DOMESTIC WATER SUPPLY		
	Pipes and Fittings, PPR	lot	1. Includes pipes, valves and all fittings for potable water supply from waterline main distribution system 2. Provision of four (4) units faucet for general utilities at Semi Basement 3. Provision of branch pipe with end cap below First Floor for future water distribution at Semi Basement.

	Potable Cistern Tank	cu.m.	Concrete work with waterproofing. Includes installation gauges, vent and overflow
<b>VI.</b>	<b>MECHANICAL WORKS</b>		
	FIRE PROTECTION SYSTEM		
	Fire Sprinkler System	lot	<ol style="list-style-type: none"> <li>1. Includes pipes and fittings for fire sprinkler system, sprinkler heads including valves, fire department connections, fire hose and cabinets, fire extinguishers, fire pumps and controllers, hangers, supports, pipe sleeves, painting and identification items, and consumable items. Piping distribution shall cover only at First, Second and Third Floor.</li> <li>2. Provision of cross main pipe for future system distribution at Semi Basement.</li> <li>3. Includes fire protection equipment signages and fire evacuation plans in each floor including Semi Basement</li> </ol>
	VENT AND AIRCON		
	Pipes and fittings (includes all refrigerant pipes and fittings insulation and vapor barriers; includes all wires and conduits wiring devices for all A/C units)	lot	A/C units
	Pipe Accessories (include hangers, rods, supports, pipe sleeves for all a/c and electrical pipes through wall and floors, painting and identification items and consumable items)	lot	A/C units, ceiling fans and exhaust fans
<b>VII.</b>	<b>ELECTRICAL WORKS</b>		
	Cables, Wires, Race-ways & Conduits	lot	<ol style="list-style-type: none"> <li>1. Tap to existing main distribution/feeder line within the campus.</li> <li>2. Includes intermediate metal conduit for outdoor exposure, PVC conduits and fittings, all cables and wires, risers, weather heads and all accessories required.</li> <li>3. Includes provision of power and lighting at Semi Basement</li> </ol>
	Panel Board & Breakers	lot	Design shall consider integration of emergency power generator
	Boxes & Wire Devices	lot	<ol style="list-style-type: none"> <li>1. Includes pull-boxes, junction boxes, convenience and weatherproof outlets, switches, coverplates, other wiring devices and accessories at First, Second and Third Floor</li> <li>2. Includes installation of necessary devices related to lighting and power at Semi Basement</li> </ol>
	Lighting Fixtures & Accessories	lot	<ol style="list-style-type: none"> <li>1. Includes all lighting fixtures, ballasts, housing, reflectors including supports and fasteners for mounting.</li> <li>2. Basement shall be provided with lighting fixtures according to building code standard considering this area to be an open space and without ceiling.</li> </ol>
<b>X.</b>	<b>ICT</b>		
	CCTV, CATV	lot	Includes roughing-ins/cable trays and outlets for CCTV and CATV
	VOICE AND DATA AND WIFI	lot	Includes roughing-ins/cable trays and outlets for Telephone System and Data Communication System.
	Fire Alarm System	lot	Complete and functional system excluding Semi Basement

