PHILIPPINE BIDDING DOCUMENTS

Procurement of INFRASTRUCTURE PROJECTS

Government of the Republic of the Philippines

PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY AT BRGY. DON ALEJANDRO QUIROLGICO, CAOAYAN, ILOCOS SUR

IB No.: DA-RFO 1-2025-INFRA-022

Sixth Edition
July 2020

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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

INVITATION TO BID FOR THE PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY AT BRGY. DON ALEJANDRO QUIROLGICO, CAOAYAN, ILOCOS SUR

1. The Department of Agriculture - Regional Field Office 1 (DA-RFO 1), through the GAA FY 2025 intends to apply the sum of **Five Million Nine Hundred Forty Thousand Pesos and Seventy-Five Centavos (PhP5,940,000.75)** being the Approved Budget for the Contract (ABC) to payment under the contract for the **PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY AT BRGY. DON ALEJANDRO QUIROLGICO, CAOAYAN, ILOCOS SUR** with project identification number **DA-RFO 1-2025-INFRA-022**. Bids received in excess of the ABC shall be automatically rejected at bid opening.

2. The DA-RFO 1 now invites bids for the above procurement project with the following details and specifications:

DETAILS AND SPECIFICATIONS

Project Location: Brgy. Don Alejandro Quirolgico, Caoayan, Ilocos Sur

Project Description: Construction of fruits and vegetables processing facility with dehydration equipment

Scope of work:

Description	Qty	Unit
I. GENERAL REQUIREMENTS	1.00	lot
II. PROVISION OF SAFETY AND HEALTH	1.00	l.s.
III. MOBILIZATION AND DEMOBILIZATION	1.00	lot
IV. ESTABLISHMENT OF TEMPORARY FACILITY	1.00	lot
V. EARTHWORKS	228.50	cu.m.
VI. RSB WORKS	7,063.00	kgs
VII. CONCRETE WORKS (CLASS A)	55.00	cu.m.
VIII. FORMWORKS AND SCAFFOLDINGS	107.80	sq.m.
IX. MASONRY WORKS (INCLUDING PLASTERING)	461.75	sq.m.
X. STEEL WORKS (INCLUDES ELEVATED WATER STORAGE TANK)	2,414.00	kgs
XI. TINSMITHRY WORKS	128.34	sq.m.
XII. CEILING WORKS (INCLUDING EAVES)	128.34	sq.m.
XIII. PAINTING WORKS	425.60	sq.m.

XIV.	ELECTRICAL WORKS	30.00	outlers
XV.	DOORS AND WINDOWS (INCLUDING INSTALLATION)	29.27	sq.m.
XVI.	PLUMBING WORKS (INCLUDING SEPTIC TANK)	1.00	l.s.
XVII.	STAINLESS STEEL LETTERING AND LOGO	1.00	lot
XVIII.	INSTALLATION OF DEHYDRATION EQUIPMENT	1.00	lot

MINIMUM TECHNICAL PERSONNEL REQUIRED:

- 1 Project Engineer
- 1 Foreman
- 5 Skilled Workers
- 12 Unskilled Workers

MINIMUM EQUIPMENT REQUIRED:

- 1 One-Bagger Mixer
- 1 Backhoe (0.80 cu.m.)

Completion of the Works is within **one hundred seventy-seven (177) calendar days.** Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. (Instructions to Bidders).

3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184.

   Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least seventy-five percent (75%) interest or outstanding capital stock belonging to citizens of the Philippines.

4. Prospective bidders may obtain further information from and inspect the Bidding Documents at the address given below during **office hours** at **8:00 AM** to **5:00 PM, Monday to Friday.**

Department of Agriculture - Regional Field Office 1
Aguila Rd., Sevilla, City of San Fernando, La Union

5. A complete set of Bidding Documents may be acquired by interested Bidders from **February 12, 2025 to March 4, 2025** from the address given and websites below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **PhP10,000.00.** The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.

6. The **DA-RFO 1** will hold a Pre-Bid Conference on **20 February 2025, 9:00 AM** at DA-RFO 1, 5th Floor Conference Room, Aguila Road, Sevilla, City of San Fernando, La Union, which shall be open to prospective bidders.

7. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated above on or before **04 March 2025, 9:00 AM**. **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 14.

9. **Bid opening** shall be on **04 March 2025, 9:00 AM** at DA-RFO 1, 5th Floor Conference Room, Aguila Road, Sevilla, City of San Fernando, La Union. Bids will be opened in the presence of the bidders or their authorized representatives.

10. **ADDITIONAL INSTRUCTIONS TO BIDDERS:**

    a. The bidders or their duly authorized representatives may attend the bid opening;
    b. In case a representative will be attending the Bid Opening, a Special Power of Attorney (SPA), Secretary's Certificate, Board Resolution or any other forms of authorization (notarized), as the case may be, together with the Company-issued Identification Card or any valid ID must be presented upon submission of the bid proposal at the BAC Secretariat. The name/title of the project must be indicated in the authorization or SPA.
    c. Each Bidder shall submit one copy of the first and second components of its Bid. Bidders shall submit their bids with proper index tabbing using the forms specified in the Bidding Documents in two (2) separate sealed bid envelopes, and which shall be submitted simultaneously;

       The first component which is the Technical Eligibility requirements must be soft-bound, marked with the **name of the contract** and its **IB No., name and address of the bidder**, and enclosed in an envelope, sealed with signature and marked with the **name of the contract**, **name and address of the bidder**, addressed to the **BIDS AND AWARDS COMMITTEE (BAC) DA RFO-1 CITY OF SAN FERNANDO, LA UNION**, the **specific Identification No.** and the warning **"DO NOT OPEN BEFORE…"** the date and time for the bid opening.

       The second component being the Financial requirements may be soft-bound/fastened in a folder, marked with the **name of the contract** and its **IB No., name and address of the bidder**, and enclosed in an envelope, sealed with signature and marked with the **name of the contract**, **name and address of the bidder**, addressed to the **BIDS AND AWARDS COMMITTEE (BAC) DA RFO-1 CITY OF SAN FERNANDO, LA UNION**, the **specific Identification No.** and the warning **"DO NOT OPEN BEFORE…"** the date and time for the bid opening.
       The Technical and Financial Requirement each in separate envelopes, shall be enclosed in a mother envelope with the same sealing and markings.

    Non-compliance with index tabbings shall not be a ground for outright disqualification or declaration of ineligibility. The improper index tabbings must be duly acknowledged by the bidder/representative and be subject to the bid evaluation and post-qualification of the Technical Working Group (TWG) as to their substance.

d. All **documents** in the **Financial Requirements envelope** must be **duly signed and/or initialed,** as needed, by the bidder/authorized representative on **EACH AND EVERY PAGE** thereof.

11. The **DA-RFO 1** 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 Section 41 of the 2016 Revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.

12. For further information, please refer to:

    DENNIS I. TACTAC, ABE
    Chairperson, Bids and Awards Committee
    Department of Agriculture - Regional Field Office 1
    Aguila Road, Sevilla, City of San Fernando, La Union
    Tel. No.:(072) 242/1045-46, Ext. 07
    E-mail add: bacsec@ilocos.da.gov.ph

13. For downloading of Bidding Documents, you may visit the following websites:
    DA-RFO1 Website: https://ilocos.da.gov.ph/
    PhilGEPS Website: https://www.philgeps.gov.ph/

February 11, 2025

Approved by:

(Sgd.) GILBERT D. RABARA, DVM
Vice-Chairperson, Bids and Awards Committee

Invitation to Bid Identification No. DA-RFO 1-2025-INFRA-022

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, **Department of Agriculture - Regional Field Office 1 (DA-RFO 1)** invites Bids for the **PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY AT BRGY. DON ALEJANDRO QUIROLGICO, CAOAYAN, ILOCOS SUR** with Project Identification Number **DA-RFO 1-2025-INFRA-022.**

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 **GAA FY 2025** in the amount of **Five Million Nine Hundred Forty Thousand Pesos and Seventy-Five Centavos (PhP5,940,000.75).**

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:

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, **5th Floor Conference Room, Aguila Road, Sevilla, City of San Fernando, La Union** indicated in paragraph 6 of the **IB.**

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the

IB, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents Comprising the Bid: Eligibility and Technical Components

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

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

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

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

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

11. Documents Comprising the Bid: Financial Component

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

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

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

12. Alternative Bids

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

13. Bid Prices

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

14. Bid and Payment Currencies

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

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

a. 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 **July 2, 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. Additional Contract documents are indicated in the **BDS**.

Section III. Bid Data Sheet

Bid Data Sheet

<table>
<tr><th>ITB Clause</th><th></th></tr>
<tr><td>5.2</td><td>For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:
CONSTRUCTION OF PROCESSING FACILITY</td></tr>
<tr><td>7.1</td><td>N/A</td></tr>
<tr><td>10.3</td><td>N/A</td></tr>
<tr><td>10.4</td><td>The key personnel must meet the required minimum years of experience set below:

<table>
<tr><th>Key Personnel</th><th>General Experience</th><th>Relevant Experience</th></tr>
<tr><td>Project Engineer</td><td>3 years</td><td>Construction Supervision</td></tr>
<tr><td>Foreman</td><td>2 years</td><td>Masonry/Carpentry</td></tr>
</table></td></tr>
<tr><td>10.5</td><td>The minimum major equipment requirements are the following:

<table>
<tr><th>Equipment</th><th>Capacity</th><th>No. of Units</th></tr>
<tr><td>Mixer</td><td>One-Bagger</td><td>1</td></tr>
<tr><td>Backhoe</td><td>0.80 cu.m.</td><td>1</td></tr>
</table></td></tr>
<tr><td>12</td><td>N/A</td></tr>
<tr><td>15.1</td><td>The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:
a. The amount of not less than Php118,800.02 bid security is in cash, cashier’s/manager’s check, bank draft/guarantee or irrevocable letter of credit;

b. The amount of not less than Php297,000.04 bid security is in Surety Bond.</td></tr>
<tr><td>19.2</td><td>Partial bid is not allowed.</td></tr>
<tr><td>20</td><td>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.</td></tr>
<tr><td>21</td><td>Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.</td></tr>
</table>

Section IV. General Conditions of Contract

1. Scope of Contract

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

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

2. Sectional Completion of Works

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

3. Possession of Site

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

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

4. The Contractor's Obligations

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

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

5. Performance Security

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

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

6. Site Investigation Reports

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

7. Warranty

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

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

8. Liability of the Contractor

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

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

9. Termination for Other Causes

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

10. Dayworks

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

11. Program of Work

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

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

12. Instructions, Inspections and Audits

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

13. Advance Payment

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

14. Progress Payments

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

15. Operating and Maintenance Manuals

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

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

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
2	N/A
4.1	Schedule of construction in full shall start within **7 calendar days** from receipt of the Notice to Proceed
6	N/A
7.2	[In case of permanent structures, such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures:] Fifteen (15) years
10	a. Dayworks are applicable at the rate shown in the Contractor's original Bid.
11.1	The Contractor shall submit the Program of Work (PERT-CPM, Construction Schedule, S-Curve and Construction Methods) to the Procuring Entity's Representative within 10 calendar 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 10% of the 15% Advance Payment.
13	The amount of the advance payment is 15% of the Contract Price.
14	Materials and equipment delivered on the site but not completely put in place (Actual Accomplishment) shall **not** be included for payment.
15.1	The "as built" Drawings and/or operating and maintenance manuals shall be required prior to the final payment.
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is 10% of the final billing.

Section VI. Specifications

Section VII. Drawings

[Insert here a list of Drawings. The actual Drawings, including site plans, should be attached to this section, or annexed in a separate folder.]

Section VIII. Bill of Quantities

Section IX. Checklist of Technical and Financial Documents

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

(a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) in accordance with Section 8.5.2 of the IRR;

Technical Documents

(b) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**

(c) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules; **and**

(d) Special PCAB License in case of Joint Ventures;
and registration for the type and cost of the contract to be bid; **and**

(e) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
or
Original copy of Notarized Bid Securing Declaration; **and**

(f) Project Requirements, which shall include the following:
   a. Organizational chart for the contract to be bid;
   b. List of contractor's key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;
   c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**

(g) Original duly signed Omnibus Sworn Statement (OSS);
and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

(h) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).

