

PHILIPPINE BIDDING DOCUMENTS

Rehabilitation of Crop Research Building 1 (Phase 1)

ABC = Php7,640,000.00

2024-SIDA-15

for

Sugar Regulatory Administration

August 27, 2024

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.

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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
Department of Agriculture

SUGAR REGULATORY ADMINISTRATION

Sugar Center Bldg., North Avenue, Diliman, Quezon City, Philippines 1101

TIN 000-784-336

Website: <http://www.sra.gov.ph>

Email Address: srahead@sra.gov.ph

Tel No. (632) 8929-3633, (632) 3455-2135, (632) 3455-3376

INVITATION TO BID FOR REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1) (2024-SIDA-15)

1. The SUGAR REGULATORY ADMINISTRATION, through the SIDA GAA 2023 rebudgeted to 2024 intends to apply the sum of **Seven Million Six Hundred Forty Thousand Pesos (₱7,640,000.00)** being the ABC for payments under the contract for the **Rehabilitation of Crop Research Building 1 (Phase 1) / 2024-SIDA-15**. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The SUGAR REGULATORY ADMINISTRATION now invites bids for the above Procurement Project. Completion of the Works is required within one hundred fifty (150) calendar days upon receipt of the Notice to Proceed. 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 SUGAR REGULATORY ADMINISTRATION 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 on August 29, 2024 to September 18, 2024 from the given address and website(s) below upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB in the amount of ₱8,000.00. The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person or through electronic means.
6. The SUGAR REGULATORY ADMINISTRATION will hold a Pre-Bid Conference on 06 September 2024 at 09:00 A.M. at the Conference Room, SRA, Araneta St., Singang, Bacolod City. This shall be open to prospective bidders who shall have the option to attend either physically or through video conferencing via Zoom or Google Meet platforms. A Link will be given to those interested in bidding for the Procurement Project.



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7. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below, on or before 18 September 2024 at 8:30 A.M. 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 18 September 2024 at 09:00 A.M. at the given address below and will be made available via Zoom or Google Meet platform for those who choose to attend virtually. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. The SUGAR REGULATORY ADMINISTRATION 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:

NATASHA KIM G. PESQUERA
RBAC Secretariat Head
Sugar Regulatory Administration
Araneta St., Singcang, Bacolod City, Negros Occidental 6100 sra.rbac@sra.gov.ph
Tel. (034) 460-8530
Mobile No. 0998-8453123
<http://www.sra.da.gov.ph>

12. You may visit the following websites for downloading of Bidding Documents:

<http://www.sra.da.gov.ph>
www.philgeps.gov.ph

August 27, 2024



ATTY. GUILLERMO C. TEJIDA III
Chairperson
Regional Bids and Awards Committee

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, SUGAR REGULATORY ADMINISTRATION invites Bids for the **Rehabilitation of Crop Research Building 1 (Phase 1)** with Project Identification Number 2024-SIDA-15.

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 SIDA GAA 2023 rebudgeted to 2024 in the amount of Seven Million Six Hundred Forty Thousand Pesos (₱7,640,000.00).

2.2. The source of funding is: General Appropriations Act (GAA) – SIDA.

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. 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 Conference Room, SRA, Araneta St., Singang, Bacolod City and/or 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 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 January 15, 2025. 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.

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

ITB Clause																															
5.2	<p>For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:</p> <p>Vertical Infrastructure Projects, such as Building Construction/ Improvement/ Rehabilitation/ Repair</p>																														
10.3	<i>None.</i>																														
10.4	<p>The key personnel must meet the required minimum years of experience set below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Key Personnel</th> <th style="text-align: left;">General Experience</th> <th style="text-align: left;">Relevant Experience</th> </tr> </thead> <tbody> <tr> <td>Project Construction Engineer (Civil Engineer)</td> <td>10 years</td> <td>5 years</td> </tr> <tr> <td>Project Engineer (Licensed Civil Engineer)</td> <td>10 years</td> <td>5 years</td> </tr> <tr> <td>Licensed Electrical Engineer</td> <td>10 years</td> <td>3 years</td> </tr> <tr> <td>Safety Engineer/ Construction Safety and Health Officer (EE/ME/CE)</td> <td>5 years</td> <td>2 years with COSH/BOSH Certificate of Training</td> </tr> <tr> <td>Electrician (RME)</td> <td>10 years</td> <td>5 years</td> </tr> <tr> <td>General Foreman</td> <td>10 years</td> <td>5 years</td> </tr> <tr> <td>Heavy Equipment Operators</td> <td>5 years</td> <td>5 years</td> </tr> <tr> <td>Skilled Workers</td> <td>5 years</td> <td>3 years</td> </tr> <tr> <td>Laborers</td> <td>5 years</td> <td>2 years</td> </tr> </tbody> </table>	Key Personnel	General Experience	Relevant Experience	Project Construction Engineer (Civil Engineer)	10 years	5 years	Project Engineer (Licensed Civil Engineer)	10 years	5 years	Licensed Electrical Engineer	10 years	3 years	Safety Engineer/ Construction Safety and Health Officer (EE/ME/CE)	5 years	2 years with COSH/BOSH Certificate of Training	Electrician (RME)	10 years	5 years	General Foreman	10 years	5 years	Heavy Equipment Operators	5 years	5 years	Skilled Workers	5 years	3 years	Laborers	5 years	2 years
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10.5	<p>The minimum major equipment requirements are the following:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Equipment</th> <th style="text-align: left;">Capacity</th> <th style="text-align: left;">Number of Unit</th> </tr> </thead> <tbody> <tr> <td>Jack Hammer</td> <td></td> <td>1 unit</td> </tr> <tr> <td>Welding Machine</td> <td>200-300A</td> <td>2 units</td> </tr> <tr> <td>Cutter/Grinder</td> <td>100MM 700W</td> <td>2 units</td> </tr> <tr> <td>Bagger Mixer</td> <td></td> <td>1 unit</td> </tr> <tr> <td>Stick Vibrator</td> <td></td> <td>1 unit</td> </tr> <tr> <td>Plate Compactor</td> <td>6.5HP</td> <td>1 unit</td> </tr> <tr> <td>Electric Drill</td> <td>½ in dia.</td> <td>1 unit</td> </tr> <tr> <td>Water Storage Tank</td> <td>2000 L</td> <td>1 unit</td> </tr> </tbody> </table>	Equipment	Capacity	Number of Unit	Jack Hammer		1 unit	Welding Machine	200-300A	2 units	Cutter/Grinder	100MM 700W	2 units	Bagger Mixer		1 unit	Stick Vibrator		1 unit	Plate Compactor	6.5HP	1 unit	Electric Drill	½ in dia.	1 unit	Water Storage Tank	2000 L	1 unit			
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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"> a. The amount of not less ₱152,800.00, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or b. The amount of not less than ₱382,000.00, if bid security is in Surety Bond. 																														
20	Philippine Contractors Accreditation Board (PCAB) license																														

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 Programme Evaluation Review Technique / Critical Path Method (PERT/CPM) or other acceptable tools of project scheduling.
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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	<i>Not applicable.</i>
4.1	Upon receipt of the Notice to Proceed
6	The site investigation reports are: The Civil Works Pre-Inspection Report and the Ocular Site Inspection conducted by the prospective Contractor
7.2	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 seven (7) 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 1% of the ABC or ₱76,400.00.
13	The amount of the advance payment shall not exceed 15% of the total contract price.
14	<i>Not allowed</i>
15.1	The date by which operating, and maintenance manuals are required is upon issuance of the Certificate of Acceptance. The date by which "as built" drawings are required is upon issuance of the Certificate of Acceptance.
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required, the Procuring Entity's Representative shall withhold the amount equivalent to one-tenth (1/10) of ten percent (10%) from payments due to the Contractor.

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.

PROJECT	:	REHABILITATION OF CROP RESEARCH BUILDING 1
LOCATION	:	LA GRANJA LA CARLOTA CITY, NEGROS OCCIDENTAL
OWNER	:	SUGAR REGULATORY ADMINISTRATION
SUBJECT	:	TECHNICAL SPECIFICATION
ABC	:	PHP 7,640,000.00
DURATION	:	150 CALENDAR DAYS

TECHNICAL SPECIFICATIONS AND GENERAL REQUIREMENTS

GENERAL CONDITIONS

This project pertains to the CONSTRUCTION OF GUARDHOUSE. Should there be a conflict between the plans and the specifications, the latter shall prevail. Where some items of work are not clearly indicated on the plans and in the specifications, standard engineering practice shall be guided for the execution of the unspecified item of works.

Scope of Work

This section shall include the mobilization and demobilization of Contractor's plant, equipment, materials and employee to the site; compliance with the contract requirements; this section shall include the furnishing of labor, materials, transportation, tools, supplies, plant, equipment and appurtenances to complete satisfactorily the construction of the proposed subproject.

Mobilization and Demobilization

The Contractor upon receipt of the Notice to Proceed shall immediately mobilize and transport his plant, equipment, materials and employees to the site and demobilize or remove the same at the completion of subproject.

Compliance with Contract Requirements

Control of on-Site Construction. Prior to the start of any definable feature of the work, the Contractor must perform the necessary inspection to include as follows:

- (1) Review of Contract Documents to make sure that material, equipment and products have been tested, submitted and approved.
- (2) Physical examination of materials and equipment to assure its conformity to the specifications, plans, shop drawings and other data.
- (3) As soon as the work has been started the Contractor shall conduct initial inspection to check and review the workmanship in compliance with the contract requirements for a particular item of work.

(4) The Contractor shall perform these inspections on a regular basis to assure continuing compliance with the contract requirements until completion of a particular type of work

Preconstruction Meetings

Prior to the start of construction, Contractor's material men or vendors whose presence is required, must attend preconstruction meetings as directed for the purpose of discussing the execution of work.

Progress Meetings

Progress meetings shall be called upon by the following for the purpose of discussing the implementation of the work.

- (1) When called upon by the Engineer or the Procuring Entity or his representative for the purpose of discussing the execution of work. Contractor's material men or vendors whose presence is necessary or requested must attend progress meetings. Each of such meeting shall be held at the time and place designated by the Engineer or his representative.
- (2) Decisions and instructions agreed on these meetings shall be binding and conclusive on the contract. Minutes of this meeting shall be recorded and reasonable number of copies shall be furnished to the Contractor for distribution to various materials men and vendors involved.
- (3) The Contractor may also call for a progress meeting for the purpose of coordinating, expediting and scheduling the work. In such meeting Contractor's material men or vendors, whose presence is necessary or requested are required to attend.
- (4) Progress Reports and Construction Logbook. Contractor shall prepare and submit progress reports to the Engineer weekly and every 30 days for each month from the start of the sub-project's mobilization up to its completion, showing the work completed, work remaining to be done, the status of construction equipment, labor, and materials at the site and deliveries.
- (5) Construction logbook shall be available showing actual works in daily basis including other information such as weather conditions, truck delivery, visitors, etc.

Construction Photographs

The Contractor shall take photographs during the progress of the work once a month, all taken where directed by the Engineer. At the completion of one project final photographs shall be taken by the Contractor as directed by the Engineer. Two prints of each photograph shall be sent to the Procuring Entity and one print to the Engineer. The photographs shall be neatly labelled, dated, and identified in a little box in the lower right-hand corner, showing the date of exposure, project name, location and direction of view. All negatives and/or electronic copies shall be retained by the Contractor until completion of the work at which time they shall become the property of the Procuring Entity.

Cleaning-up

The Contractor shall at all times keep the construction area including storage area used by him free from accumulations of waste material or rubbish. Upon completion of construction, the Contractor Technical Specifications shall leave the work and premises in clean, neat and workmanlike conditions satisfactory to the Procuring Entity.