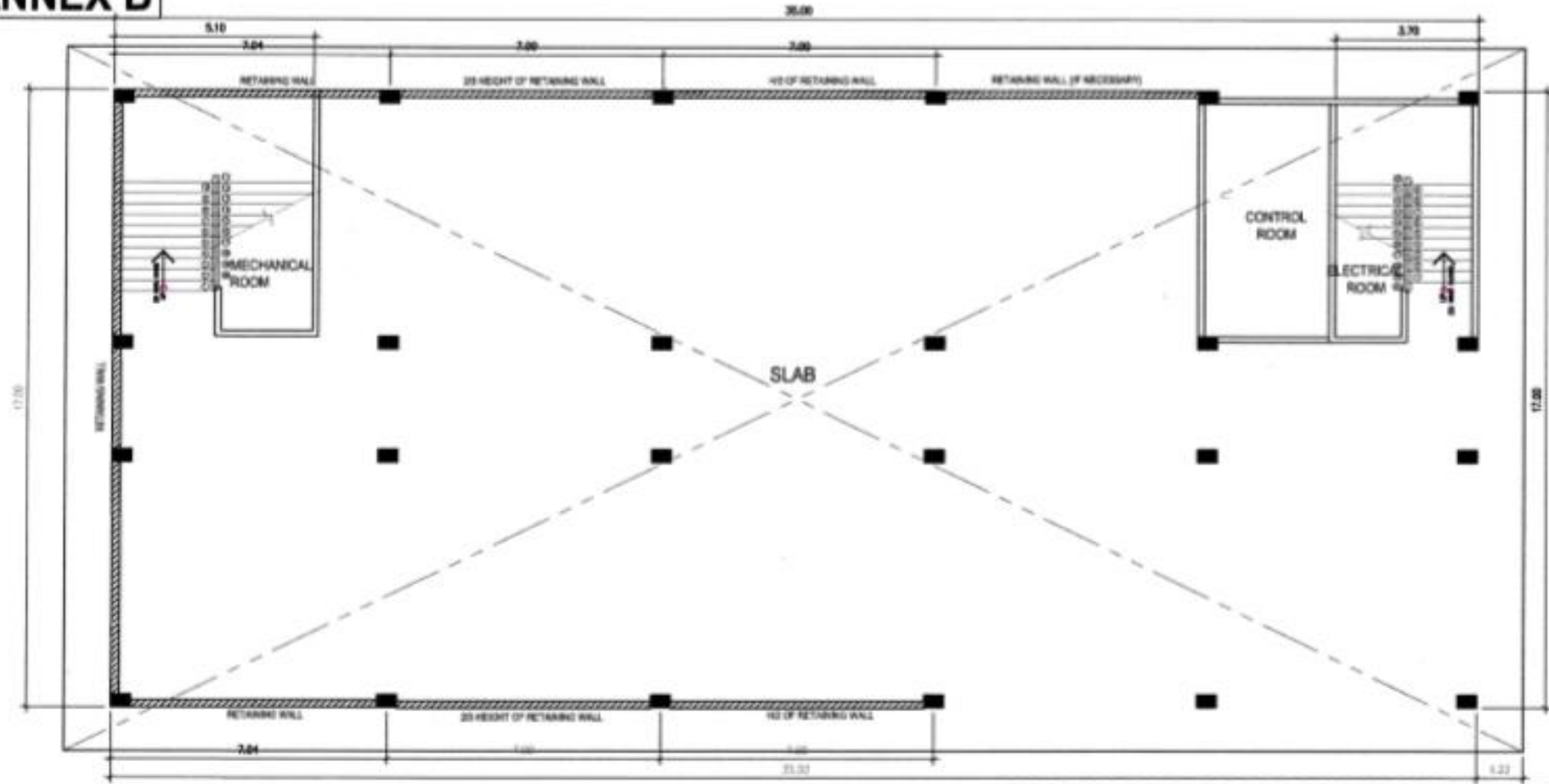


## ***Section VII. Drawings***



## CAMPUS MASTER PLAN