Class "B" Documents

(i) If applicable, duly signed joint venture agreement (JVA) in accordance with RA No. 4566 and its IRR in case the joint venture is already in existence;
or
duly notarized statements from all the potential joint venture partners stating

that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

II. FINANCIAL COMPONENT ENVELOPE

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

Other documentary requirements under RA No. 9184

(k) Original of duly signed Bid Prices in the Bill of Quantities; **and**

(l) Duly accomplished Detailed Estimates Form, including a summary shee indicating the unit prices of construction materials, labor rates, and equipmen rentals used in coming up with the Bid; **and**

(m) Cash Flow by Quarter.


Republic of the Philippines
gppb
Government Procurement Policy Board

BILL OF QUANTITIES

PROJECT NAME:

CONSTRUCTION OF FRUITS AND VEGETABLES PROCESSING FACILITY

PROJECT LOCATION: **BRGY. DON ALEJANDRO QUIROLOGICO, CAOAYAN, ILOCOS SUR**

PROJECT DESCRIPTION:

Construction of Fruits and Vegetables Processing Facility

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
	SCOPE OF WORK:				
I.	GENERAL REQUIREMENTS	lot	1.00		
II.	PROVISION OF SAFETY AND HEALTH	l.s	1.00		
III.	MOBILIZATION AND DEMOBILIZATION	lot	1.00		
IV.	ESTABLISHMENT OF TEMPORARY FACILITY	lot	1.00		
V.	EARTHWORKS	cu.m	228.50		
VI.	RSB WORKS	kgs	7,063.00		
VII.	CONCRETE WORKS (CLASS A)	cu.m	55.00		
VIII.	FORMWORKS AND SCAFFOLDINGS	sq.m	107.80		
IX.	MASONRY WORKS (INCLUDING PLASTERING)	sq.m	461.75		
X.	STEEL WORKS (INCLUDES ELEVATED WATER STORAGE TANK)	kgs	2,414.00		
XI.	TINSMITHRY WORKS	sq.m	128.34		
XII.	CEILING WORKS (INCLUDING EAVES)	sq.m	128.34		
XIII.	PAINTING WORKS	sq.m	425.60		
XIV.	ELECTRICAL WORKS	outlets	30.00		
XV.	DOORS AND WINDOWS (INCLUDING INSTALLATION)	sq.m	29.27		
XVI.	PLUMBING WORKS (INCLUDING SEPTIC TANK)	l.s	1.00		
XVII.	STAINLESS STEEL LETTERING AND LOGO	lot	1.00		
XVIII.	INSTALLATION OF DEHYDRATION EQUIPMENT	lot	1.00		
				GRAND TOTAL:	

NUMBER OF DAYS TO COMPLETE THE PROJECT: 177 Calendar Days

TOTAL AMOUNT OF BID (in words and figures): _____

_____

_____
Name in Print Company/Office/Firm

_____
Full Name of Bidder/Authorize Representative

Address: _____

By: _____
Signature Over Printed Name

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
REGIONAL FIELD OFFICE NO. 1
Aguila Road, Sevilla, City of San Fernando, La Union

CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY

BRGY. DON ALEJANDRO QUIROLGICO,
CAOAYAN, ILOCOS SUR

REPUBLIC OF THE PHILIPPINES

DEPARTMENT OF AGRICULTURE

REGIONAL FIELD OFFICE NO. 1

Aguila Road, Sevilla, City of San Fernando, La Union

NAME OF PROJECT: CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY

LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CAOAYAN, ILOCOS SUR

COORDINATES:
N 17.5360983°
E 120.3824785°

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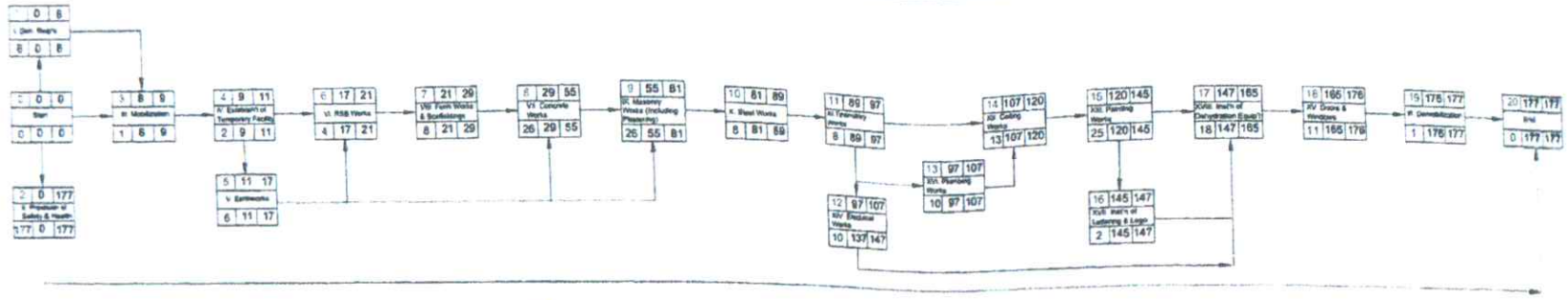
MAIN PROJECT FEATURES	
1. PROEJCT FACILITIES	
A. BUILDING FACILITY	DIMENSION (M)
a.1 LENGTH (TOTAL)	11.50
a.2 HEIGHT (TOTAL)	6.45
a.3 WIDTH (TOTAL)	7.00
B. DEHYDRATION EQUIPMENT	
a.1 LENGTH (TOTAL)	5.00
a.2 HEIGHT (TOTAL)	2.50
a.3 WIDTH (TOTAL)	2.45
C. DESIGN ASSUMPTION	
a.1 CROPPING TYPE	HIGH VALUE CROPS
a.2 AVERAGE YIELD (TONS/HA.)	120
D. PROJECT COST	6,000,000.00

PREPARED FROM THE OFFICE OF THE:	PROJECT TITLE:	PREPARED BY:	CHECKED & REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS	SHEET NO.
DEPARTMENT OF AGRICULTURE REGIONAL AGRICULTURAL ENGINEERING DIVISION	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CAOAYAN, ILOCOS SUR	ROLANDO J. CADAWAS, ABE ENGINEER I / MAED	MARK HARRY C. PASTOR, ABE CHIEF, AED	DENNIS I. TACTAC, ABE OIC, RTD for Operations	JOHN B. PASCUAL, DVM OIC, REGIONAL AGRICULTURE DIRECTOR		1/21

02 Rev. 00, Eff.Date: 01/20/2024

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
REGIONAL FIELD OFFICE NO. 1
Aguila Road, Sevilla, City of San Fernando, La Union

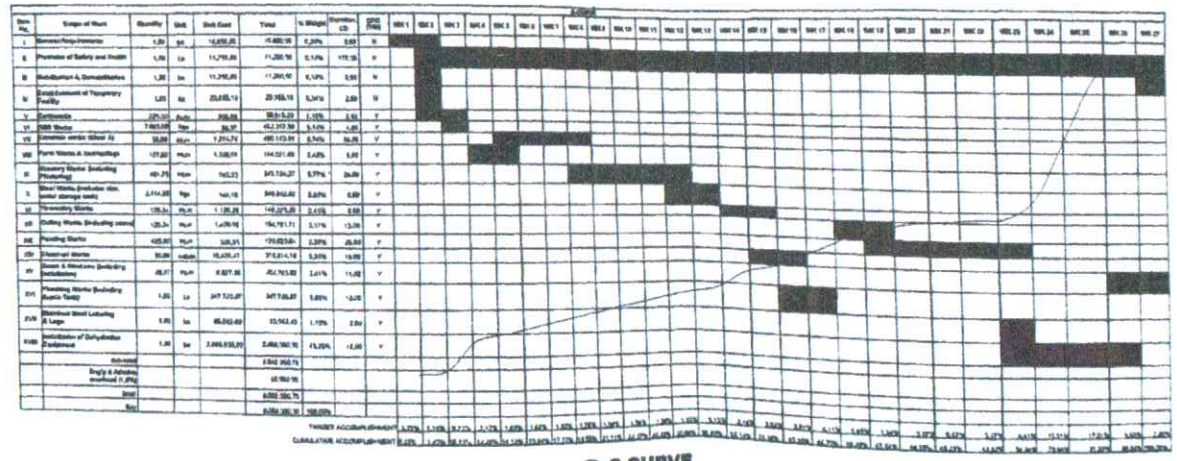
NAME OF PROJECT: CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY
LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CAOAYAN, ILOCOS SUR



Legend:

ES-Early Start/Successor (LS)
LF-Late Finish/Predecesor (EL)

PERT/CPM
SCALE NTS



S-CURVE
SCALE NTS

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DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 REGIONAL AGRICULTURAL ENGINEERING DIVISION	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CAOAYAN, ILOCOS SUR	ROLANDO J. CADAWAS, ABE ENGINEER I, RAED	MARK HARRY G. PASTOR, ABE Chief, RAED	DENNIS T. TACTAC, ABE RTD for Operations	JOHN B. PASCUAL, DVM OIC, REGIONAL EXECUTIVE DIRECTOR	PERT/CPM S-CURVE	2 21

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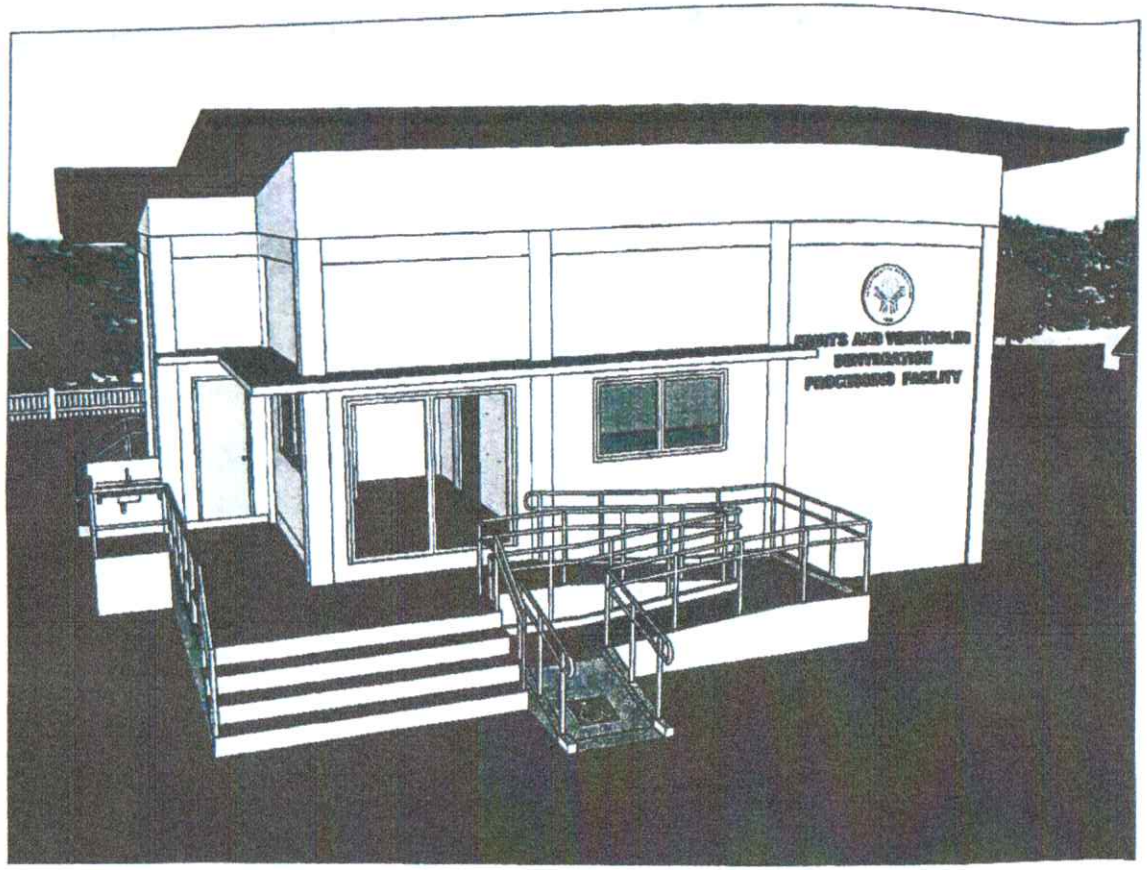
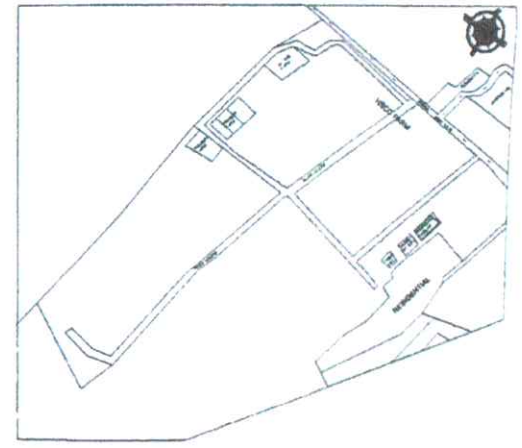