Documents to be submitted

The following documents shall be submitted by the Contractor to the Engineer and Procuring Entity prior to final payment and before issuance of final certificate of payment in accordance with the provisions of the Conditions of Contract.

(1) The guarantee required by the Conditions of Contract and any other extended guarantees stated in the technical sections of the specifications.

(2) A set of As-Built drawings shall be submitted showing accurate record of changes or deviations from the contract documents and the shop drawings indicating the work as actually installed. Records shall be arranged in order, in accordance with the various sections of the specifications and properly indexed with certifications of endorsement thereof, that each of the revised print of the drawings and specifications are complete and accurate. Prior to the application for final payment, and as a condition to its approval by the Engineer and the Procuring Entity, the Contractor shall deliver the records, drawings, and specifications.

PLASTERING

The Contractor shall furnish all cement plaster materials, labor and tools and equipment required in undertaking cement plaster finish as shown on the plans and in accordance with this specification.

Cement plaster finish shall be true to details and plumbed. Finish surface have no visible junction marks where one day's work adjoins the other.

Cement plaster finish shall not be applied directly to the concrete or masonry surface that been coated with bituminous compound and surface that had been painted or previously plastered.

ROOFING WORKS

Use polycarbonate roofing materials. Pre-painted bended accessories shall be fabricated from cold rolled galvanized iron sheets specially tempered steel for extra strength and durability. It shall conform to the material requirements defined in PNS 67: 1985.

FABRICATION

1. Field fabrication shall be kept to a minimum and fabrication shall be employed to the greatest extent possible with member's shop fabricated as practicable with a minimum requirement for field connection.

2. Welding, shearing, gas cutting, chipping and all other works involved fabrication of structural steel shall be done with accuracy and of the highest quality of workmanship, within the allowable tolerance prescribed in the AISC specification.

ERECTION

1. The steel structures shall be erected plumb and true to line and grade. Bracings and support shall be introduced whenever necessary to take care of all loads to which the structure may be subjected. Such bracing shall be left in place as long as may require for safety.

2. Base plates and bearing plates shall be supported on steel wedges until the supported members shall have been aligned and plumb, following which the entire bearing area shall be grouted solid with non-shrink cement grout.

3. All steel work after complete erection, shall be field painted with the type and color specified in the section of painting of this specification. Painting shall not be done on any steel surface that is thoroughly clean and dry.

ELECTRICAL WORKS

Electrical installation shall conform to the provisions of the rules and regulations of the Philippine Electrical Code, the requirements of the City General Services Department and those of the Power Company. All materials for use shall be of approved brand. All wiring shall run through flexible non-metal conduits. All the necessary outlets, switches and convenience outlets as indicated in the wiring plans and in the specifications shall be installed properly. Electrical installations shall be done under

the supervision of a duly licensed Professional Electrical Engineer. Application shall be done in an approved procedures and practices.

Codes, Regulations and Standards;

1. The installation and equipment shall conform to good engineering practices and in particular comply with the requirements laid down in the following documents or its equivalent which are mandatory and modified only by specific agreement.

Philippine Electrical Code	PEC
Underwriters' Laboratory, Inc	UL
National Electrical Manufacturers Association	NEMA
Local Utility Power Company	LUPC

2. In addition to the requirements of these Codes and the Utility Power Company requirements, local government regulations and supplier's specification if any shall be followed.

Lay-out of Work

1. Electrical system lay-out indicated on the drawings are generally diagrammatic and the location of outlets, devices, apparatus and equipment are only approximate.
2. The exact routing of the conduits, location of outlets, devices and equipment shall be governed by structural and architectural conditions and limitations.
3. For the exact location, consult the supervising Engineer. This does not mean to permit redesigning of systems. All outlets are to be interconnected as indicated in the drawings.
4. the Owner reserves the right to make any reasonable changes in location of outlets and equipment prior to roughing in, without additional expense.
5. The Contractor shall be responsible and pay charges for cutting and patching for piping lines where sleeves or slots were not installed or where incorrectly located.

Materials Requirement

1. All panel board to be used shall be flush mounted when located in areas that are visible to the general public and maybe surfaced mounted when located in machine room.
2. All panel boards shall be set plumb symmetrical with the surrounding objects.
3. Standard PVC conduit pipe system is required for this project.
4. Conduit runs shall be concealed in drop ceiling and or embedded in concrete structure where concealment is not possible.
5. All conduit and conduit fittings shall be PVC and shall conform with the U.S. Underwriters Laboratories Standard and Codes.
6. When not shown on the Plans, conduit sizes shall correspond to the conduit size as prescribed in the Philippine Electrical Code table for "Size of Conduit Pipes."
7. All boxes and outlets and switches shall be PVC or galvanized iron approved products of reputable manufacturers.
8. All ceiling outlet boxes intended for lighting outlets shall be of the 10 cm octagonal box.
9. Convenience and wall switch outlet boxes shall be of the 10cm by 5.3cm rectangular deep flush type or 100mm square cm junction box with gang raised cover as required to accommodate the wires therein.

10. All boxes include junction and pull boxes shall be of sufficient size to provide free space for all conductors enclosed in the box, in addition to the fittings such as switch mechanism and receptacles that may be placed therein.
11. Wall switches intended to control lights on the 230-volt system shall be rated 15 amp. 250 volts.
12. Convenience outlets shall be flushed duplex type rated amperes 230 volts 60 Hz., AC.
13. All lighting fixtures shall be furnished and installation by the Contractor. They shall be shown on the drawings or specified on the schedule of lighting fixtures. For other details as to type and model, consult the Engineer.

CONCRETE WORKS

1. Portland Cement shall conform to the requirements of ASTM C-150 Type for normal Portland Cement; Type III for high Early Strength Portland Cement. Cement shall be any standard commercial brand in 50 kilograms per bag.
2. Fine Aggregates sand shall be clean, hard, coarse river sand or crushed sand free from injurious amount of clay loam and vegetable matter and shall conform to ASTM C-33 or C-330.
3. Coarse Aggregates shall be river run gravel or broken stones the maximum size shall be 1/5 of the nearest dimension between sides of forms of the concrete, or 3/4 of the minimum clear spacing between reinforced bars, between rebars and form whichever is smaller.
4. Mixing water used in mixing concrete shall be clean and free from injurious amount of oils, acids, alkali, organic materials or deleterious substances.

All concrete works for this project shall be undertaken in accordance with the standard specifications for plain and reinforced concrete as approved by the Government.

The following proportions of concrete shall be used for various parts of the building:

- | | |
|---|-----------------------|
| 1. Footings and Columns | ...Class A (1 :2: 4) |
| 2. Girders, Beams and Slabs | ...Class A (1 :2: 4) |
| 3. Septic Vault Cover | ...Class A (1 :2: 4) |
| 4. Concrete Hollow Block Footings., B.A. | Class B (1:2 ½: 5) |
| 5. Concrete Slab on fill | ...Class B (1:2 ½: 5) |

Class A concrete shall be a mixture of 1 part cement, 2 parts fine aggregates and 4 parts coarse aggregates by volume, plus enough water to make the mixture into a pliable paste.

Class B concrete shall be a mixture of 1 part cement, 2 1/2 parts fine aggregates and 5 parts coarse aggregates by volume, plus enough water to make the mixture into a pliable paste.

Class C concrete shall be a mixture of 1 part cement, 3 parts fine aggregates and 6 parts coarse aggregates by volume, plus enough water to make the mixture into a pliable paste.

The fine aggregates for concrete shall consists of natural sand or of inert materials with similar characteristics, having hard, clean and durable grains, free from organic matters or loam.

The coarse aggregates for concrete shall be of crushed rock or durable qualities, or clean and hard gravel. Size of the coarse aggregates to be used shall vary from 200mm (3/4") to 400mm (1 1/2").

Concrete slabs on fill shall be poured on a layer of hard gravel fill spread over well-compacted and thoroughly tamped earth fill. Each concrete slab course to be poured shall not be more than one-meter wide, and each course shall be poured alternatively to the indicated floor finishes.

STEEL REINFORCING BARS

Steel reinforcing bars to be used for this project shall consist of standard deformed structural bars meeting ASTM A-305 specifications.

The steel reinforcements for concrete shall be formed accurately according to sizes of the columns, beams, girders, footings, slab, etc., where they are to be used. They shall be tied together each bar intersection with gauge no. 16 G.I. tie wire or by welding and it shall conform with ASTM A-82.

No steel bars shall be installed unless it is free from rust, scale or other coating which would destroy or reduce the bond with concrete. The reinforcement bars must be positioned such that there is space between the steel at the sides and bottom of the forms.

FORMS

Forms shall conform to the shape, lines and dimensions shown on the drawings. They shall be substantial and designed to resist the pressure and weight of the concrete.

Forms shall be properly tied and braced and shored so as to maintain their position and shape. Forms shall be sufficiently tight and strong to prevent leakage.

Removal of forms or shoring is subject to approval by the Engineer and under no circumstances shall bottom form and shoring be removed until after the members have acquired sufficient strength to support their weight and the load thereon. Forms shall remain in place for a minimum time as follows:

Foundation	...1 days
Walls	...2 days
Beams and suspended slabs	...14 days

MASONRY

The work covered by this item shall include the following:

1. Furnishing of all necessary materials, tools and equipment, and labor necessary to complete the execution of the concrete masonry work as shown on the drawings and herein specified.
2. All preparation for masonry work necessary to receive and adjoin other work, including provision for inserts and attachments as noted in the plans and specifications which shall be installed under the terms of this work.
3. Furnishing of all reinforcing steel for concrete masonry work and their placement including those not provided for under their section but necessary for prosecution of the work.

ALTERATIONS

No alterations shall be done during the progress of work without the written approval by the supervising Project Engineer, unless otherwise agreed by and between the End user and the Contractor. All works shall be done in accordance with the approved plans.

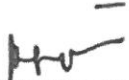
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Recommending Approval:


ATTY. IGNACIO S. SANTILLANA
Deputy Administrator II, RDE

Approved by:

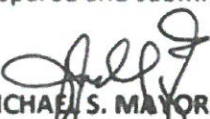

PABLO LUIS S. AZCONA
Administrator

PROJECT : REHABILITATION OF CROP RESEARCH BUILDING 1
LOCATION : LA GRANJA LA CARLOTA CITY, NEGROS OCCIDENTAL
OWNER : SUGAR REGULATORY ADMINISTRATION
SUBJECT : SCOPE OF WORK
DURATION : 150 CALENDAR DAYS

SCOPE OF WORK

1. Mobilization and Demobilization;
2. Secure permits and clearances
3. Cleaning and grubbing;
4. Demolition works on existing structure for the establishment of CRB 1;
5. Lay-out and staking;
6. Excavation works for building foundations and footing beddings and septic tank;
7. Fabrication of scaffoldings and other supports;
8. Establishment of footings, footing supports, and columns including forms and concrete pouring;
9. Establishment of slabs, beams, beam supports, forms and concrete pouring;
10. Wall establishments (Partitions, footings & parapet laying of hollow blocks and concrete pouring) and plastering;
11. Plumbing works (pipe and fittings installations);
12. Flooring works and establishments; filling and compaction, bedding, rebar installations and concrete pouring;
13. Electrical installations (electrical conduits, wirings, and other electrical fixtures);
14. Construction of septic tank
15. Sign and seal the architectural and electrical plans to Professional Architect and Electrical Engineer respectively.
16. Clearing after work completion.