# ANNEX B

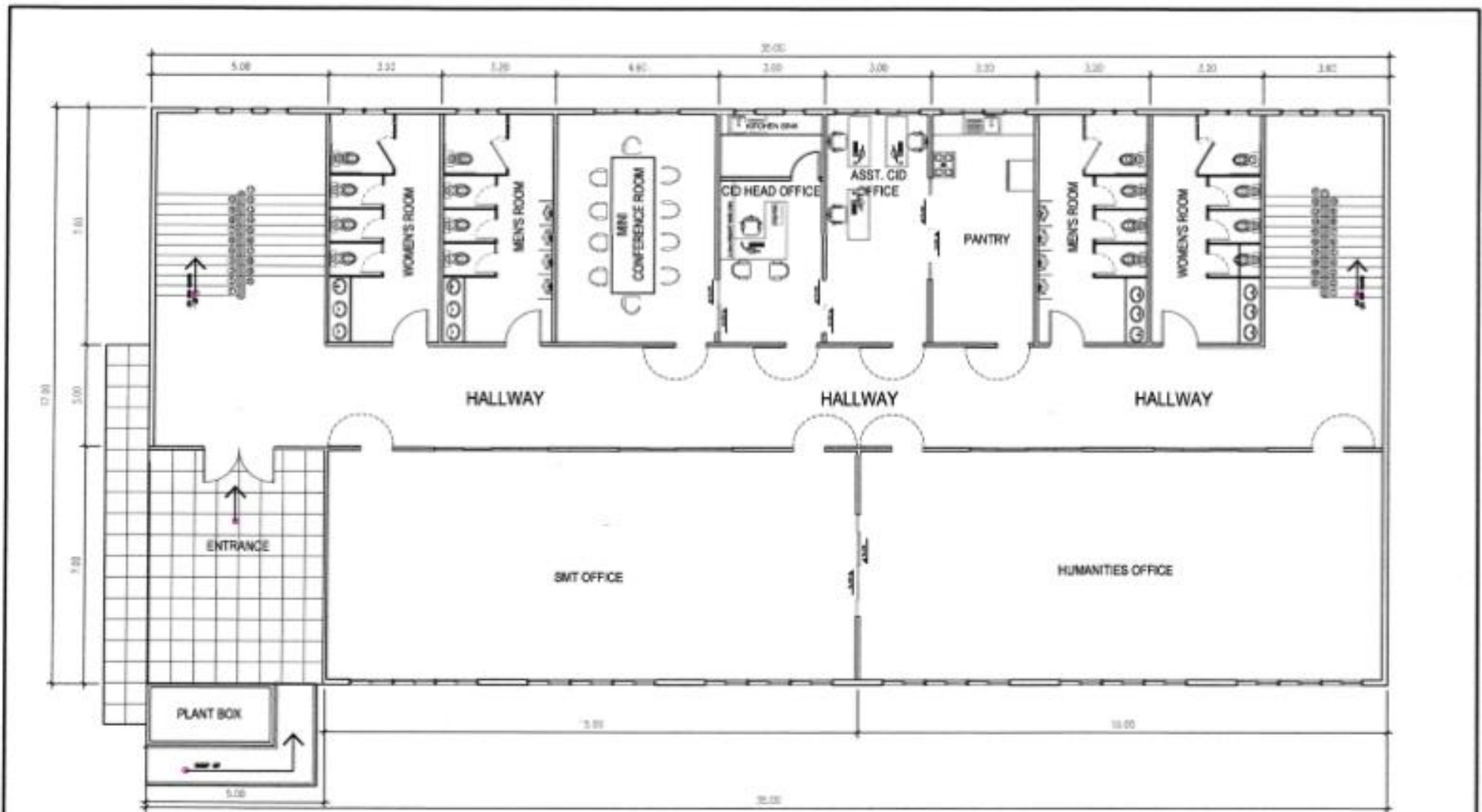


## BASEMENT FLOOR PLAN

SCALE: 1:100 (MS)