PERSPECTIVE
SCALE N.T.S

VICINITY MAP
SCALE N.T.S



FARM DEVELOPMENT PLAN
SCALE N.T.S

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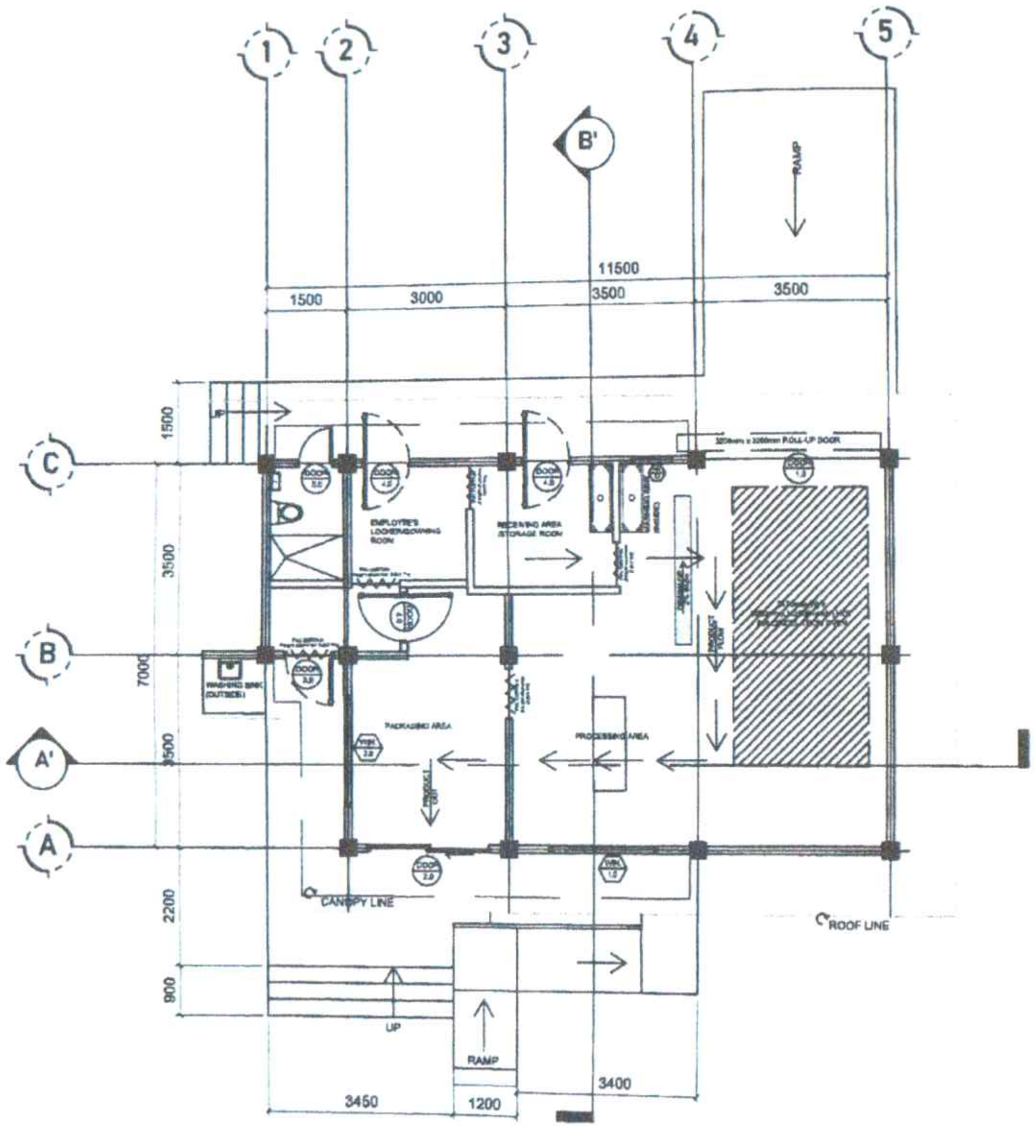
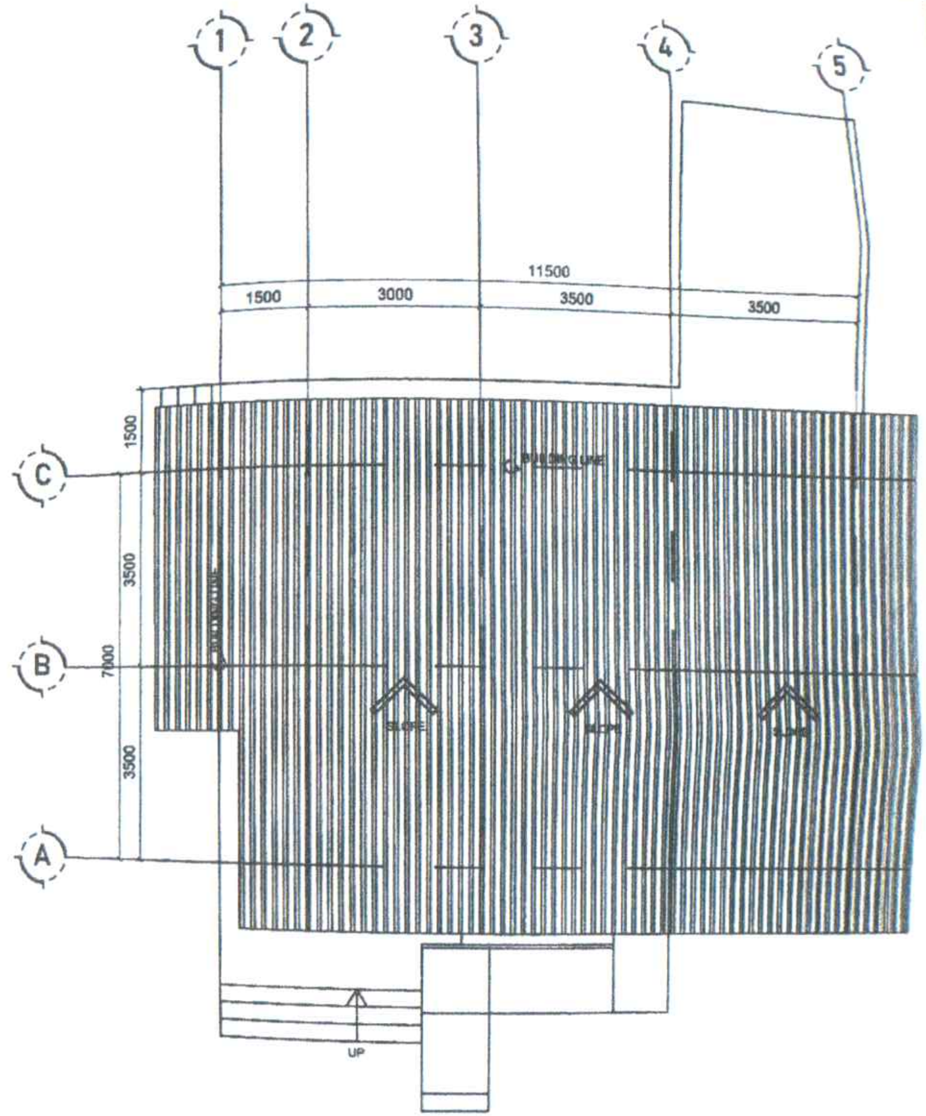
DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 REGIONAL AGRICULTURAL ENGINEERING DIVISION	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DAN ALEJANDRO QUIBULUE II, CALAYAN, ILOCOS SUR.	ROLANDO J. CADAWAS, ABE ENGINEER I, ABED	MARK HARRY G. PASTOR, ABE Chief, ABED	DENNIS I. TACTAC, ABE RED for Operations	JOHN B. PASCUAL, DVM OIC, REGIONAL EXECUTIVE DIRECTOR	VICINITY MAP PERSPECTIVE FARM DEVELOPMENT PLAN	3 21



FLOOR PLAN
SCALE 1:100



ROOF PLAN
SCALE 1:100

PREPARED FROM THE OFFICE OF THE:	PROJECT TITLE:	PREPARED BY:	CHECKED & REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS:	SHEET NO.
DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CAUAYAN, ILOCOS SUR	ROLANDO J. CADAWAS, ABE ENGINEER I, RAED	MARK HARRY G. PASTOR, ABE Chief, RAED	DENNIS I. TACTAC, ABE	JOHN B. PASCUAL, DVM OIC, REGIONAL EXECUTIVE DIRECTOR	FLOOR PLAN ROOF PLAN	4 21

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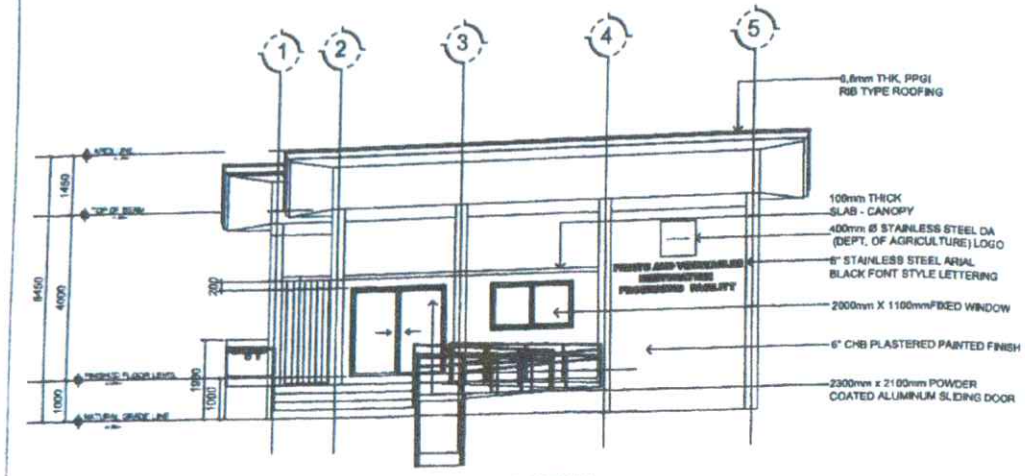
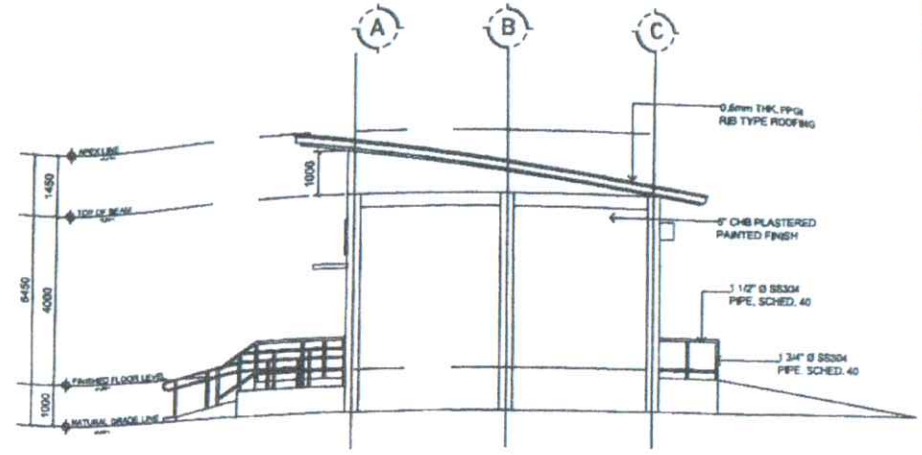
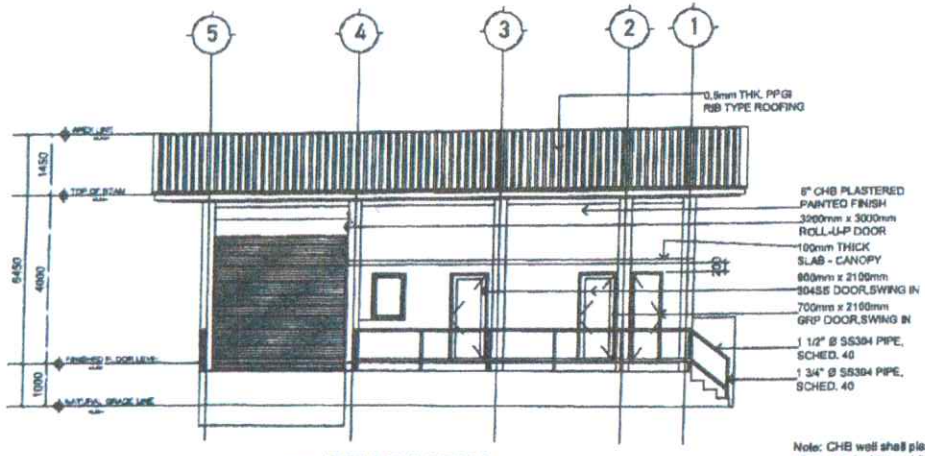