Prepared and submitted by:


MICHAEL S. MAYORDO JR.
ENGINEER I - COS
Agricultural Support Services Division


Noted by:


ENGR. MICHAEL R. HAMAYBAY
QIC- Chief, ASSD

Recommending Approval:


HELEN B. LOBATON
Manager III, RDE

Recommending Approval:


ATTY. IGNACIO S. SANTILLANA
Deputy Administrator II, RDE

Approved by:

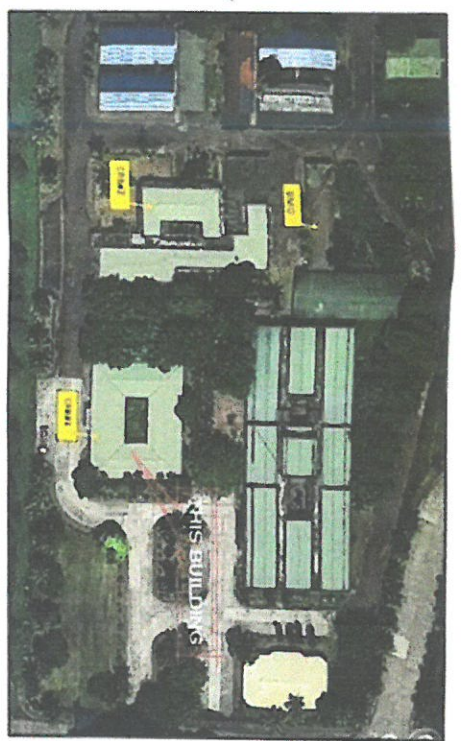

PABLO LUIS S. AZCONA
Administrator

Section VII. Drawings



NEGROS ISLAND MAP

NOT DRAWN TO SCALE



VICINITY MAP

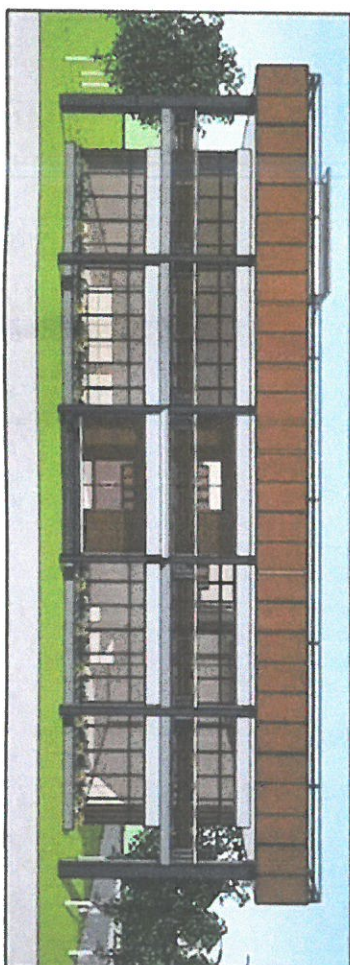
NOT DRAWN TO SCALE

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2 / 15	PERSPECTIVE VIEW
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	SPECS./SCHEDULE OF LOADS
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	LEGEND
	CATCH BASIN DETAIL
	SPECIFICATIONS

- GENERAL NOTES:**
1. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE NOTED
 2. ALL ELEVATIONS E.L. ARE IN METERS
 3. ALL PARTS OF THE STRUCTURE UNLESS OTHERWISE SPECIFIED SHALL BE CONCRETE HAVING MINIMUM OF COMPRESSIVE STRENGTH OF 211 MEGAPASCALS (28 DAYS)
 4. REINFORCING BARS SHALL BE DEFORMED # 11 LET STEEL OF INTERMEDIATE GRADE (ASTM 615 OR MS 275 GRADE 40L)
 5. THE MAXIMUM SIZE OF AGGREGATES FOR CAST-IN PLACE CONCRETE SHALL NOT BE LARGER THAN 1/5 OF THE LEAST DIMENSIONS OF THE MEMBER NOR LARGER THAN 40MM FOR PRECAST CONCRETE SHALL NOT BE LARGER THAN 1/4 OF THE LEAST DIMENSION OF THE MEMBER NOR LARGER THAN 20MM
 6. CONCRETE PROTECTION FOR REINFORCEMENT SHALL NOT BE LESS THE FOLLOWING:
 - a. FROM THE GROUND CONTACT SURFACE OF CONCRETE FOOTINGS AND MEMBERS IN WHICH CONCRETE IS DEPOSITED AGAINST THE GROUND: 75MM
 - b. FROM CONCRETE SURFACE EXPOSED TO WATER FLOW OR BE IN CONTACT WITH THE GROUND AFTER REMOVAL OF FORMS: 50MM
 7. FOR BARS LARGER THAN 16MM Ø 50MM
 8. FOR BARS LARGER THAN 16MM Ø AND SMALLER 2 40MM
 9. LAPPING OF BARS SHALL BE 24 BAR Ø FOR DEFORMED BARS AND 48 BAR Ø FOR PLAN
 10. BARS SPICES SHALL BE STAGGERED
 10. ALL BARS NOT OTHERWISE SPECIFIED SHALL BE 10MM Ø SPACED 300MM O.C. OR 12MM Ø SPACED 450MM ON CENTER
 11. MINIMUM DISTANCE BETWEEN PARALLEL BARS SHALL BE 50MM
 12. DETECT THE SPACERMENTS AROUND GROUT PROJECT POCKETS AND RECESSES
 13. ALL REINFORCING BARS SHALL BE ROUNDED OR CHAMFERED
 14. ALL BARS WHEN REQUIRED SHALL BE BENT TO D HOOKS OR BENDS SHOWN IN THE DRAWING SHALL HAVE THE FOLLOWING DIMENSIONS:
 - * BAR Ø BUT NOT LESS THAN 60MM

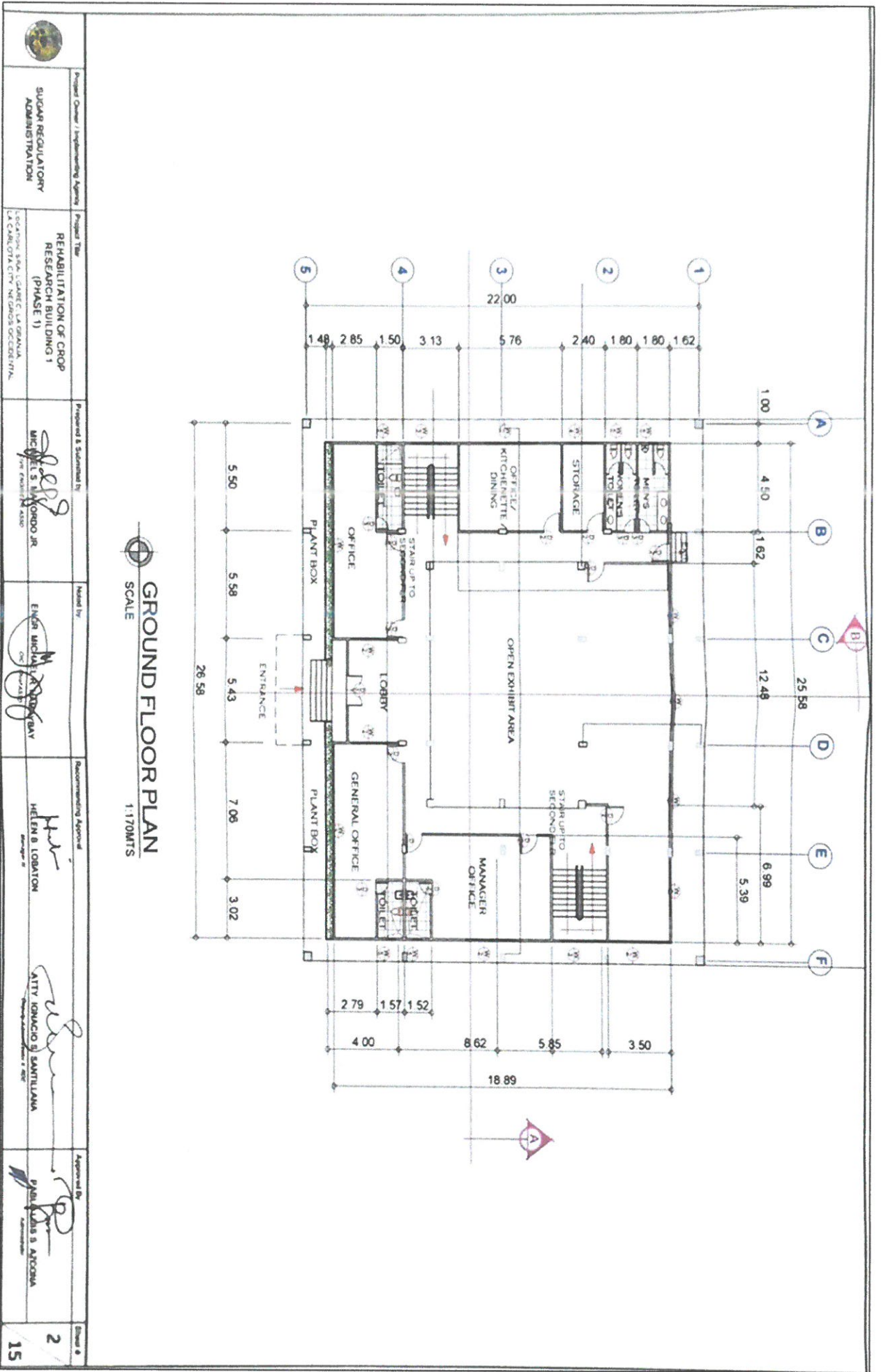


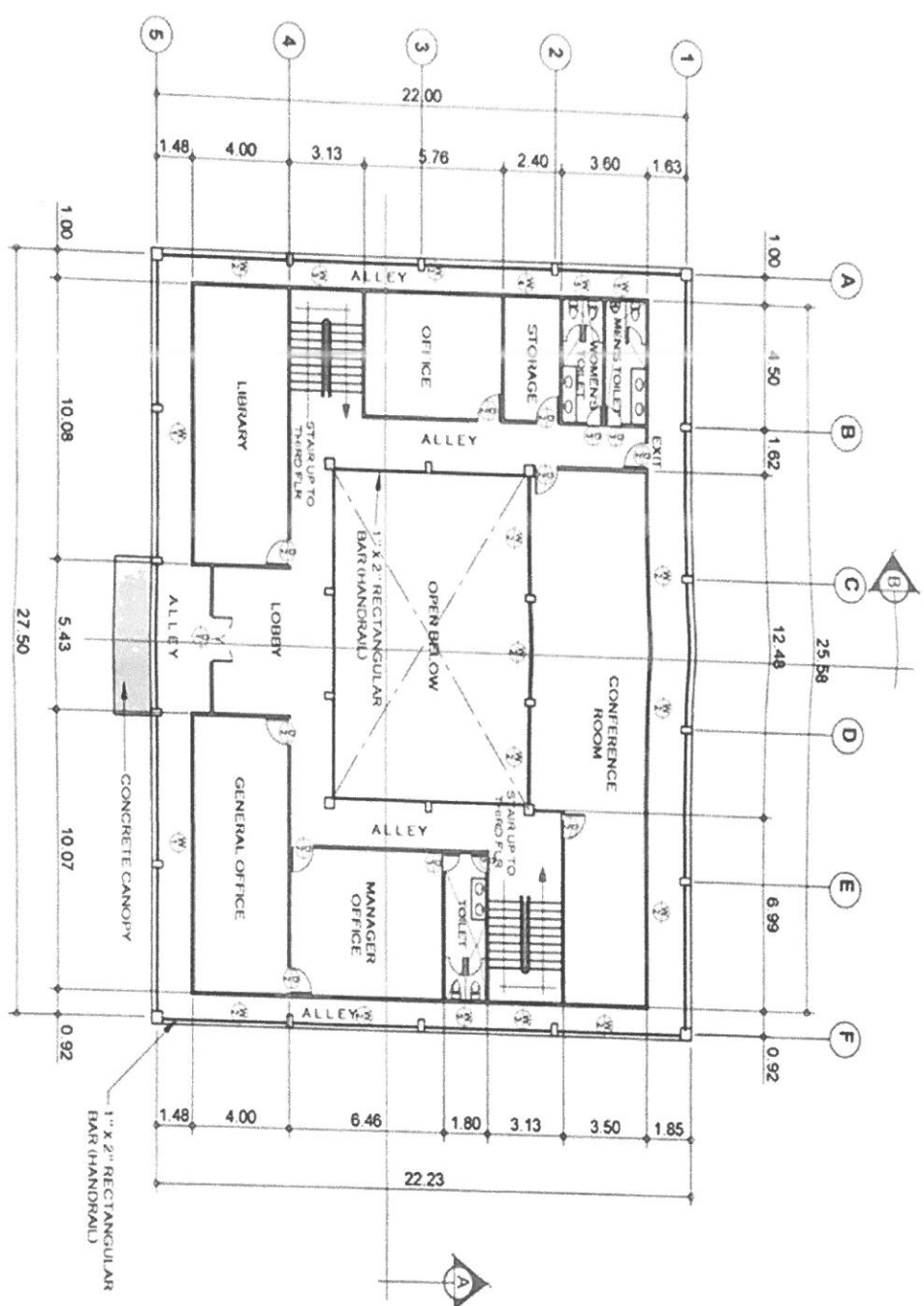
R = 2 1/2 BAR Ø FOR 10MM Ø OR 16MM Ø BARS
 R = 3 BAR Ø FOR 20MM Ø 22MM Ø OR 25MM Ø BARS