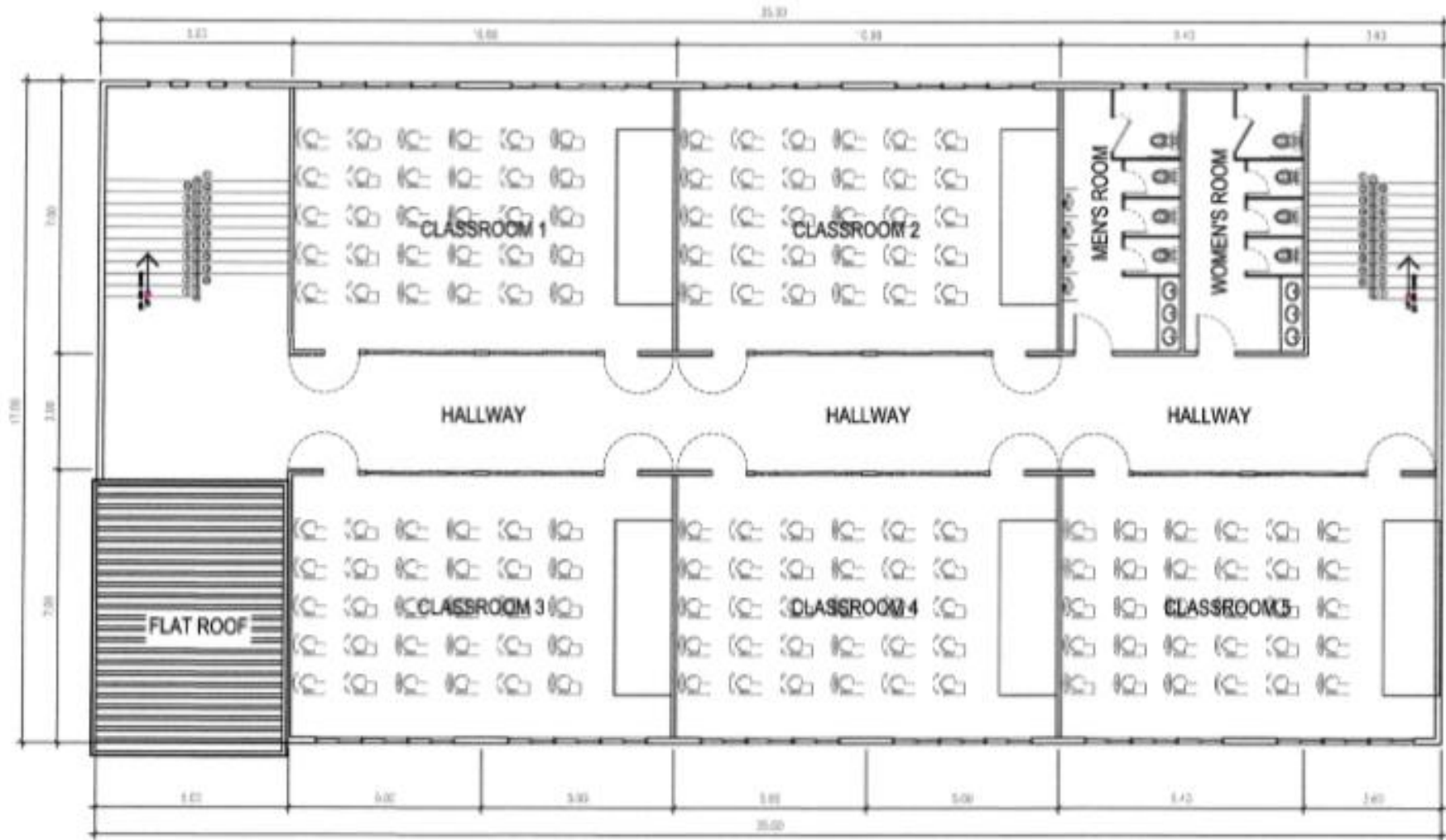
NOTE: -VERIFY MEASUREMENT IN ACCORDANCE TO CONTRACTOR'S DESIGN.  
 -LOCATION AND NUMBER OF COLUMNS CAN BE MODIFIED IN ACCORDANCE TO CONTRACTOR'S DESIGN.  
 -VERIFY THE ACTUAL MEASUREMENT, THE HEIGHT AND THE LENGTH OF RETAINING WALL INTENDED FOR THE TERRAIN/SLOPE

<p>REPUBLIC OF THE PHILIPPINES          DEPARTMENT OF SCIENCE AND TECHNOLOGY          PHILIPPINE SCIENCE HIGH SCHOOL          DAVANAO PENINSULA REGION CAMPUS          WED. CORRAL, BPODOO CITY, DAVANAO DEL NORTE</p>	<p>PROJECT TITLE:  <b>CONSTRUCTION OF          ACADEMIC BUILDING III</b></p>	<p>PREPARED BY:    <b>ENGR. ANTONIO P. ESCABARTE JR.</b>          RC-PEE</p>	<p>CHECKED BY:    <b>ENGR. DEBBIE P. MUGHILLAN</b>          RC-PEE</p>	<p>RECOMMENDING APPROVAL:    <b>MILO S. SALDON</b>          RC-DRP</p>	<p>APPROVED:    <b>LOUIE C. JAMORA PAE, MSc</b>          CIVIL ENGINEER</p>	<p>SHEET NO.:  </p>
	<p>REVISIONS:</p>					