FRONT VIEW
SCALE 1:125

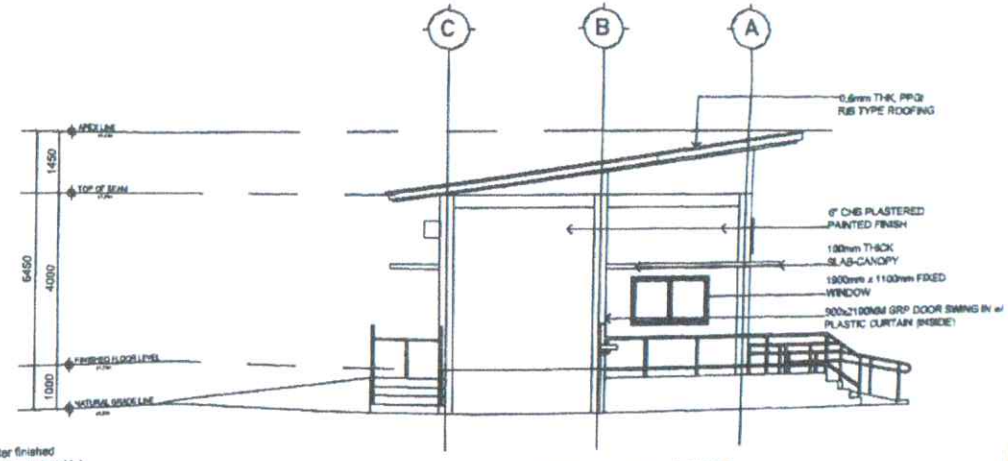


RIGHT SIDE VIEW
SCALE 1:125



REAR VIEW
SCALE 1:125

Note: CHB wall shall plaster finished 12mm thk (inside) and 20mm thk (outside)



LEFT SIDE VIEW
SCALE 1:125

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DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 REGIONAL AGRICULTURAL ENGINEERING DIVISION	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. SAN ALEJANDRO, SUBLIBARUAN, CABUGAO, ILOCOS SUR	ROLANDO J. CADAWAS, ABE ENGINEER I / MAED	MARK HARRY C. PASTOR, ABE Chief, RAED	DENNIS T. TACTAC, ABE RED Concurrence	JOHN B. PASCUAL, DVM OIC, REGIONAL EXECUTIVE DIRECTOR	ELEVATION VIEW	5 21

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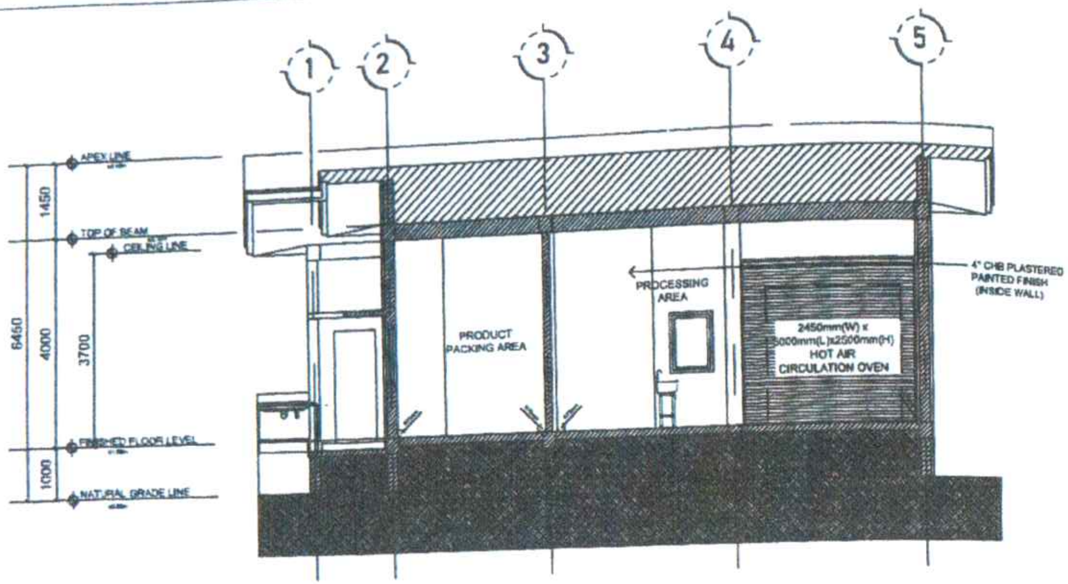
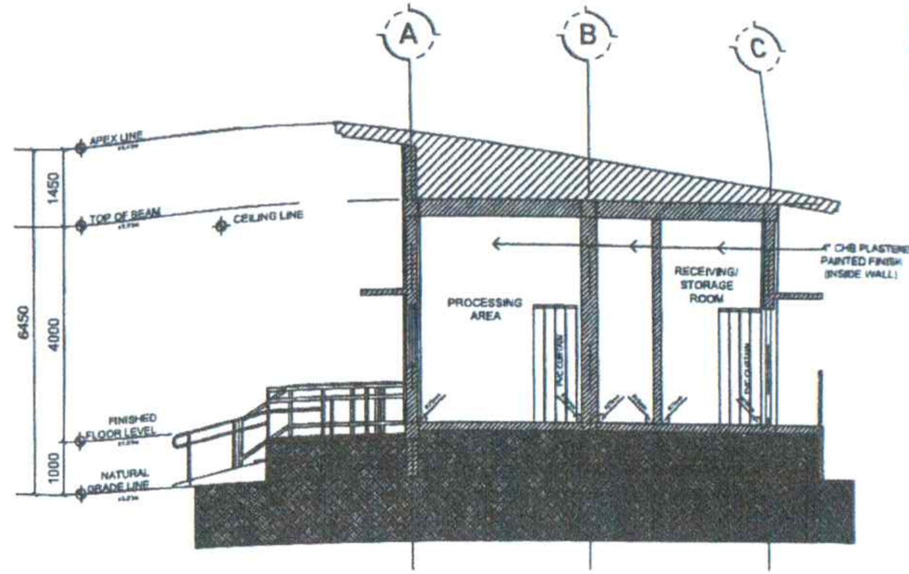


X-SECTION A'
SCALE 1:100



X-SECTION B'
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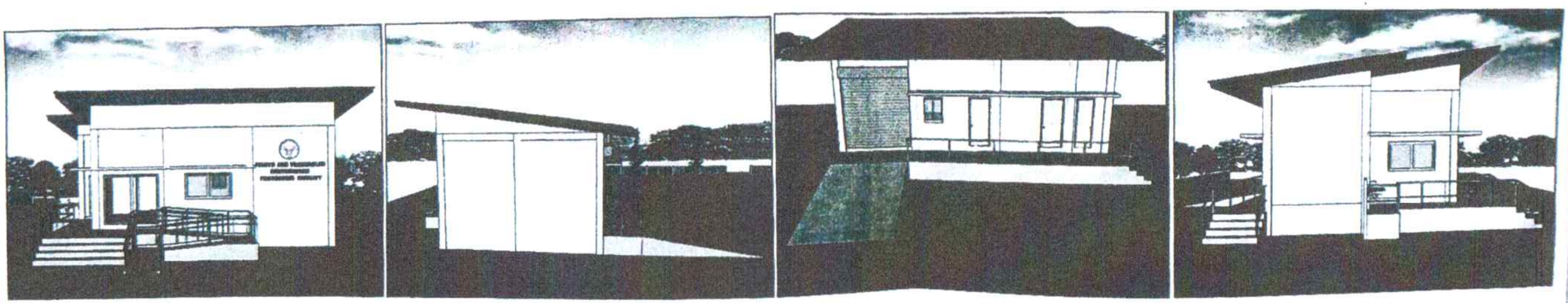

PERSPECTIVE
SCALE N.T.S

PREPARED FROM THE OFFICE OF THE:	PROJECT TITLE:	PREPARED BY:	CHECKED & REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS	SHEET NO.
DEPARTMENT OF AGRICULTURE Regional Field Office No. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CABUGAO, ILOCOS SUR	ROLANDO J. CADAWAS, ABE Engineer I, RAED	MARK HARRY C. PASTOR, ABE Chief, RAED	DENNIS I. TACTAC, ABE RTD for Operations	JOHN R. PASCUAL, DVM Regional Executive Director	X-SECTION A' X-SECTION B' PERSPECTIVE	6 21

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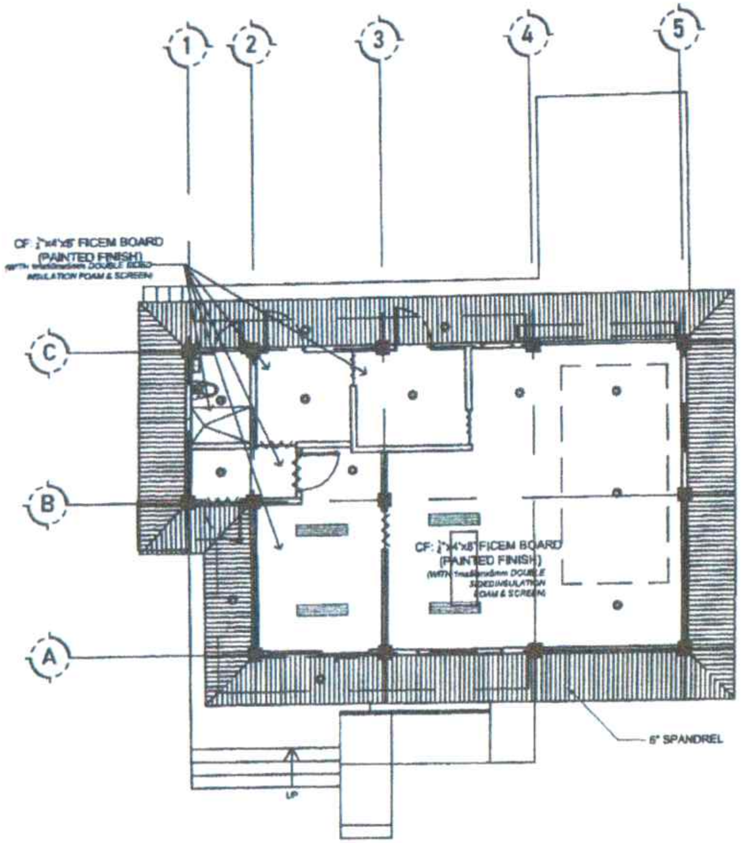
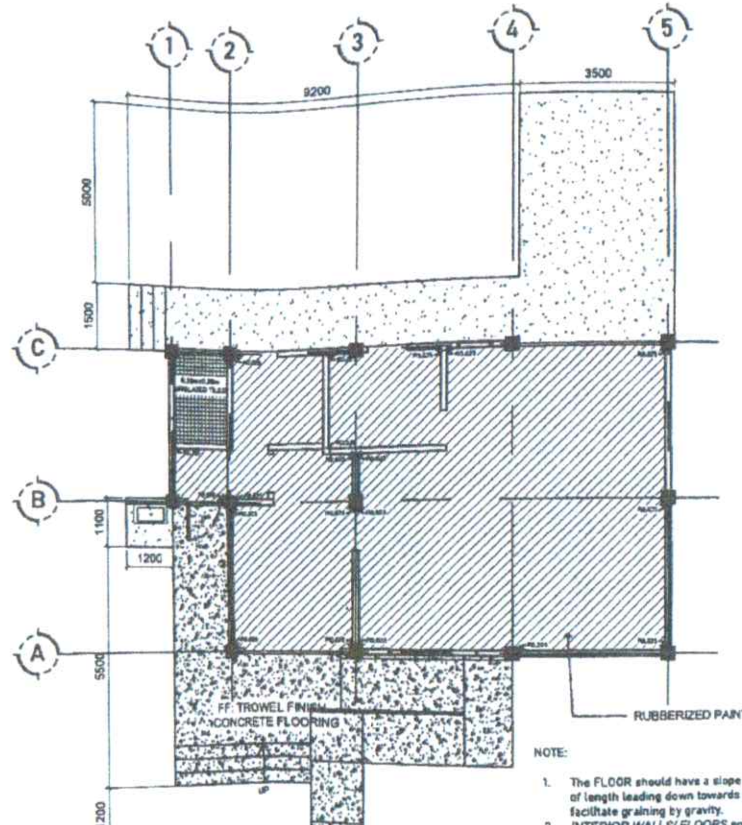
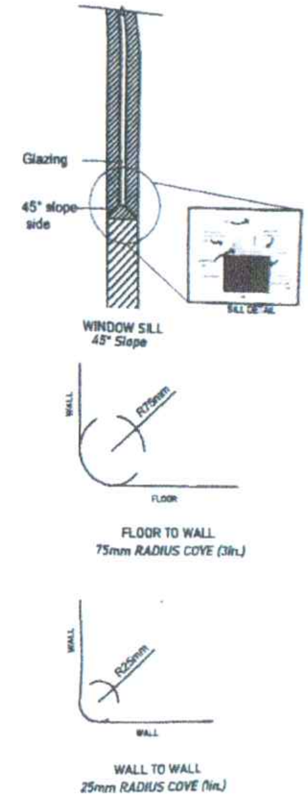