PERSPECTIVE VIEW

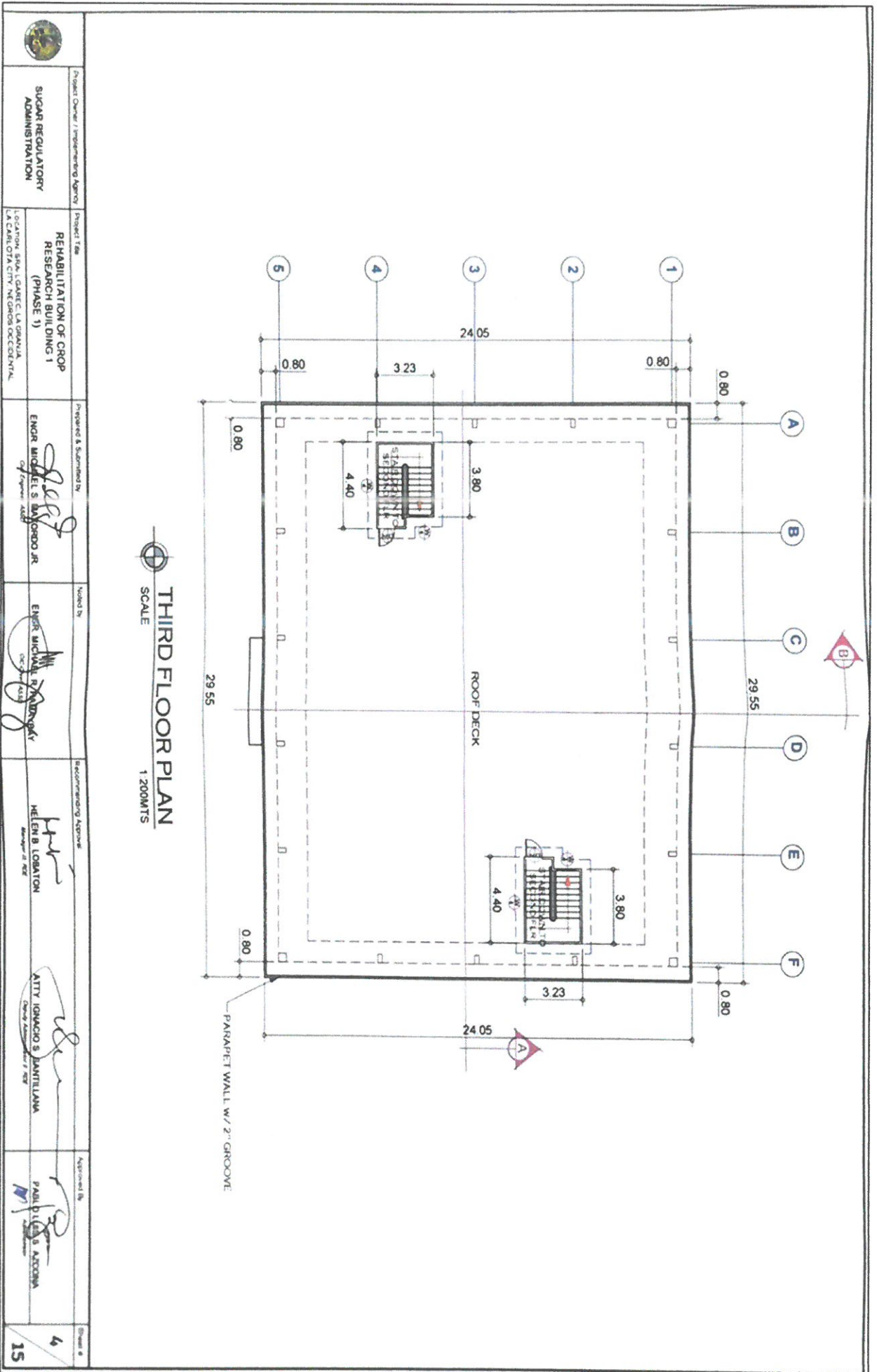
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	<p>REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1)</p>	<p>ENGR. MICHAEL S. TORONDO JR.</p>	<p>ENGR. MICHAEL S. TORONDO JR.</p>	<p>ENGR. MICHAEL S. TORONDO JR.</p>	<p>HELEN B. LOBATON</p>	<p>ATTY. ROMARIO S. SANTILLANA</p>
<p>LOCATION: TBA 1, QUARTER 1, CAROLINA LA CAROLINA CITY, NEGROS OCCIDENTAL</p>						
						<p>Sheet #</p>
						<p>15</p>





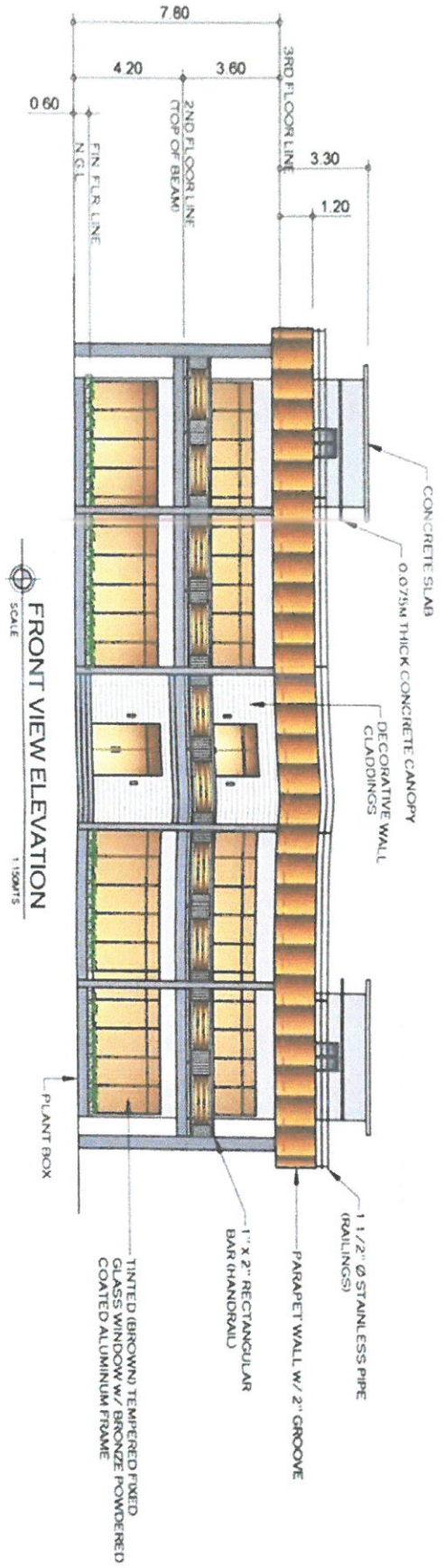
SECOND FLOOR PLAN
SCALE 1:200MTS

<p>Project Owner / Programming Agency SUDAR REGULATORY ADMINISTRATION</p>	<p>Project Title REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1)</p> <p>LOCATION: 89A, CORNER C LA GRANJA LA CAROLITA CITY, NEGROS OCCIDENTAL</p>	<p>Prepared & Submitted by ENGR. <i>[Signature]</i> MICHAEL V. TORO, JR. Civil Engineer (RCE)</p>	<p>Noted by ENGR. <i>[Signature]</i> RICHARD E. RIVARAY Civil Engineer (RCE)</p>	<p>Recommending Approval HELEN B. LOBATON Manager (RCE)</p>	<p>Approval by ATTY. IGNACIO S. SANTILLANA Attorney at Law</p>	<p>Approval by PABLO D. S. AZCONA Architect</p>	<p>Sheet # 3 of 15</p>
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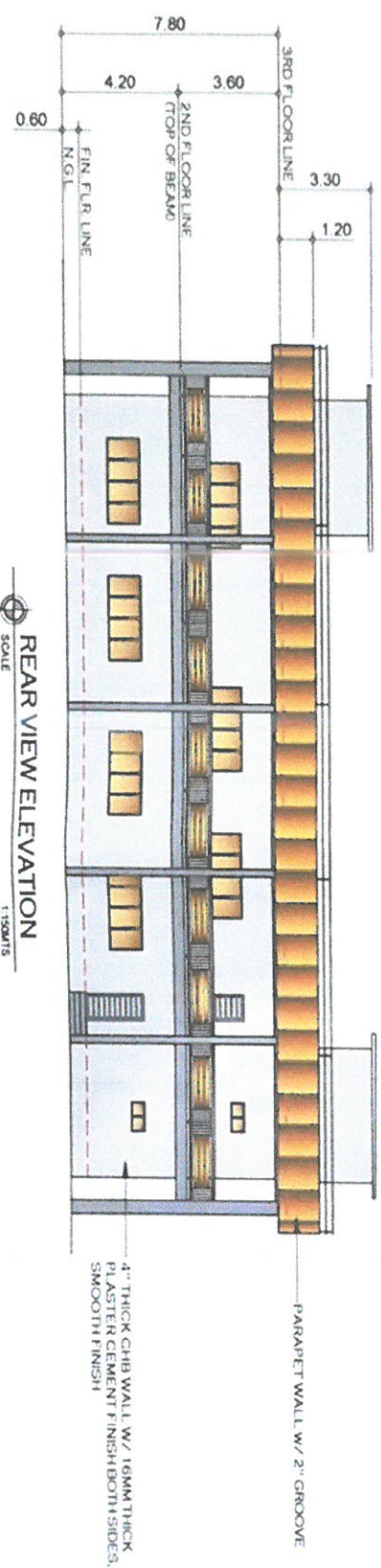