**FIRST FLOOR PLAN**  
 SCALE: 1:100 mts.

	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF SCIENCE AND TECHNOLOGY PHILIPPINE SCIENCE HIGH SCHOOL ZAMBANGARA PENINSULA REGION CAMPUS BRP. LORON, EPRADE CITY, ZAMBANGARA DEL NORTE	<b>PROJECT TITLE:</b> CONSTRUCTION OF ACADEMIC BUILDING III	<b>PREPARED BY:</b>  ENGR. ANTONIO P. ESCABARTE JR. RE-PSHS	<b>DESIGNED BY:</b>  ENGR. DEBBIE P. MUCHILLAS RE-PSHS	<b>RECOMMENDING APPROVAL:</b>  MILD S. SALDON FAC-CHIEF	<b>APPROVED:</b>  LOUIE C. JAMORA PAE, MS CAMPUS DIRECTOR	SHEET NO.



 **SECOND FLOOR PLAN**  
SCALE: 1:100 mts.




REPUBLIC OF THE PHILIPPINES  
DEPARTMENT OF SCIENCE AND TECHNOLOGY  
PHILIPPINE SCIENCE HIGH SCHOOL  
BAMBANGA PINKILLA BRANCH CAMPUS  
BWOY, CORDA, DAVAO CITY, DAVAO REGION, MINDANAO