CEILING PLAN
SCALE 1:125



TILING LAYOUT
SCALE 1:125



COVE DETAILS

NOTE:

1. The FLOOR should have a slope of 1cm per every linear meter of length leading down towards the drainage canals to facilitate graining by gravity.
2. *INTERIOR WALLS/ FLOORS are recommended to have rounded corner coves for easy cleaning and sanitizing (see cove details)*
3. *WINDOW SILL/LEDGE are recommended to have 45° slope both side corners for easy cleaning and sanitizing.*

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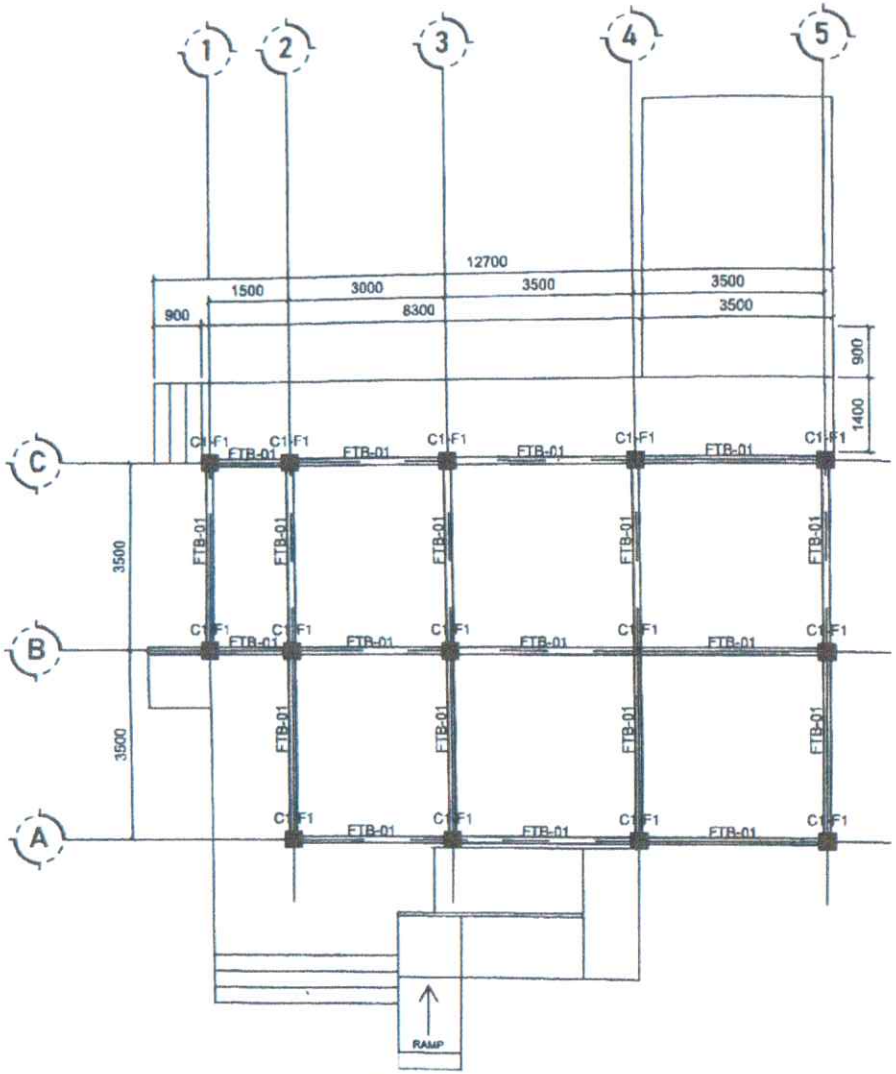
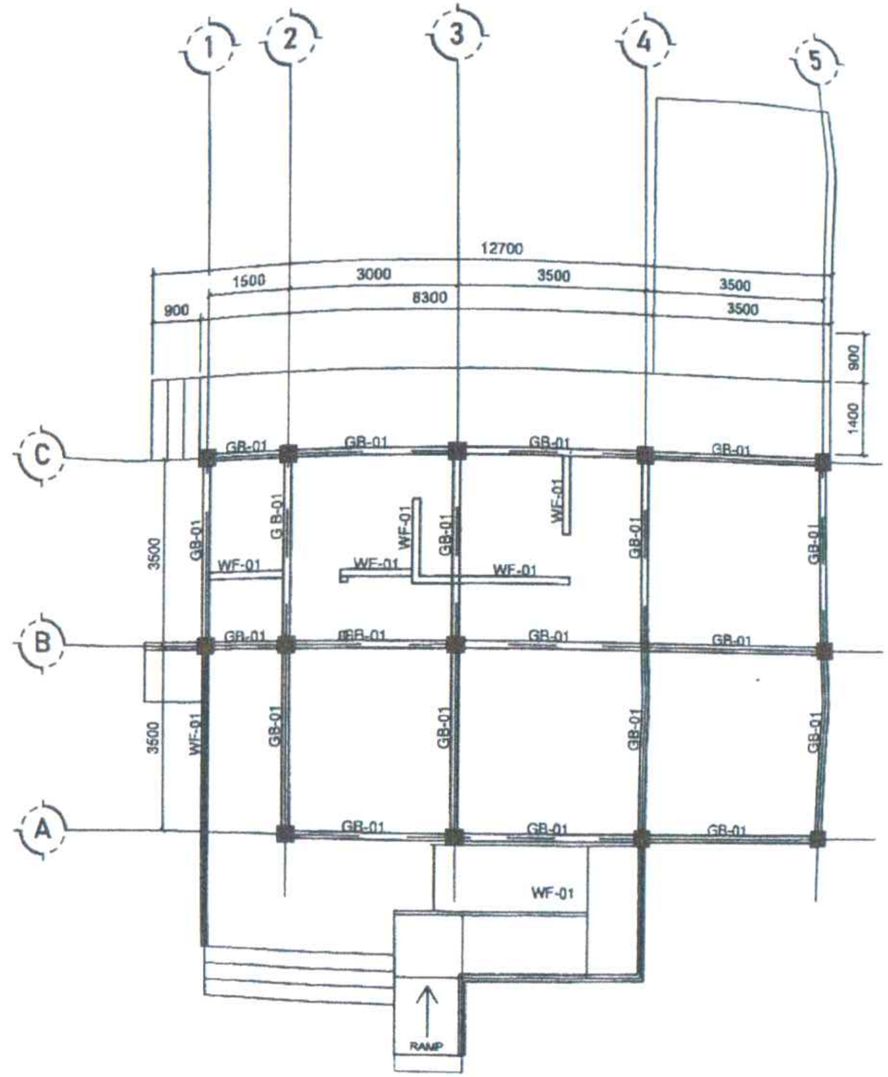
DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CABUGAO, ILOCOS SUR	ROLANDO J. CADAWAS, ABE ENGINEER I, RAED	MARK HARRY G. PASTOR, ABE Chief, RAED	DENNIS ... TACTAC, ABE RTD for Operations	JOHN B. PASCUAL, DVM OIC, REGIONAL EXECUTIVE DIRECTOR	CEILING PLAN TILING LAYOUT	7/21