THIRD FLOOR PLAN
SCALE 1:200M/TS

	Project Owner / Engineering Agency SUGAR REGULATORY ADMINISTRATION	Project Title REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1)	Prepared & Submitted by <i>Engr. Michael S. Manobo Jr.</i> Engr. MICHAEL S. MANOBO JR. Of Engineer No. 4434	Validated by <i>Engr. Michael R. Manobo</i> Engr. MICHAEL R. MANOBO Of Engineer No. 4434	Recommending Approver <i>Helena B. Lobaton</i> HELENA B. LOBATON Manager of REG	Attending Architect <i>Atty. Ignacio S. Santillana</i> ATTY. IGNACIO S. SANTILLANA Attorney at Law	Approved by <i>Paul D. Lobaton</i> PAUL D. LOBATON Manager of REG	Sheet No. 4 of 15
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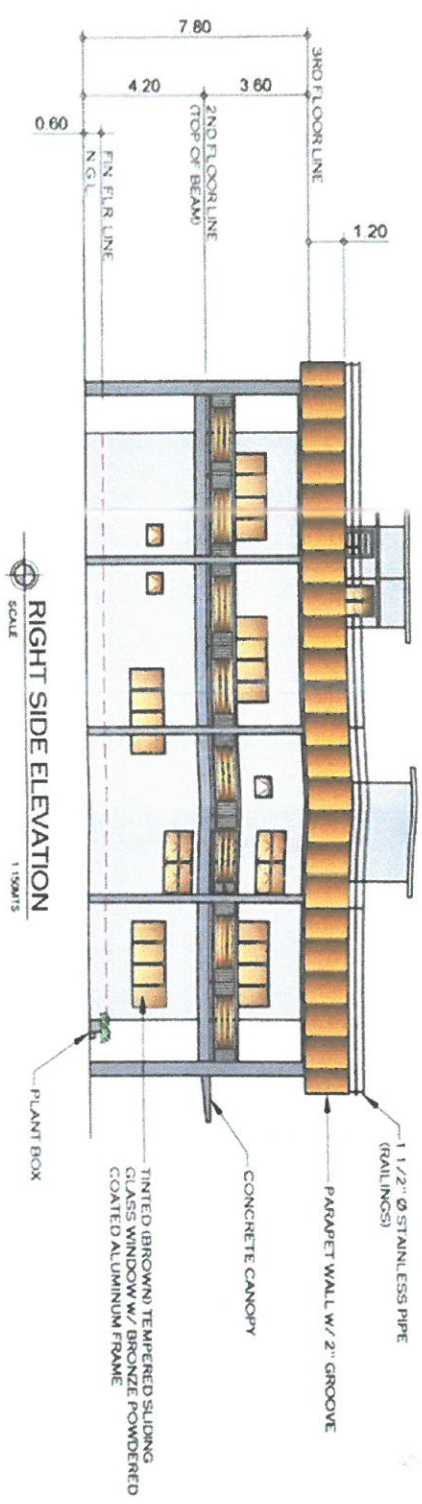


FRONT VIEW ELEVATION
SCALE 1:150A/T5

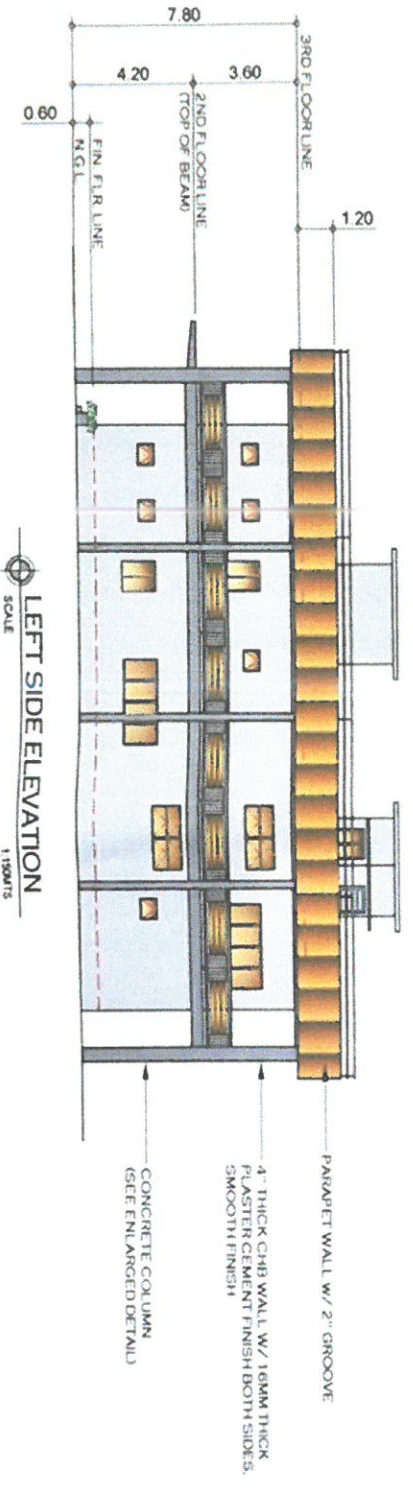


REAR VIEW ELEVATION
SCALE 1:150A/T5

	Project Owner / Engineering Agency SUGAR REGULATORY ADMINISTRATION	Project Title REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1)	Prepared & Submitted by <i>[Signature]</i> ENGR MICHAEL S. VITORO JR. Civil Engineer - ARB	Checked by <i>[Signature]</i> ENGR MICHAEL R. ANAYAN DEC 2015	Recommending Agency <i>[Signature]</i> HELEN B. LOBATO Architect - ARB	Approved by <i>[Signature]</i> ATTY. IGNACIO S. SANTILLANA Attorney - ARB	Approved by <i>[Signature]</i> PABLO CAL S. AZCONA Architect - ARB	Sheet # 5
								15

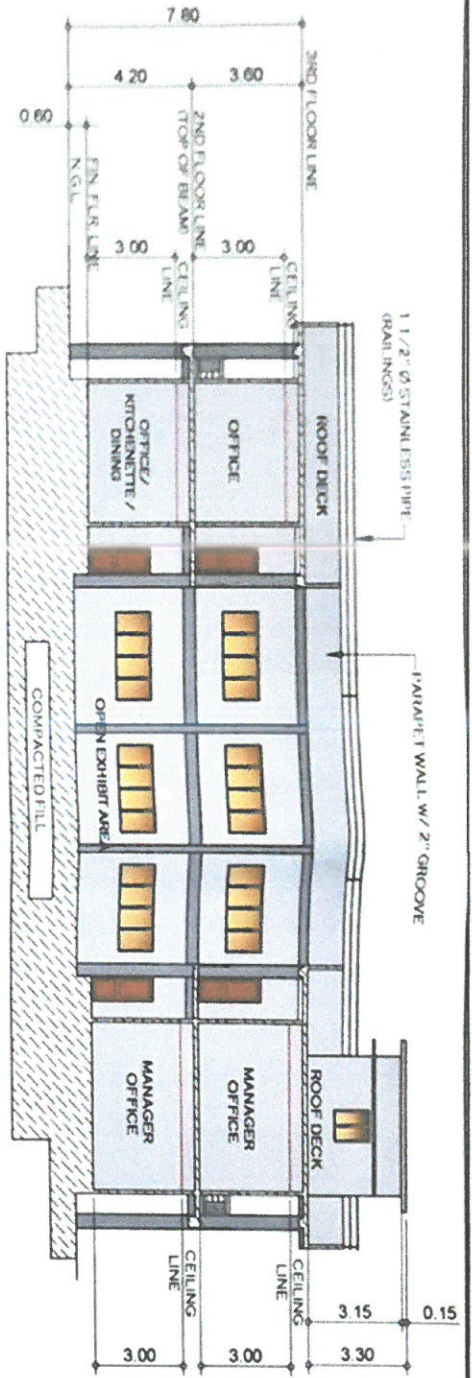


RIGHT SIDE ELEVATION
SCALE 1/16"=1'-0"

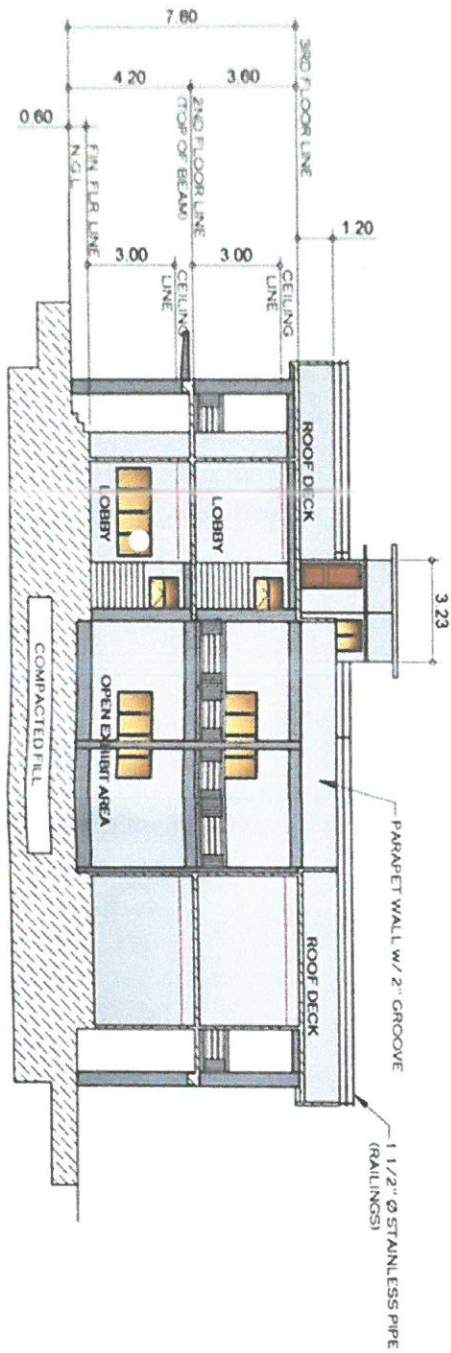


LEFT SIDE ELEVATION
SCALE 1/16"=1'-0"

	Project Owner / Implementing Agency SUGAR REGULATORY ADMINISTRATION	Project Title REHABILITATION OF CROP RESEARCH BUILDING-1 (PHASE 1)	Prepared & Submitted by ENGR. MICHAEL S. MAGSAYSAY <small>24777777</small>	Checked by ENGR. MICHAEL D. ARROYO <small>24777777</small>	Recommended Approval HELEN B. LOBATON <small>24777777</small>	Approved by ATTY. IGNACIO S. MANTELAVA <small>24777777</small>	Approved by PABLO L. ALARCON <small>24777777</small>	Sheet # 6 of 15
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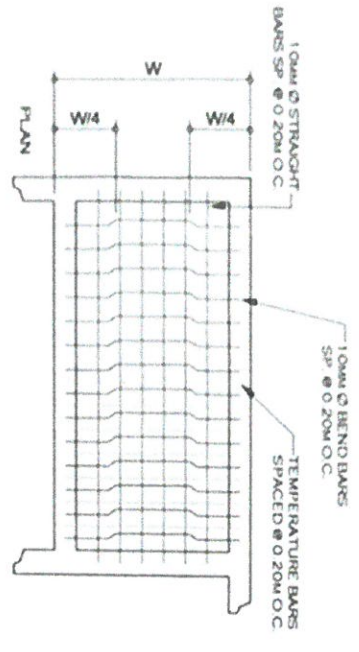
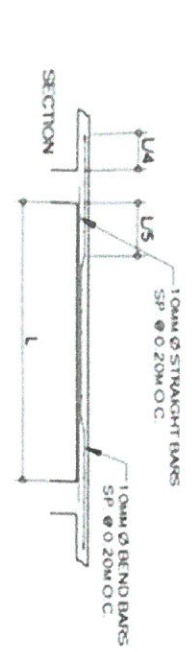


LONGITUDINAL SECTION THRU 'A'
SCALE 1/16"=1'-0"

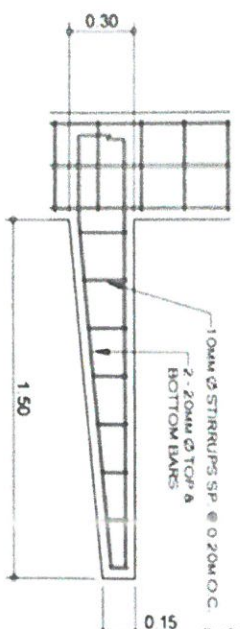


CROSS SECTION THRU 'B'
SCALE 1/16"=1'-0"