PROJECT TITLE  
**CONSTRUCTION OF  
ACADEMIC BUILDING III**

PROPOSED BY  
  
**ENGR. ANTONIO P. ESCABARTE JR.**  
R.C. PDS

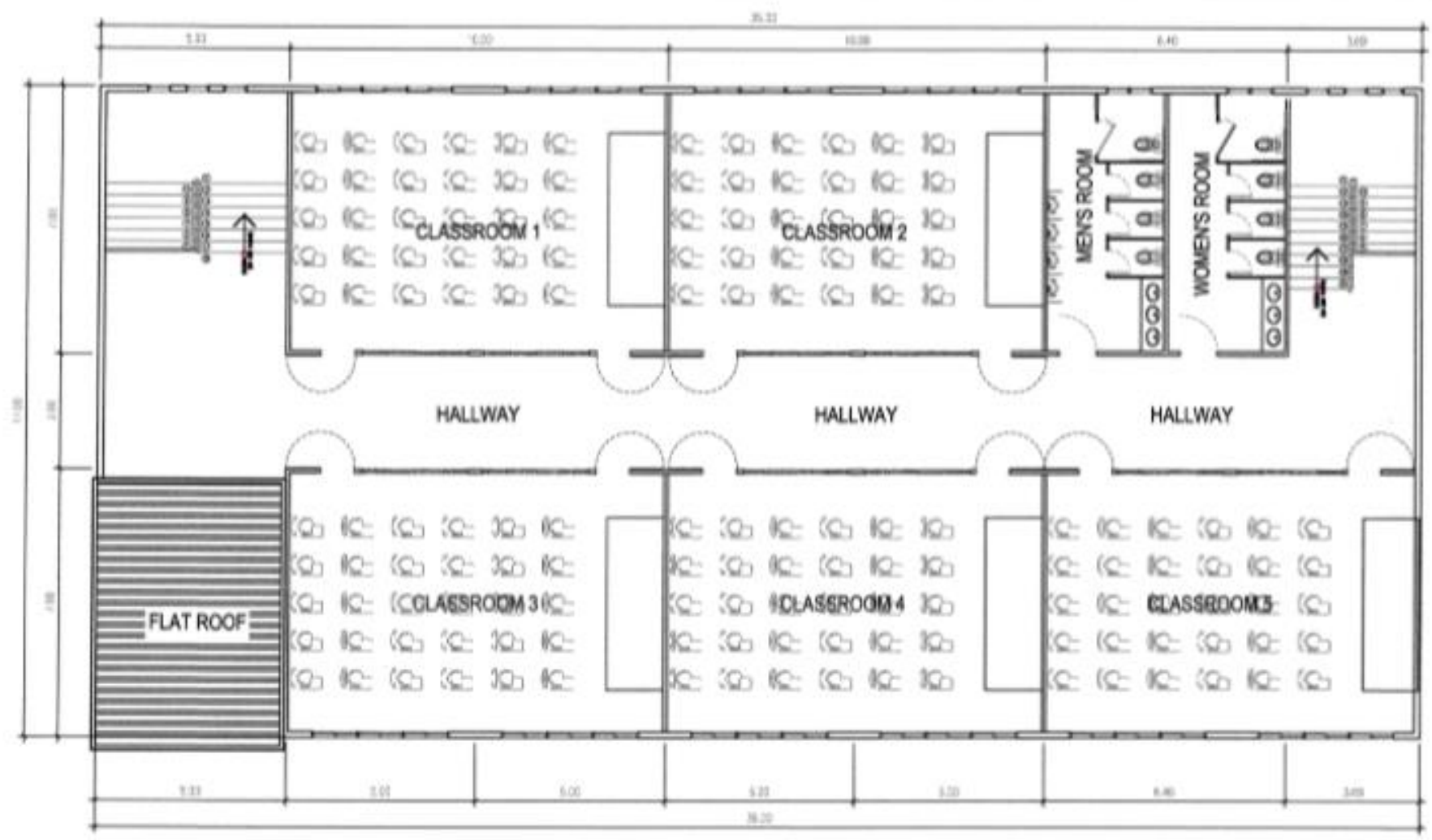
DESIGNED BY  
  
**ENGR. DERRIC P. MUCHILLAS**  
R.C. PDS

FORWARDED APPROVAL  
  
**MILO S. SALOON**  
R.C. PDS

APPROVED  
  
**LOUIE C. JAMORA PAE, MSc**  
CAMPUS MANAGER



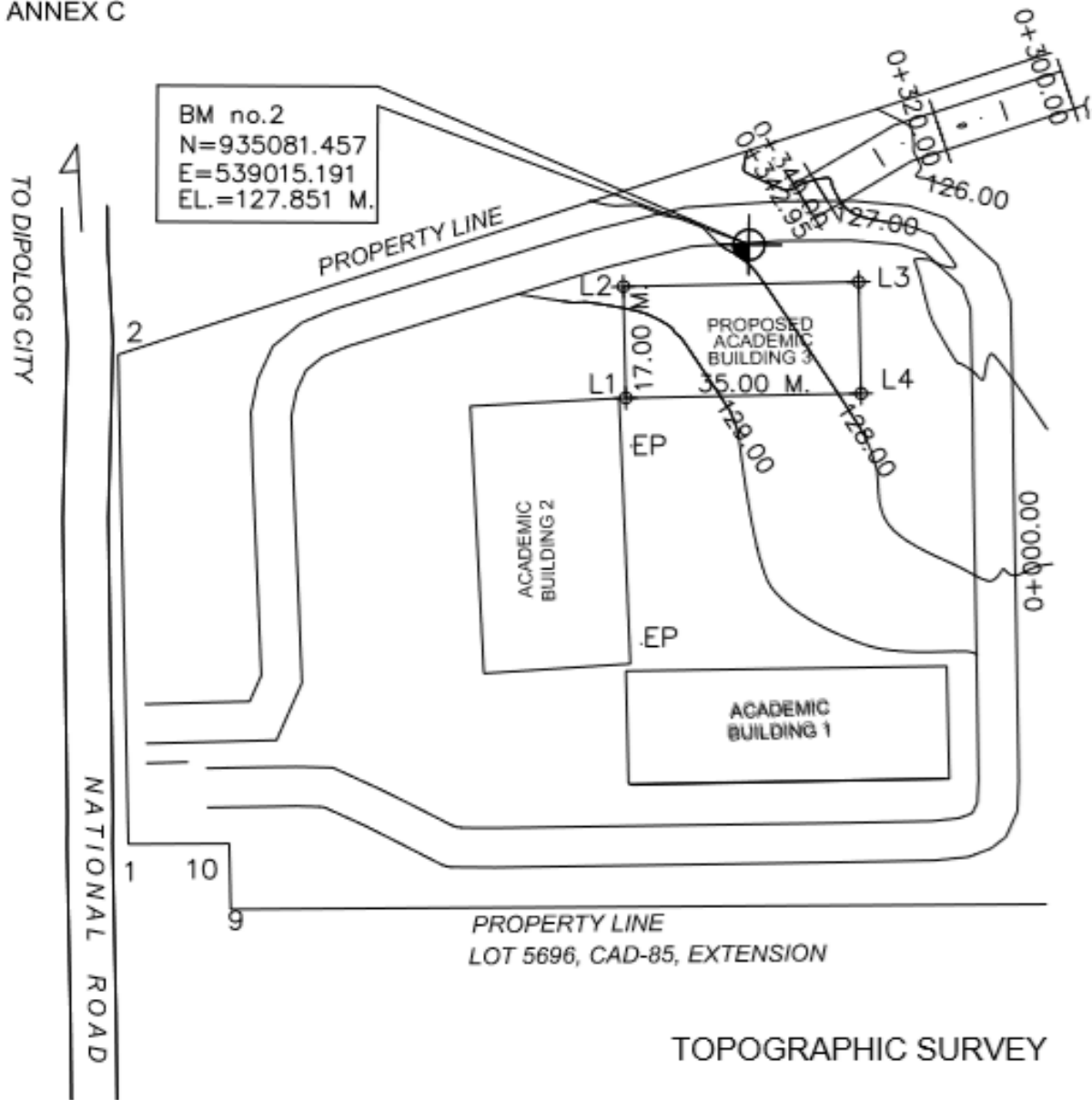





**THIRD FLOOR PLAN**  
 SCALE: 1:100 mm.

	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF SCIENCE AND TECHNOLOGY PHILIPPINE SCIENCE HIGH SCHOOL, DABAWANG DIVISION REGION CAMPUS <small>WEST CORNER, BRICKER CITY, DAVENPORT BL. NORTH</small>	PROJECT TITLE <b>CONSTRUCTION OF          ACADEMIC BUILDING III</b>	DESIGNED BY  <b>ENGR. ANTONIO P. ESCARBYTE JR.</b> <small>BC-PSIS</small>	CHECKED BY  <b>ENGR. DEBBIE P. MUCHILLAS</b> <small>BC-PSIS</small>	SUPERVISOR APPROVAL  <b>M.L.O. SALDON</b> <small>AS-200</small>	APPROVAL  <b>LOUIE C. JAMORA PAE, MS</b> <small>CAMPUS DIRECTOR</small>	SHEET NO. 
							

ANNEX C



PROPOSED ACADEMIC BUILDING 3			
LAYOUT	NORTHING	EASTING	ELEVATION
1	935053.961	539003.942	129.810 M.