FOUNDATION PLAN
SCALE 1:100



GRADE BEAM LAYOUT
SCALE 1:100

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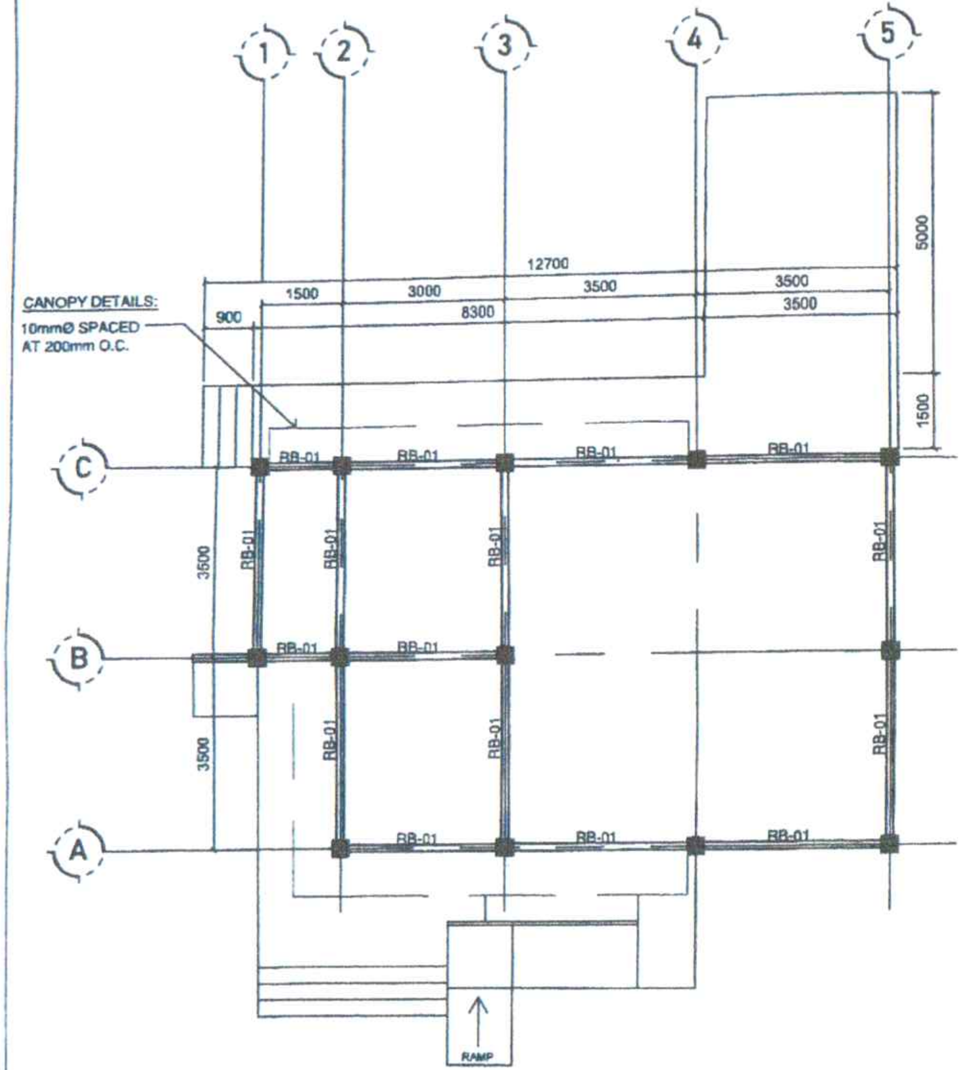
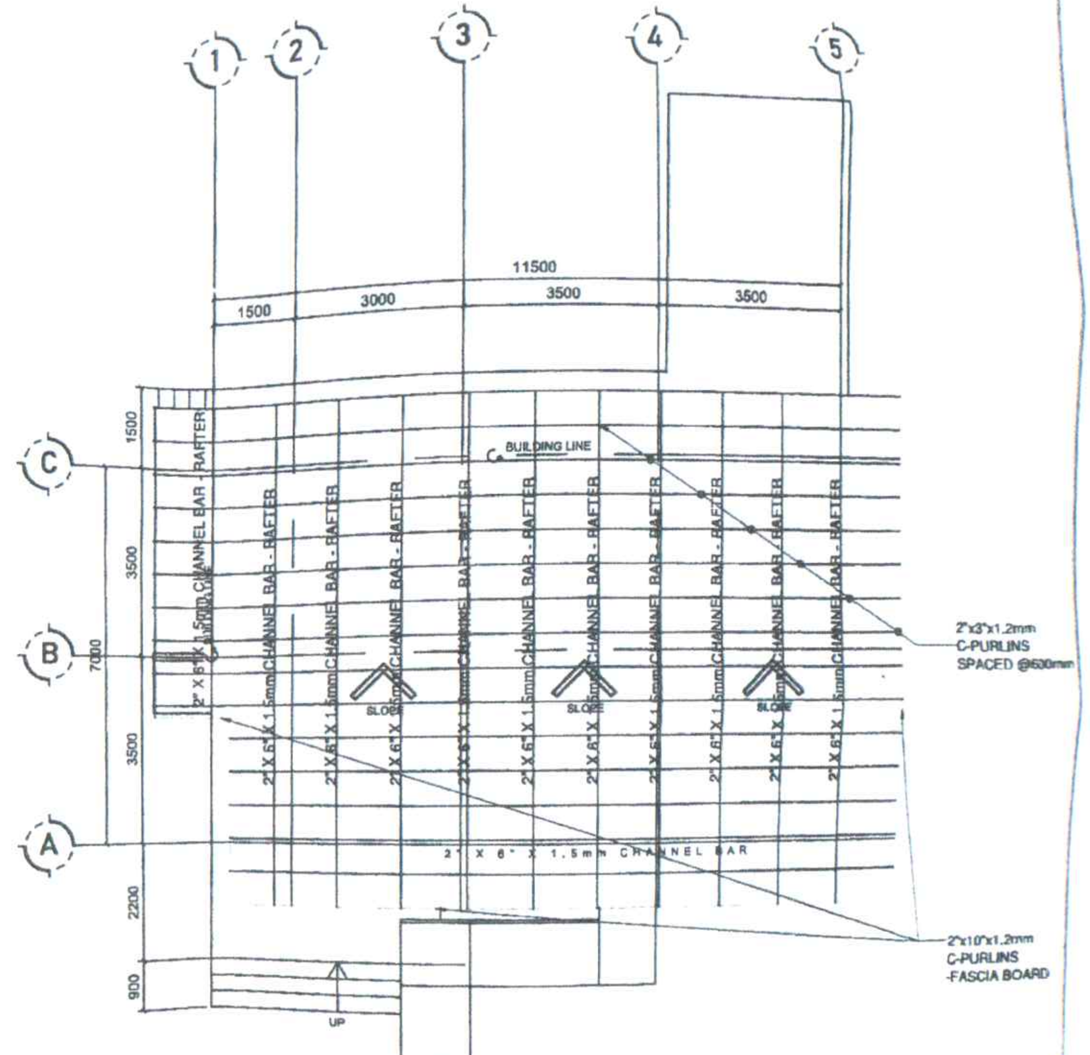
DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CABAYAN, ILOCOS SUR	ROLANDO J. CADAWAS, ABE ENGINEER, RAED	MARK HARRY G. PASTOR, ABE Chief, RAED	DENNIS F. TACTAC, ABE RTD for Operations	JOHN B. PASCUAL, DVM OIC, REGIONAL EXECUTIVE DIRECTOR	FOUNDATION PLAN GRADE BEAM PLAN	8 / 21

02 Rev. 00, Eff.Date: 01/20/2024



ROOF BEAM LAYOUT

SCALE 1:100

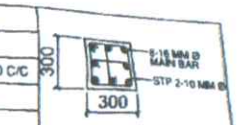
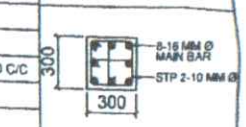


ROOF FRAMING LAYOUT

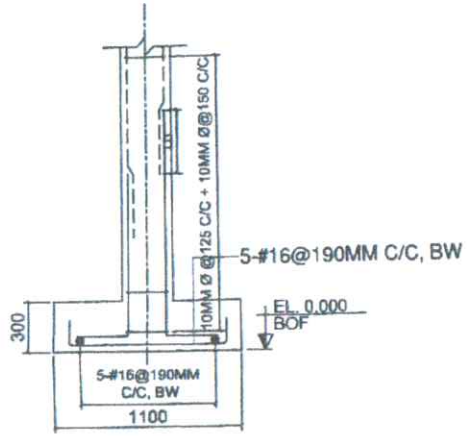
SCALE 1:100

PREPARED FROM THE OFFICE OF THE:	PROJECT TITLE:	PREPARED BY:	CHECKED & REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS	SHEET NO.
DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CAOAYAN, ILOCOS SUR	ROLANDO J. CADAWAS, ABE ENGINEER I, RAED	MARK HARRY G. PASTOR, ABE Chief, RAED	DENNIS I. TACTAC, ABE RTD for Operations	JOHN R. PASCUAL, DVM OIC, Regional Executive Director	ROOF BEAM LAYOUT ROOF FRAMING LAYOUT	9/21

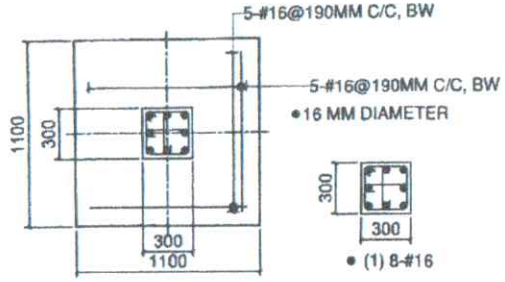
FOOTING NUMBERS	COLUMN NUMBERS	FOOTING TYPE	FOOTING DIMENSION			FOOTING REINFORCEMENT		REMARKS
			L	B	D	BOTTOM		
						ALONG B	ALONG L	
F1	C1	Pad	1100	1100	300	5-#16@190 C/C	5-#16@190 C/C	PROPOSED

2M TO 5.0M	SIZE	300 X 300	
	STEEL	8-16 MM Ø	
	LINKS	10MM Ø @125 C/C + 10MM Ø @150 C/C	
	MATERIAL	C21:Fy415	
	SCR ZONE	475	
0M TO 2M	SIZE	300 X 300	
	STEEL	8-16 MM Ø	
	LINKS	10MM Ø @125 C/C + 10MM Ø@150 C/C	
	MATERIAL	C21:Fy415	
	SCR ZONE	450	
COLUMN MARKED		C1-F1	C1-F1

COLUMN SCHEDULE



C1-F1
DETAIL OF FOOTING

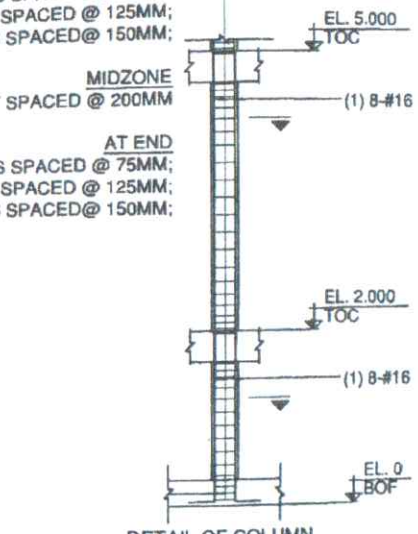


USE 10MM Ø RSB AS LATERAL TIES:

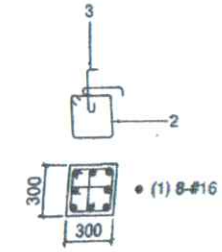
AT SUPPORT
3 PCS SPACED @ 75MM;
3PCS SPACED @ 125MM;
3PCS SPACED@ 150MM;

MIDZONE
REST SPACED @ 200MM

AT END
3 PCS SPACED @ 75MM;
3PCS SPACED @ 125MM;
3PCS SPACED@ 150MM;



DETAIL OF COLUMN
(SCALE 1:50)

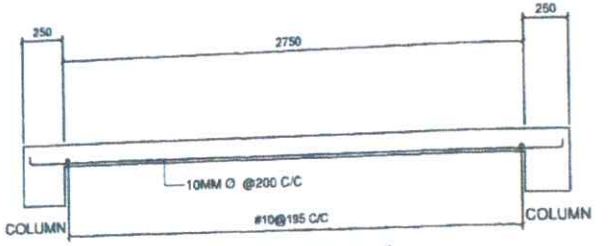


C1-F1 DETAILS
SCALE 1:125

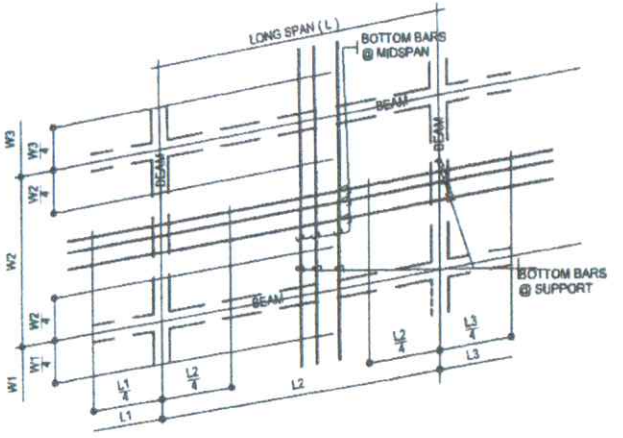
PREPARED FROM THE OFFICE OF THE:	PROJECT TITLE:	PREPARED BY:	CHECKED & REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS:	SHEET NO.
DEPARTMENT OF AGRICULTURE Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DON ALEJANDRO QUIRILISCO, CADAYAN, BUKIDNON	ROLANDO J. CADAWAS, ABE ENGINEER I / HEAD	MARK HARRY G. PASTOR, ABE Chief, AMD	DENNIS T. TACTAC, ABE Chief, Operations	JOHN B. PASCUAL, DVM OIC, Regional Executive Director, TDA	C1F1 DETAILS	10/21

02 Rev. 00, Eff.Date: 01/20/2024

SLAB MARKED	SLAB TYPE	SLAB THICKNESS	BOTTOM REINFORCEMENT		TOP REINFORCEMENT				REMARKS
			ALONG SHORT SPAN	ALONG LONG SPAN	OVER LONG SUPPORT		OVER SHORT SUPPORT		
			FULL LENGTH	FULL LENGTH	CONTINUOUS SUPPORT	END SUPPORT	CONTINUOUS SUPPORT	END SUPPORT	
GROUND FLOOR SLAB	ONE-WAY	150	10 MM Ø @ 200 C/C	10 MM Ø @ 200 C/C	---	---	---	---	PROPOSED

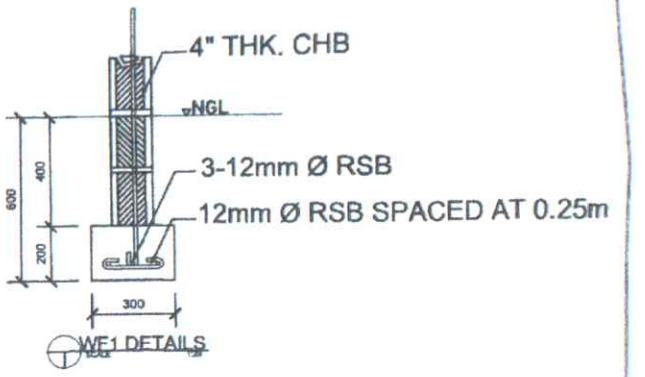


GROUND FLOOR SLAB
(ONE WAY) (150 THK)