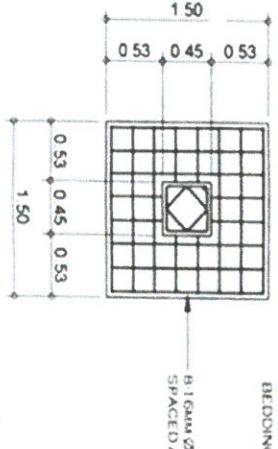
	Project Owner / Engineering Agency STATE REGULATORY ADMINISTRATION	Project Title REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1)	Prepared & Submitted By ENGINEER: EMILIO M. TORRES, S. M. TORRES, JR. ARCHITECT: EMILIO M. TORRES, S. M. TORRES, JR.	Checked By EMILIO M. TORRES, S. M. TORRES, JR.	Recommending Approval HELEN B. LOBATO Manager of RCE	Atty. General's Approval ATTY. GENERAL: SANTILLANA Director of RCE	Approved By PAUL J. SANCHEZ Administrator	Sheet # 7 of 15
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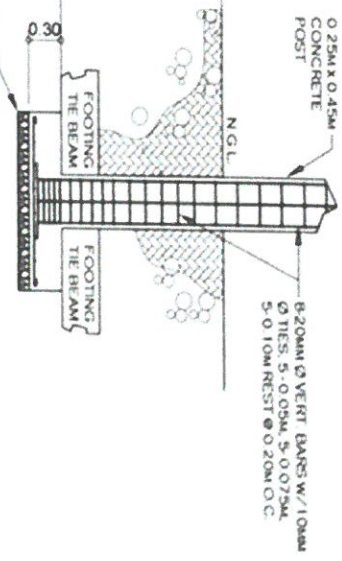
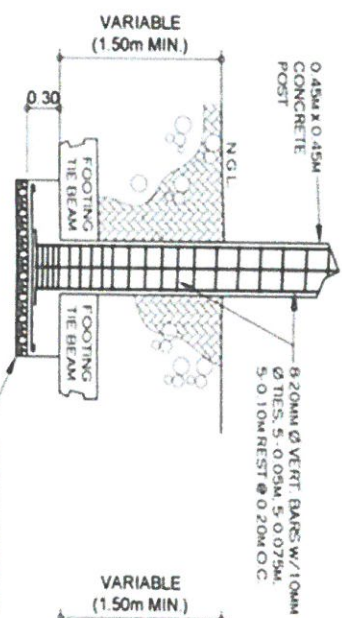
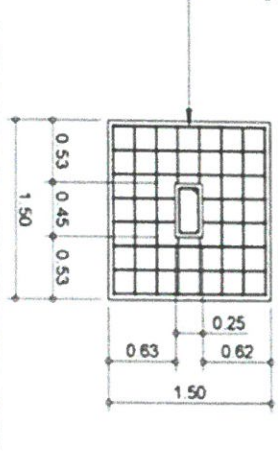
ONE-WAY SLAB REINFORCEMENT DET.
SCALE 1:40MTS.



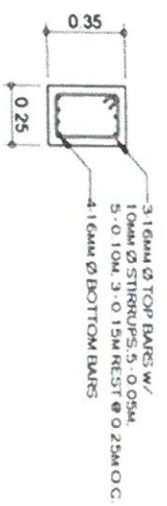
COLUMN 1 / FOOTING 1 DET.
SCALE 1:40MTS.



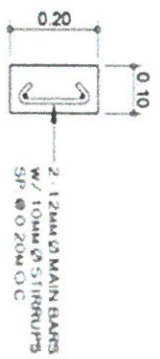
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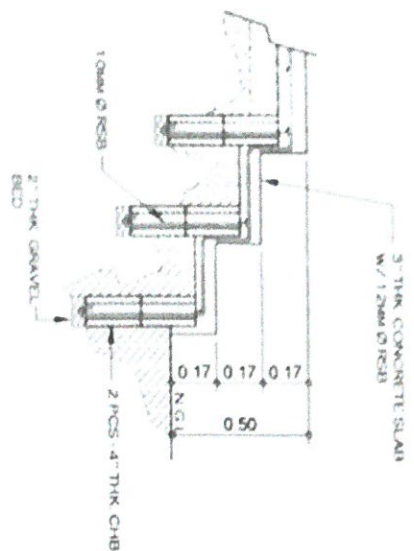
FOOTING THE BEAM DETAIL
SCALE 1:20MTS.



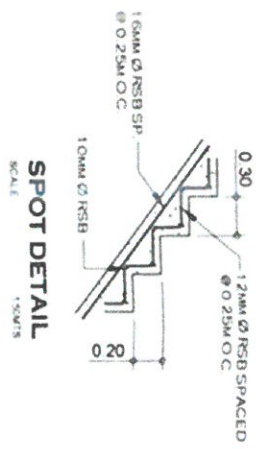
LINTEL BEAM DETAIL
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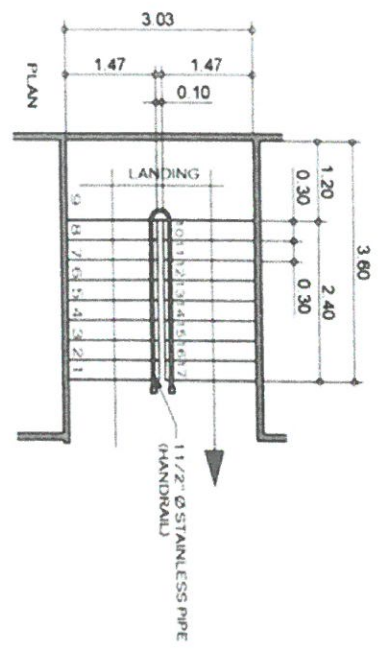
	Project Owner / Engineering Agency SUCAN REGULATORY ADMINISTRATION	Project Title REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1)	Prepared & Submitted By ENGR MIGUEL S. TOLINO JR.	Checked By ENGR BROCK A. REYES	Revisiting Agency HELLEN B. LOGANON	Approved By ATTY IVANCHO S. SANTILLANA	Sheet # 10
Location: S.M.A. C.A.M.C. LA GRANADA LA CORONA CITY, NEGROS OCCIDENTAL	 ENGR BROCK A. REYES	 ENGR BROCK A. REYES	 ENGR BROCK A. REYES	 ENGR BROCK A. REYES	 ENGR BROCK A. REYES	 ENGR BROCK A. REYES	Sheet # 15



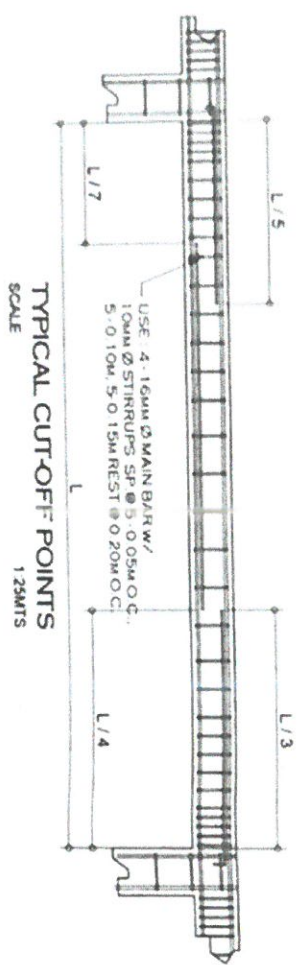
DETAIL OF CONCRETE STEP
IN EXHIBIT AREA
SCALE 1/8"=1'-0"



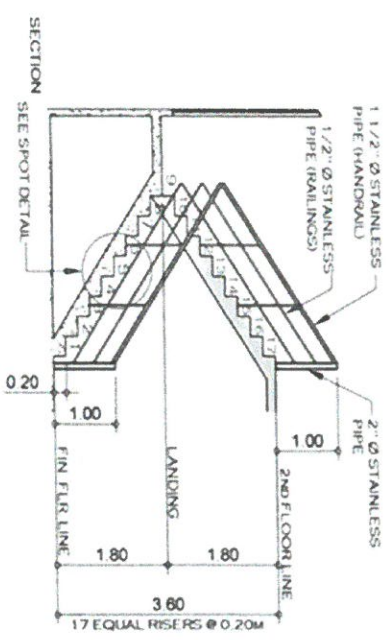
SPOT DETAIL
SCALE 1/8"=1'-0"




PLAN

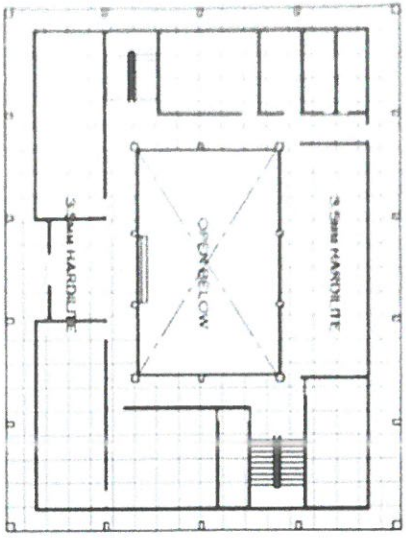


TYPICAL CUT-OFF POINTS
SCALE 1/25M=1'-0"

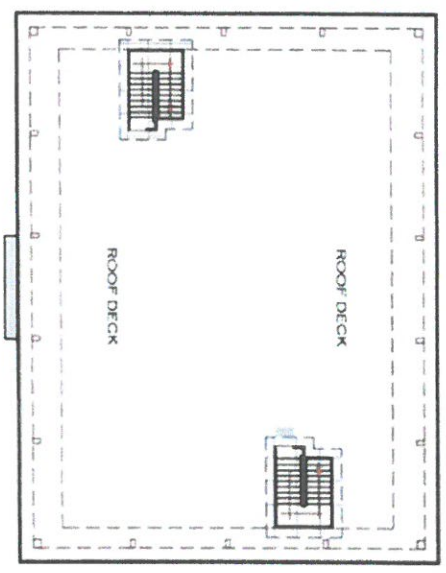


DETAIL OF STAIR
SCALE 1/8"=1'-0"

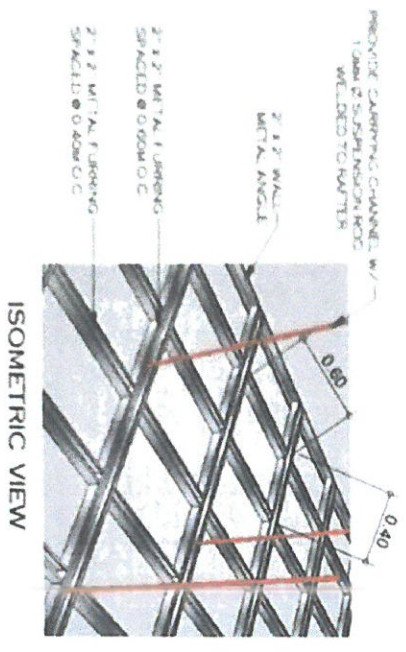
 SUGAR REGULATORY AGENSI MALAYSIA	Project Name	Prepared & Submitted by	Checked by	Recommended Approve	Approved by	Drawn #
	REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1) 12, CONDOMINIUM, GARDEN CILAU, GORAKH NAGAR, KUALA LUMPUR, FEDERAL TERRITORY OF PUTRAJAYA	ENGR. <i>[Signature]</i> M. AYUBOOR J.R. Lead Engineer	ENGR. MICHAEL R. HANNAWAY Lead Engineer	HELEN B. LOBATION Manager of R&E	ATTY. IGNACIO S. SANTILLANA Manager of R&E	PAUL D. LEE & ASSOCIA