2	935070.228	538998.982	128.770 M.
3	935080.435	539032.461	127.300 M.
4	935064.175	539037.421	127.800 M.

TOPOGRAPHIC SURVEY

Annex D



FIXED ACCESS LADDER



## ***Section VIII. Bill of Quantities***

<b>ITEM NO.</b>	<b>DESCRIPTION OF WORKS</b>	<b>UNIT</b>	<b>Unit Cost</b>	<b>Amount</b>
<b>I.</b>	<b>GENERAL REQUIREMENTS</b>			
	Detailed Design Fees			
	Mobilization/Demobilization	lot		
	Temporary Facilities	lot		
	Permits and clearances	lot		
	Construction Safety and Health	lot		
	Project Identification and Sign	lot		
<b>II.</b>	<b>SITE WORKS</b>			
	Survey and Test			
	Clearing and Grubbing	sq.m.		
	Excavation	cu.m		
	Fill/Backfill with Compaction	cu.m.		
	Gravel Bedding	cu.m.		
	Soil Treatment	sq.m.		
<b>III.</b>	<b>STRUCTURAL WORKS</b>			
	CONCRETE			
	Column Footing	cu.m.		
	Grade Beam and Slab on Grade	cu.m.		
	Wall Footing	cu.m.		
	Columns	cu.m.		
	Beams and Girders	cu.m.		
	Roof Beams	cu.m.		
	Suspended Slab	cu.m.		
	Stairs and Canopy	cu.m.		
	Basement Wall	cu.m.		
	REBAR WORKS			
	Def Bars Grade 40	kgs.		
	TESTING (Concrete and Rebars)	lot		
	FORMWORKS & SCAFFOLDINGS	sq.m.		
	MASONRY			