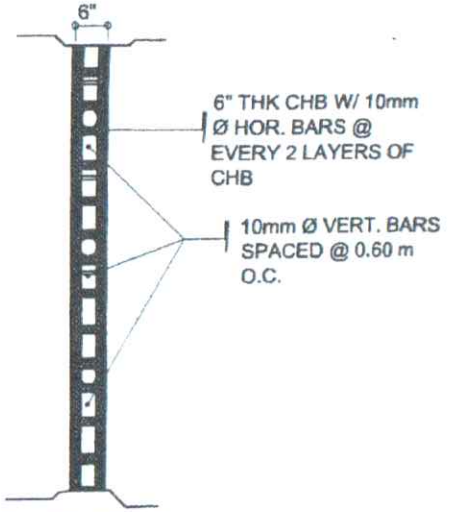


TYPICAL ONE-WAY SLAB DETAIL
(ONE WAY) (150 THK)

TYPICAL SLAB DETAILS
SCALE 1:125



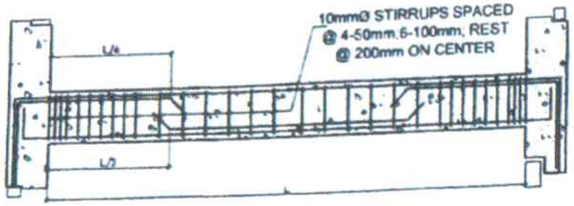
WF1 DETAILS

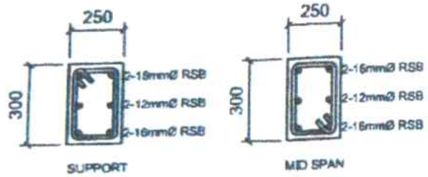


CHB DETAILS
SCALE 1:5

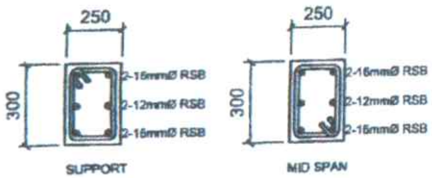
PREPARED FROM THE OFFICE OF THE:	PROJECT TITLE:	PREPARED BY:	CHECKED & REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS:	SHEET NO.
DEPARTMENT OF AGRICULTURE Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY	ROLANDO J. CADAWAS, ABE ENGINEER I / RAED	MARK HARRY G. PASTOR, ABE Chief, RAED	DENNIS I. TACTAC, ABE RTD, Mechanization	JOHN B. PASCUAL, DVM OIC, Regional Executive Director	WF1 DETAILS CHB DETAILS TYPICAL SLAB DETAILS	11 21

02 Rev. 00, Eff.Date: 01/30/2024

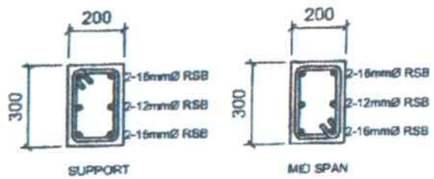




FOOTING TIE BEAM DETAIL (FTB-01)



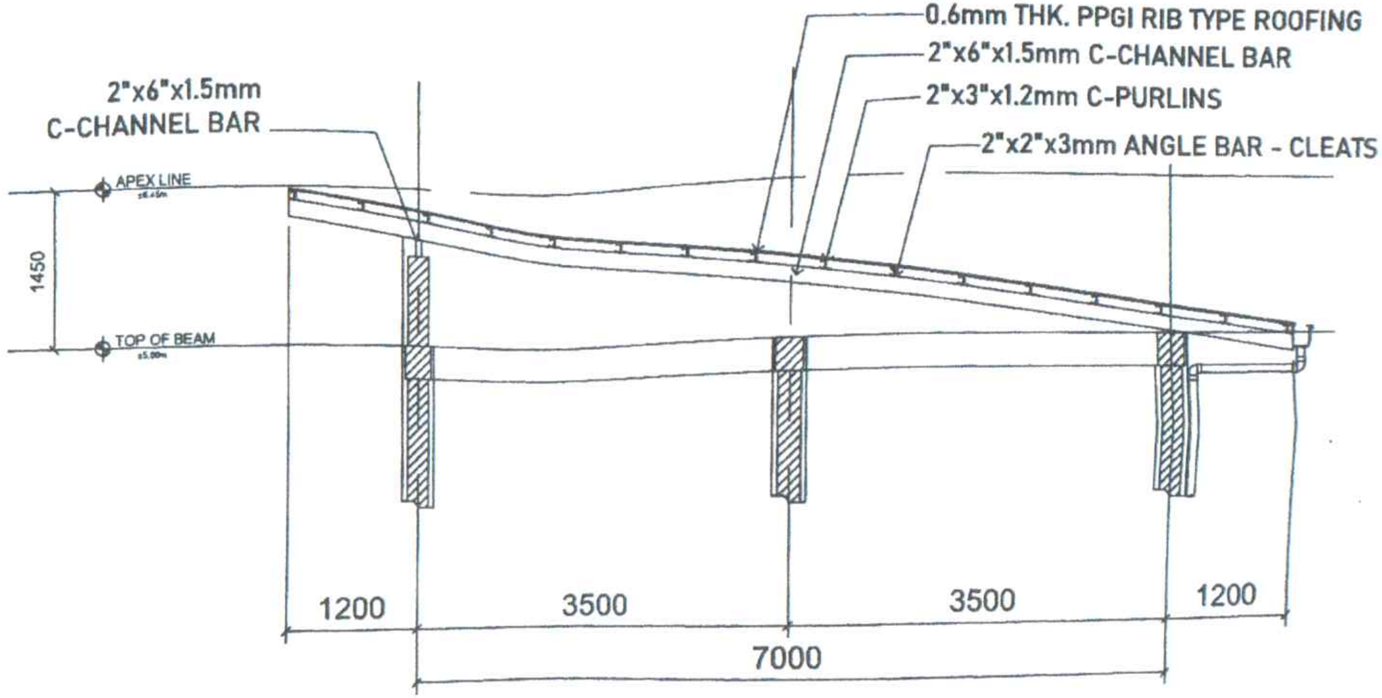
GRADE BEAM DETAIL (GB-01)



ROOF BEAM DETAIL (RB-01)

BEAM DETAILS

SCALE 1:20



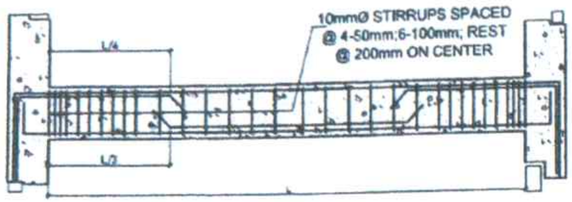
ROOF DETAILS

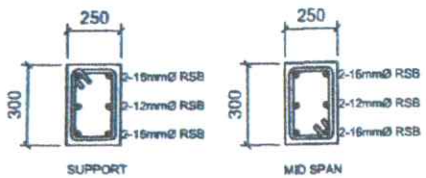
SCALE 1:50

PREPARED FROM THE OFFICE OF THE	PROJECT TITLE	PREPARED BY:	CHECKED & REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS	SHEET NO.
REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY	ROLANDO J. CADAWAS, ABE Engineer I, RAED	MARK HARRY G. PASTOR, ABE Chief, RAED	DENNIS T. TACTAC, ABE RTD for Operations	JOHN B. PASQUAL, DVM OIC, Regional Executive Director	BEAM DETAILS ROOF DETAILS	12 / 21

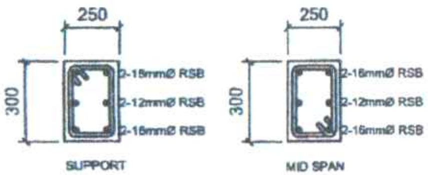
LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CABAYAN, ILOCOS SUR

PLANS-SSIP/FMR/PHF/OTHERS-20__

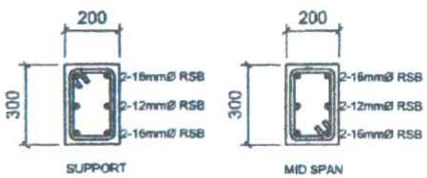




FOOTING TIE BEAM DETAIL (FTB-01)

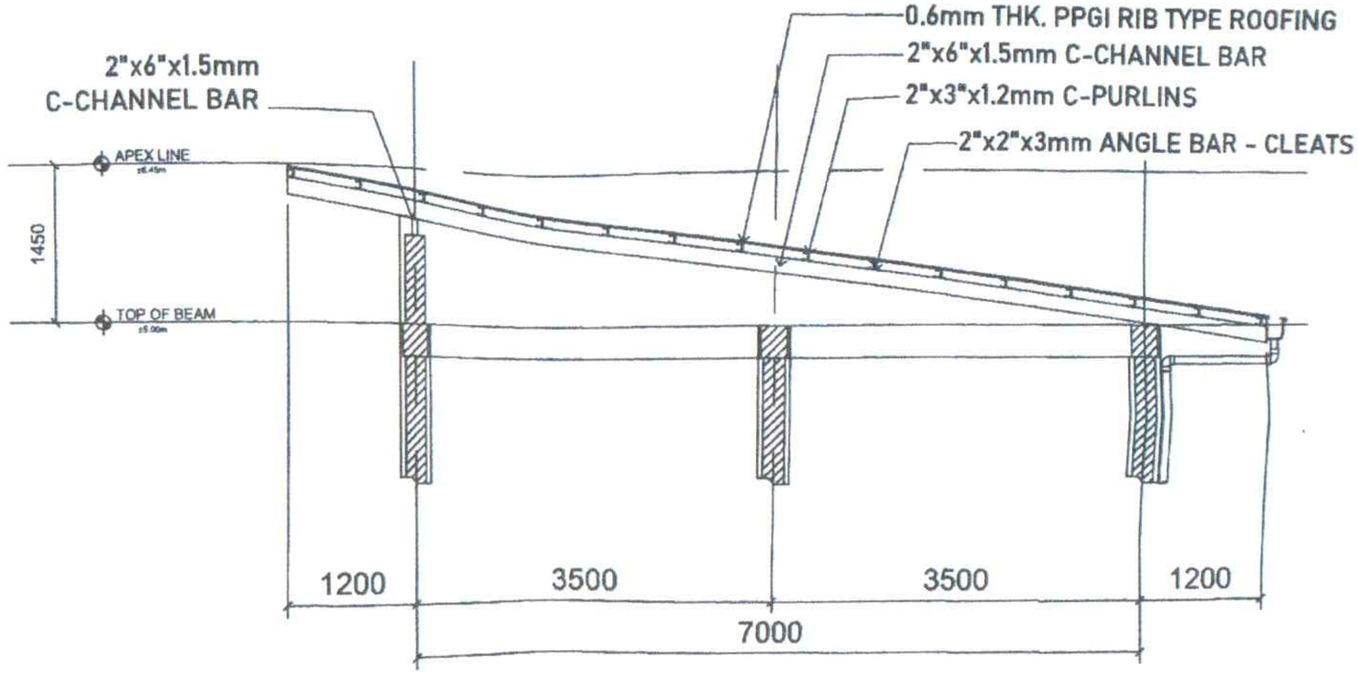


GRADE BEAM DETAIL (GB-01)



ROOF BEAM DETAIL (RB-01)