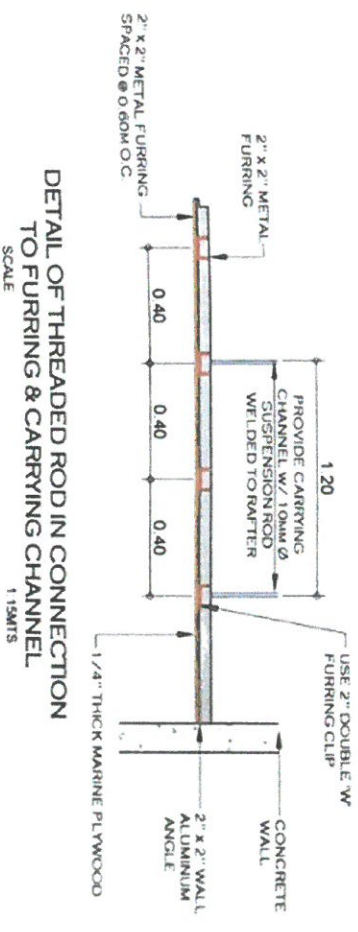
REFLECTED CEILING PLAN (2ND FLR.)
SCALE 1:250M/T



REFLECTED CEILING PLAN (3RD FLR.)
SCALE 1:250M/T

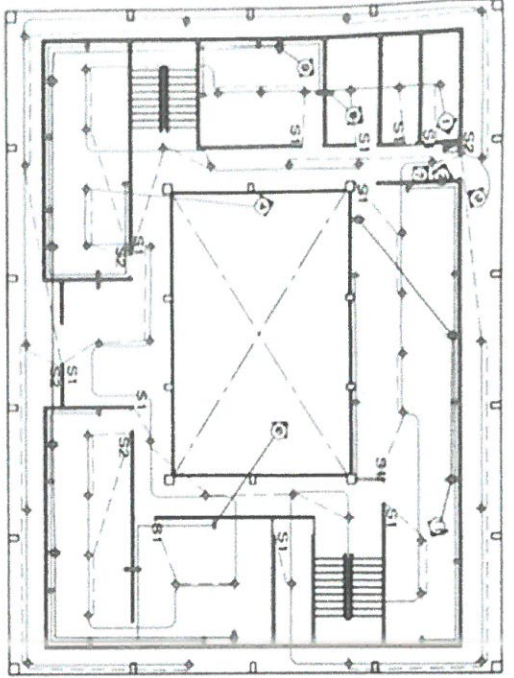


ISOMETRIC VIEW



DETAIL OF THREADED ROD IN CONNECTION TO FURRING & CARRYING CHANNEL
SCALE 1:15M/T

	Prepared by: <i>[Signature]</i> ENGINEERING DEPARTMENT COLLEGE OF ENGINEERING	Prepared by: <i>[Signature]</i> ENGR. MICHAEL S. TORONDO JR. CIVIL ENGINEER	Prepared by: <i>[Signature]</i> ENGR. MICHAEL S. TORONDO JR. CIVIL ENGINEER	Recommended by: <i>[Signature]</i> HELEN B. LOBATON Manager of DEE	Approved by: <i>[Signature]</i> ATTY. IGNACIO S. SANTILLANA Deputy Commissioner 2	Approved by: <i>[Signature]</i> PAUL O. DELA CRUZ ARCHAEOLOGIST	Sheet # 12 of 15
	Project Name: REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1) <small>LOCATION: SAKI DOME CIVIL ENGINEERING DEPARTMENT, UNIVERSITY OF THE PHILIPPINES - DILIMAN</small>	Project No.:	Date:	Scale:	Drawing No.:	Revision:	Date:

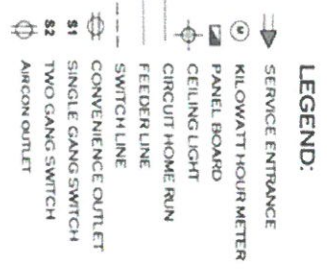


ELECTRICAL LAYOUT (1ST FLR.)

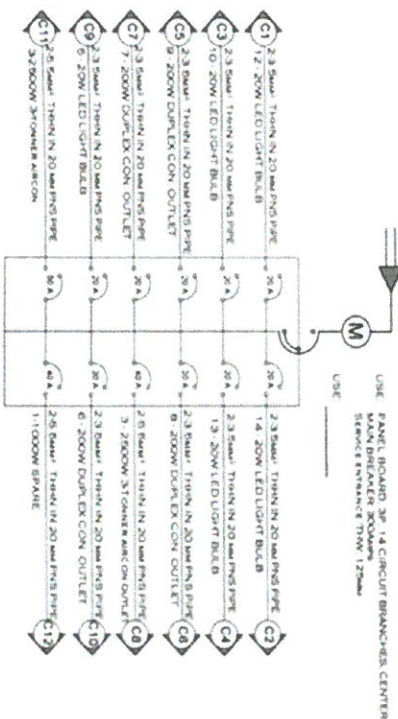
SCALE 1:200M


SCHEDULE OF LOADS

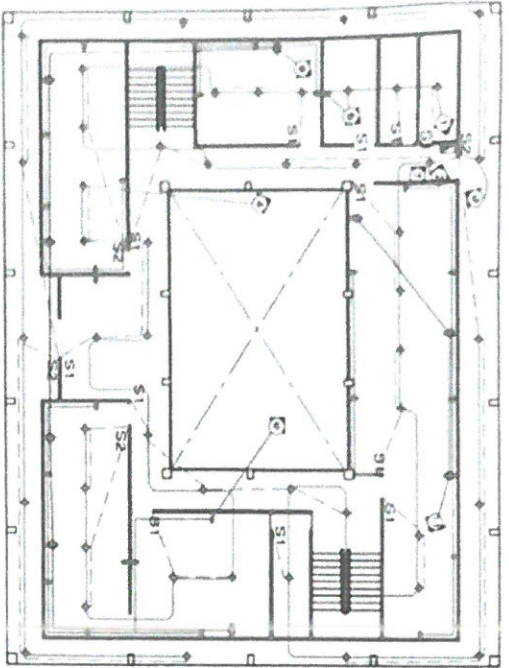
CIRCUIT NO.	DESCRIPTION	WATTS	VOLTS	AMPS	PROTECTION	SIZE OF WIRE
C-1	12 200W LED LIGHT BALLB	2400	220	1.09	20 A	2.5 Square Three IN 20 mm PMS PIPE
C-2	14 200W LED LIGHT BALLB	2800	220	1.27	20 A	2.5 Square Three IN 20 mm PMS PIPE
C-3	10 200W LED LIGHT BALLB	2000	220	0.91	20 A	2.5 Square Three IN 20 mm PMS PIPE
C-4	13 200W LED LIGHT BALLB	2600	220	1.18	20 A	2.5 Square Three IN 20 mm PMS PIPE
C-5	9 200W DUPLEX CON. OUTLET	1800	220	0.81	20 A	2.5 Square Three IN 20 mm PMS PIPE
C-6	8 200W C. EX. CON. OUTLET	1600	220	0.727	20 A	2.5 Square Three IN 20 mm PMS PIPE
C-7	7 200W C. EX. CON. OUTLET	1400	220	0.636	20 A	2.5 Square Three IN 20 mm PMS PIPE
C-8	5 200W 3-TONNER AIRCON OUTLET	7500	220	34.10	40 A	2.5 Square Three IN 20 mm PMS PIPE
C-9	8 200W LED LIGHT BALLB	1600	220	0.727	20 A	2.5 Square Three IN 20 mm PMS PIPE
C-10	6 200W DUPLEX CON. OUTLET	1200	220	0.545	20 A	2.5 Square Three IN 20 mm PMS PIPE
C-11	7 200W DUPLEX CON. OUTLET	1400	220	0.636	20 A	2.5 Square Three IN 20 mm PMS PIPE
C-12	11 1000W SPARE	11000	220	4.94	40 A	2.5 Square Three IN 20 mm PMS PIPE
TOTAL CONNECTED LOAD		26,034		11.87		



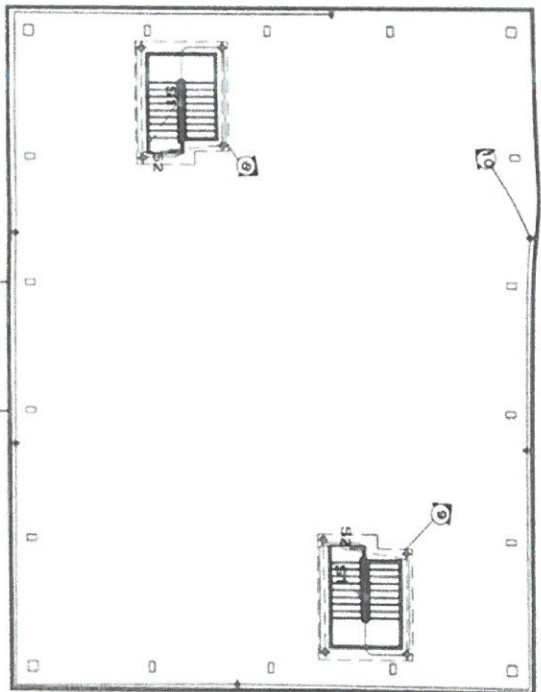
SINGLE LINE DIAGRAM



 Project Owner / Engineering Agency SUCAN REGULATORY ADMINISTRATION	Project Title REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1)	Prepared & Submitted by  ENGR MICHAEL B. BANZON JR. <small>Engr. Reg. No. 4833</small>	Checked by  ENGR WILFREDO S. SANTILLANA <small>Engr. Reg. No. 2187</small>	Recommended Approval  HELEN B. LOBATON <small>Manager in Charge</small>	Approved by  ATTY EDUARDO S. SANTILLANA <small>Atty. Reg. No. 10075</small>	Sheet # 14 of 15
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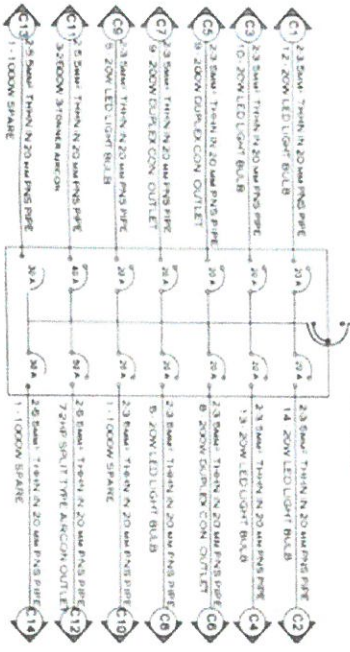
ELECTRICAL LAYOUT (2ND FLR.)
SCALE 1:200M.T.S.



ELECTRICAL LAYOUT (3RD FLR.)
SCALE 1:200M.T.S.