	STEEL WORKS/METALS			
	Roof Framing	kgs.		
	Pre-Painted Roofing	ln.m.		
	Stainless Steel Hand & Grab Rails, Railings	lot		
<b>IV.</b>	<b>ARCHITECTURAL WORKS</b>			
	CARPENTRY			
	Laminated White Board	units		
	Storage/Cabinets	lot		
	Toilet Partition, all included	lot		
	THERMAL & MOIST PROTECTION			
	Semi Basement Damp proofing and Waterproofing	lot		
	Slab, Deck, Canopy & Gutter Waterproofing	sq.m.		
	Cistern Epoxy Waterproofing	sq.m.		
	DOORS AND WINDOWS			
	Sliding Tempered Glass Doors	lot		
	Flush Hollow Core Doors (plywood & mahogany) including hardware	sets		
	Solid Panel Doors with glass, including hardware and stopper	sets		
	PVC Panel Doors with Louvers	sets		
	Fixed-Sliding Windows	sq.m.		
	Double Casement Windows	sq.m.		
	Awning Windows	sq.m.		
	FINISHES			
	Ceiling on Light Gauge Metal Frame	sq.m.		
	Vitrified Ceramic Wall & Floor Tiles	sq.m.		
	Porcelain Floor Tiles	sq.m.		
	PAINTING			
	Exterior and Interior Concrete Walls	sq.m.		
	Ceiling	sq.m.		

<b>V.</b>	<b>PLUMBING AND SANITARY WORKS</b>			
	EQUIPMENT			
	Water Pressure Booster System	unit		
	<b>SANITARY &amp; DRAINAGE</b>			
	Plumbing Pipes and Fittings	lot		
	Plumbing Fixtures	lot		
	Storm Drain and Catch Basin and Trench Drain	lot		
	Septic Tank	lot		
	<b>DOMESTIC WATER SUPPLY</b>			
	Pipes and Fittings, PPR	lot		
	Potable Cistern Tank	cu.m.		
<b>VI.</b>	<b>MECHANICAL WORKS</b>			
	<b>FIRE PROTECTION SYSTEM</b>			
	Fire Sprinkler System	lot		
	<b>VENT AND AIRCON</b>			
	Pipes and fittings (includes all refrigerant pipes and fittings insulation and vapor barriers; includes all wires and conduits wiring devices for all A/C units)	lot		
	Pipe Accessories (include hangers, rods, supports, pipe sleeves for all a/c and electrical pipes through wall and floors, painting and identification items and consumable items)	lot		
<b>VII.</b>	<b>ELECTRICAL WORKS</b>			
	Cables, Wires, Race-ways & Conduits	lot		
	Panel Board & Breakers	lot		
	Boxes & Wire Devices	lot		
	Lighting Fixtures & Accessories	lot		

<b>X.</b>	<b>ICT</b>			
	CCTV, CATV	lot		
	VOICE AND DATA AND WIFI	lot		
	Fire Alarm System	lot		

***Section IX. Checklist of Technical and  
Financial Documents***

# Checklist of Technical and Financial Documents

## I. TECHNICAL COMPONENT ENVELOPE

### *Class "A" Documents*

#### Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);  
**or**
- (b) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document;  
**and**
- (c) Mayor's or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas;  
**and**
- (e) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

#### Technical Documents

- (f) 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**
- (g) 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**
- (h) Philippine Contractors Accreditation Board (PCAB) License;  
**or**  
Special PCAB License in case of Joint Ventures;  
**and** registration for the type and cost of the contract to be bid; **and**
- (i) 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**
- (j) 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**
- (k) 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

- (l) The prospective bidder's audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; **and**
- (m) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).

#### ***Class "B" Documents***

- (n) 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**

- (o) Original of duly signed and accomplished Financial Bid Form; **and**

#### Other documentary requirements under RA No. 9184

- (p) Original of duly signed Bid Prices in the Bill of Quantities; **and**
- (q) Duly accomplished Detailed Estimates Form, including a summary sheet indicating the unit prices of construction materials, labor rates, an equipment rentals used in coming up with the Bid; **and**
- (r) Cash Flow by Quarter.