SCHEDULE OF LOADS

CIRCUIT	DESCRIPTION	WATTS	VOLTS	AMPS	PROTECTION	SIZE OF WIRE
C-1	200W LED LIGHT BULB	200	220	1.00	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-2	200W LED LIGHT BULB	200	220	1.27	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-3	200W LED LIGHT BULB	200	220	0.91	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-4	200W LED LIGHT BULB	200	220	1.18	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-5	200W LED LIGHT BULB	200	220	0.81	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-6	200W LED LIGHT BULB	200	220	0.81	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-7	200W LED LIGHT BULB	200	220	0.81	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-8	200W LED LIGHT BULB	200	220	0.81	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-9	200W LED LIGHT BULB	200	220	0.81	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-10	200W LED LIGHT BULB	200	220	0.81	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-11	200W LED LIGHT BULB	200	220	0.81	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-12	200W LED LIGHT BULB	200	220	0.81	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-13	200W LED LIGHT BULB	200	220	0.81	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
C-14	200W LED LIGHT BULB	200	220	0.81	20A	2.3 SWG 1/4" IN. 20 MM PWS PIPE
TOTAL CONNECTED LOAD		271124		123.26		



SINGLE LINE DIAGRAM

- LEGEND:**
- ➔ SERVICE ENTRANCE
 - ⊕ KILOWATT HOUR METER
 - ⊖ PANEL BOARD
 - ⊕ CEILING LIGHT
 - ⊕ CIRCUIT HOME RUN
 - ⊕ FEEDER LINE
 - ⊕ SWITCH LINE
 - ⊕ CONVENIENCE OUTLET
 - ⊕ 91 SINGLE GANG SWITCH
 - ⊕ 92 TWO GANG SWITCH
 - ⊕ AIRCON OUTLET

ELECTRICAL SPECIFICATIONS:

- ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER COMPANY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS FROM THE LOCAL AND STATE AUTHORITIES.
- THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL FURNISH THE ELECTRICAL, MECHANICAL AND APPROVAL FROM THE POWER COMPANY.
- ALL MATERIALS TO BE USED SHALL BE BRAND NEW AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER COMPANY.
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Project Owner: **University of the Philippines**

Project Title: **REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1)**

Location: **SMA, DAVAO DE LA GIJANA, CAGAYAN CITY, NEGROS OCCIDENTAL**

Prepared & Submitted by: **ENGR. MICHAEL S. MENDOZA JR.**

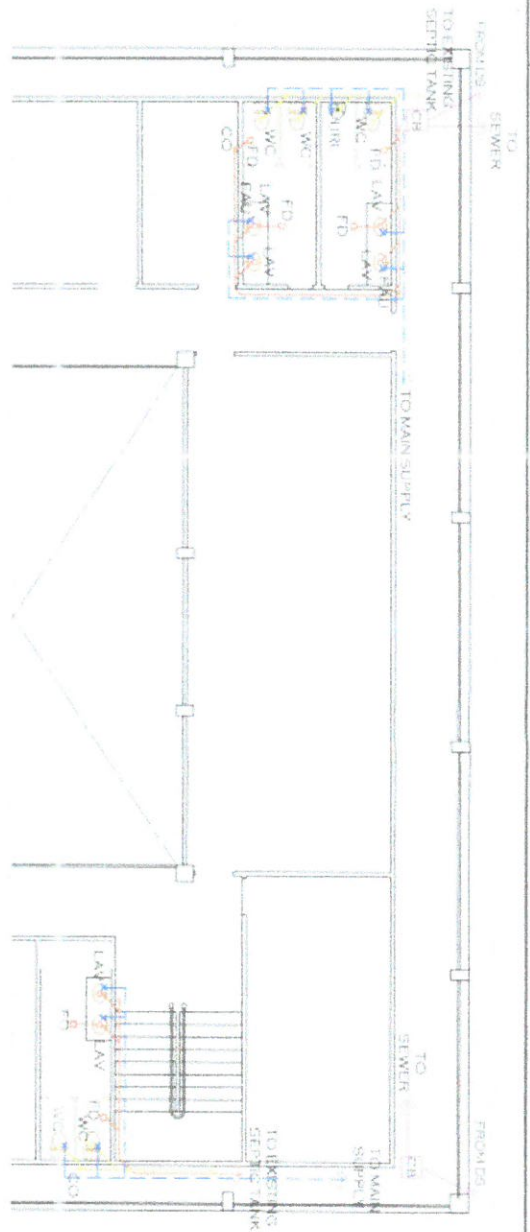
Checked by: **ENGR. RICHARD P. MENDOZA JR.**

Reviewed by: **HELEN B. LOBATOR**

Approved by: **ATTY. IGNACIO S. SANTILLANA**

Scale: **13**

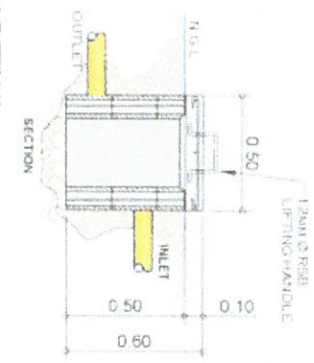
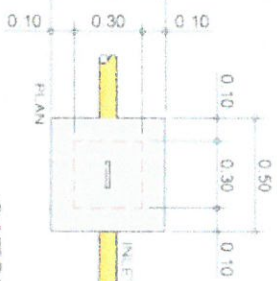
Sheet: **15**









PLUMBING LAYOUT (GROUND & 2ND FLR.)
SCALE 1/200M/T'S

SPECIFICATIONS:

1. ALL WASTE LINE & SOIL STACK SHALL BE OF P.V.C. PIPE & JOINT TIGHTLY TOGETHER WITH P.V.C. SOLVENT CEMENT
2. ALL STORM DRAINAGE LINE SHALL BE OF 4" Ø P.V.C. PIPE
3. 2" Ø P.V.C. PIPE FORDS LINE
3. WATER SUPPLY LINE SHALL BE ATLANTA P.V.C. PIPE 3/4" Ø FOR MAIN WATER SUPPLY LINE & 1/2" Ø FOR DISTRIBUTION LINE
4. ALL PLUMBING FIXTURES SHALL BE FREE OF DAMAGE OR DEFECT & SHOULD BE OF STANDARD MAKE
5. ALL WATER CLOSET SHALL BE PROVIDED WITH WATER CLOSET FLANGE
6. ALL PLUMBING INSTALLATION SHALL BE DONE UNDER THE SUPERVISION OF A REGISTERED MASTER PLUMBER AND SANITARY ENGINEER
7. ALL PLUMBING WORKS SHALL BE DONE UNDERIN ACCORDANCE WITH THE LATEST PROVISION OF THE NATIONAL PLUMBING CODE OF THE PHILS & OF THE LOCAL WATER DISTRICT



- LEGEND:
- C.O. — CLEAN-OUT
 - F.D. — FLOOR DRAIN
 - LAV — LAVATORY
 - FAU — FAUCET
 - G.T. — GREASE TRAP
 - W.C. — WATER CLOSET
 - G.B. — CATCH BASIN
 - V.T.R. — VENT THRU ROOF
 - URI — URINAL
 - WATERLINE
 - SANITARY PIPE LINE 1
 - SANITARY PIPE LINE 2

 BUCAR REGULATORY ADMINISTRATION	Project Title REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1) <small>LOCATED IN BARCELONA CITY, NEGROS OCCIDENTAL</small>	Prepared & Submitted by  ENGR. MICHAEL S. MANZANO <small>Professional Engineer No. 12345</small>	Checked by  ENGR. MICHAEL P. MANZANO <small>Professional Engineer No. 12345</small>	Approved by  HETER B. LOBATON <small>Professional Engineer No. 12345</small>	Approved by  ATTY. IGNACIO SANTILLANA <small>Professional Atty. No. 12345</small>	Approved by  PAROL UBES AZCONA <small>Professional Engineer No. 12345</small>	Sheet No. 15 of 15
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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.

Project Title : REHABILITATION OF CROP RESEARCH BUILDING 1 (PHASE 1)
 ABC : Php 7,640,000.00
 Location : LGAREC, La Carlota City, Negros Occidental
 Completion Period : 150 Calendar Days

BILL OF QUANTITIES


Item No.	Work Description	QTY	Unit	ESTIMATED DIRECT COST	MARK-UPS IN PERCENT	PROFIT	TOTAL MARK-UPS %	VALUE	VAT	TOTAL INDIRECT COST	TOTAL COST	Unit Cost
1	General Requirements											
A 1	Construction of E.A.D. Office by the Engineer	00	1.5	10,000.00	12.00	8.00	20.00	2,000.00	600.00	2,600.00	12,600.00	12,600.00
A 2	Project Billboard	00	1.8	3,000.00	12.00	8.00	20.00	6,000.00	1,800.00	7,800.00	3,720.00	3,720.00
A 3	Occupational Safety and Health Program	00	1.8	17,000.00	12.00	8.00	20.00	3,540.00	904.20	4,444.20	15,518.20	15,518.20
A 4	Permits and Clearances	00	1.8	69,425.76	12.00	8.00	20.00	14,680.00	3,670.00	18,350.00	87,775.76	48,198.00
A 5	Detached Engineering design	00	1.8	21,800.00	12.00	8.00	20.00	4,360.00	1,098.00	5,458.00	40,258.00	22,258.00
A 6	Mobilization/Demobilization	00	1.8	8,600.00	12.00	8.00	20.00	1,720.00	430.00	2,150.00	10,750.00	10,750.00
PART B	Clearing and Demolition											
	Removal of Structures and Construction	00	1.8	98,450.00	12.00	8.00	20.00	19,690.00	5,007.00	25,597.00	124,047.00	124,047.00
PART C	Earthworks											
	Excavation	573.61	cu m	232,096.01	12.00	8.00	20.00	46,419.20	13,925.76	60,344.96	292,440.97	508.06
PART D	Reinforced Concrete Works											
	Structural Concrete	44.73	cu m	2,344,303.42	12.00	8.00	20.00	468,860.68	140,688.21	609,548.89	2,953,852.31	6,656.16
PART E	Masonry Works											
	Concrete Hollow Blocks (Including Reinforcing Steel)	84.26	sq m	813,868.48	12.00	8.00	20.00	162,773.70	48,832.11	211,605.80	1,025,474.28	1,216.97
PART F	Reinforcing steel											
	Reinforcing steel (deformed/grade 40)	24,285.32	kg	1,546,298.62	12.00	8.00	20.00	309,259.32	92,771.80	402,031.12	1,948,333.74	80.29
PART G	Plumbing Works											
	Plumbing (including fittings and accessories)	00	1.8	378,650.00	12.00	8.00	20.00	75,730.00	22,719.00	98,449.00	477,099.00	477,099.00
PART H	Electrical Works											
	Conduits, Boxes & Fittings	00	1.8	152,150.000	12.00	8.00	20.00	30,430.00	9,129.00	39,559.00	191,709.00	191,709.00
	Wires and Wiring Devices	00	1.8	167,875.000	12.00	8.00	20.00	33,575.00	11,272.50	44,847.50	236,722.50	236,722.50
	Panel Board, 3p with Main & Branch Breaker	00	1.8	16,710.00	12.00	8.00	20.00	3,342.00	1,002.60	4,344.60	21,054.60	21,054.60
	Lighting Fixtures	00	1.8	129,075.00	12.00	8.00	20.00	25,815.00	7,744.50	33,559.50	162,634.50	162,634.50
TOTAL ESTIMATED PROJECT COST											7,639,976.86	

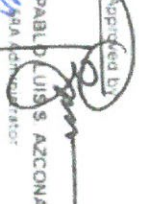
Prepared and Submitted by

 ENGR. MICHAEL S. MANORODO JR.
 ENGINEER / E.O.S.

Noted by

 ENGR. MICHAEL R. HAINAWAY
 O.C. / Agricultura Support Services Division

Recommending Approval

 HELEN B. LOBATON / ATTY. IGNACIO S. SANMILLANA
 Manager, III, RCE Deputy Administrator, II, RCE

Approved by

 PABLO LUIS S. AZCONA
 ASST. ADMINISTRATOR

Additional Requirements:

Bidders are required to submit **two (2) additional hard copies** of the first and second components of their Bid/s.

Bidders are required to **put tabs** (name of document not number in the checklist) in all documents to be submitted with the same number as indicated in the Checklist of Technical and Financial Document, in order to facilitate efficiency in evaluating all the documents.

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;

In case any of the eligibility documents per Annex A of the PhilGEPS Certificate of Registration is expired, all copies (current and valid) of SEC/DTI Registration, Mayor's Permit, Tax Clearance, and Audited Financial Statements shall be submitted along with the PhilGEPS Certificate.

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 sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; **and**
 (m) Cash Flow by Quarter.

Republic of the Philippines



Government Procurement Policy Board