BEAM DETAILS
SCALE 1:20



ROOF DETAILS
SCALE 1:50

PREPARED FROM THE OFFICE OF THE	PROJECT TITLE	PREPARED BY:	CHECKED & REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS	SHEET NO.
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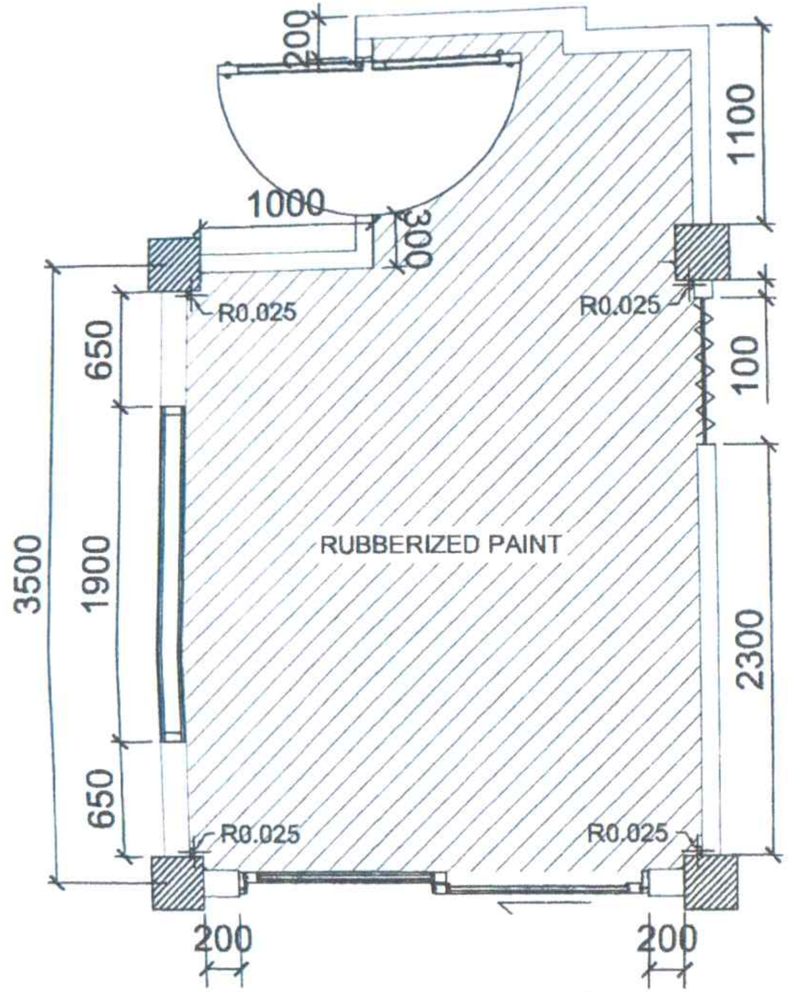
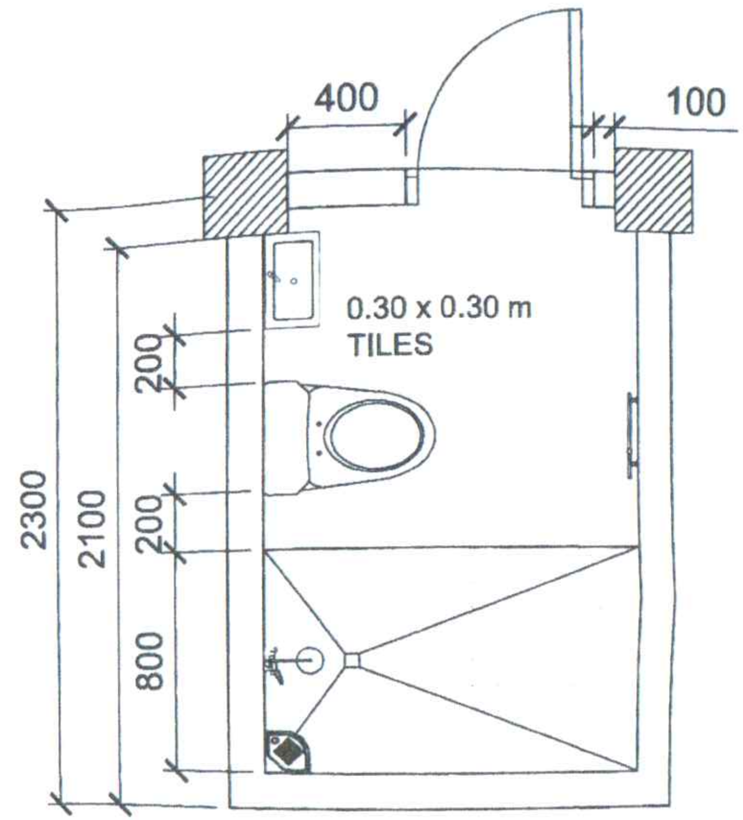
02 Rev. 00, Eff.Date: 01/20/2024



PACKING AREA

BLOW-OUT DETAILS
SCALE 1:30



COMFORT ROOM

BLOW-OUT DETAILS
SCALE 1:20

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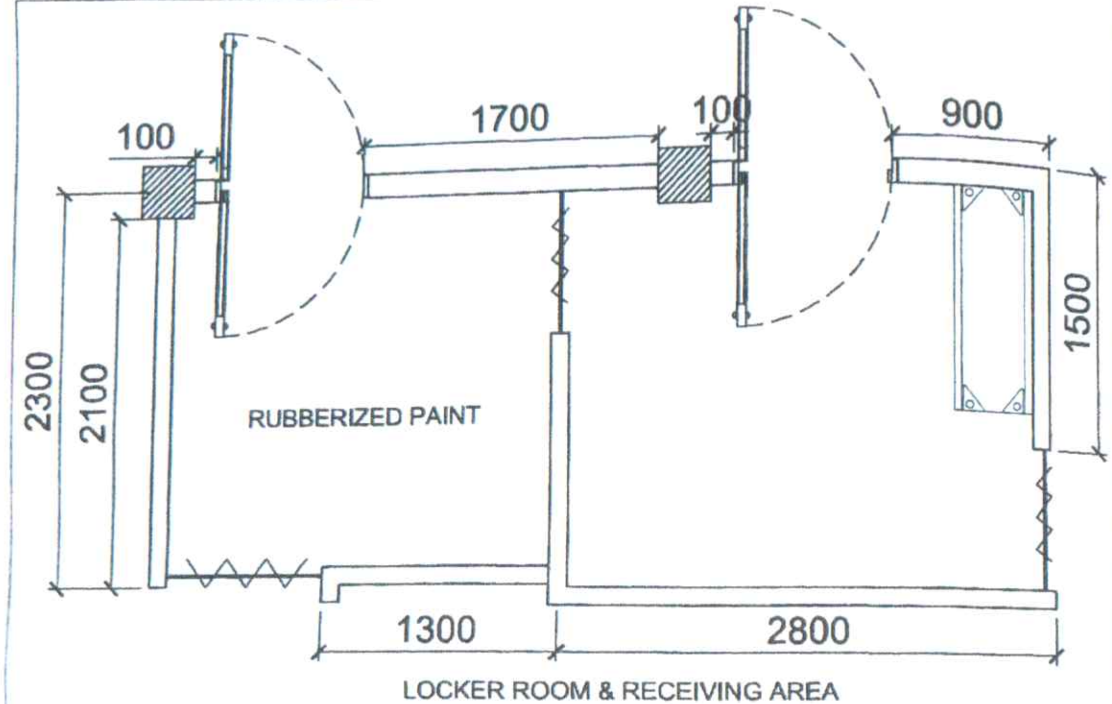
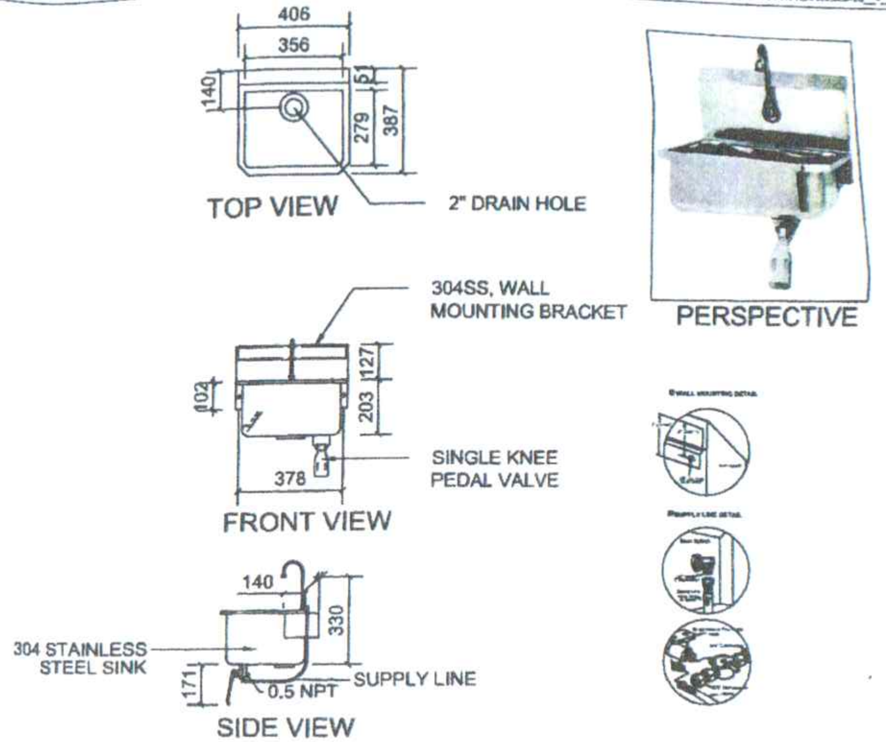
DEPARTMENT OF AGRICULTURE Regional Field Office No. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY	ROLANDO J. CADAWAS, ABE Engineer I, RAED	MARK HARRY G. PASTOR, ABE Chief, RAED	DENNIS L. ..., ABE RTD for Operations	JOHN B. PASCUAL, DVM OIC, Regional Executive Director	BLOW-OUT DETAILS OF CR & PACKING AREA	13/21

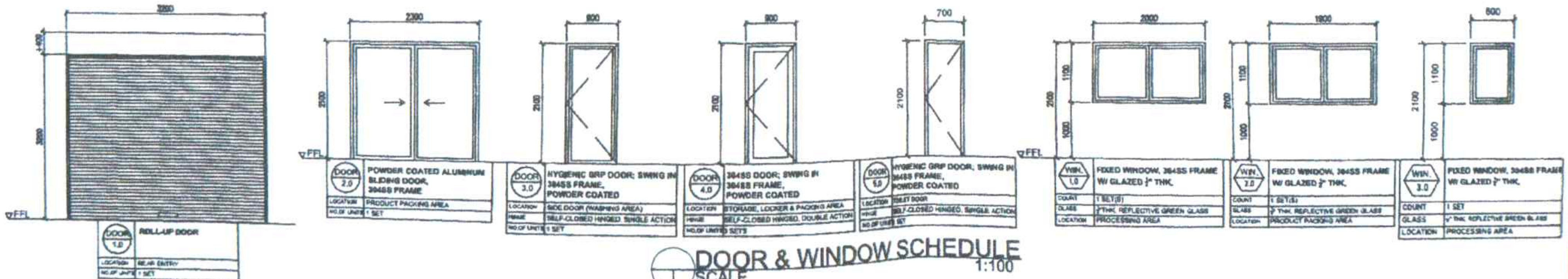
02 Rev. 00. Eff.Date: 01/20/2024



BLOW-OUT DETAILS
SCALE 1:30



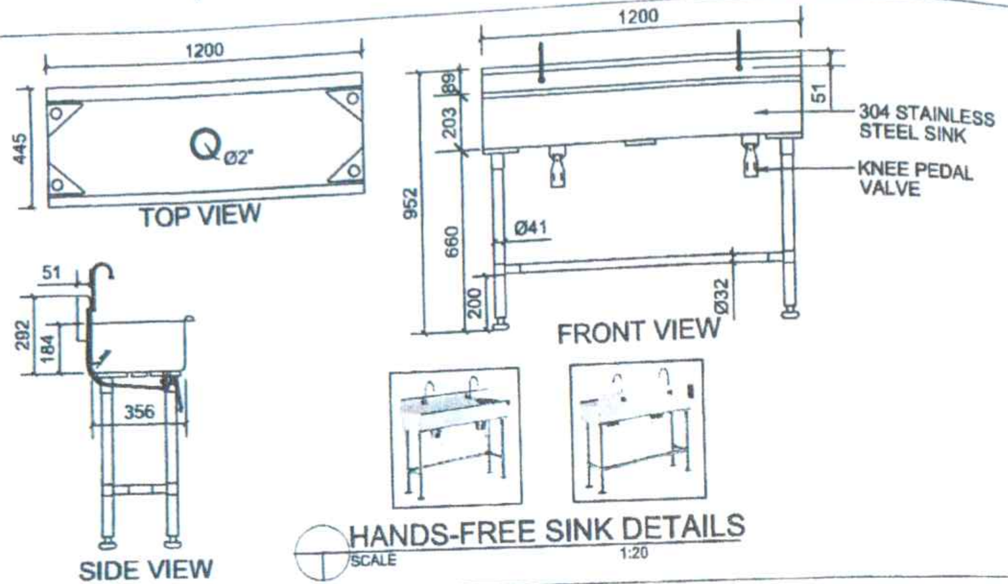
HANDS-FREE SINK DETAILS
SCALE 1:20



DOOR & WINDOW SCHEDULE
SCALE 1:100

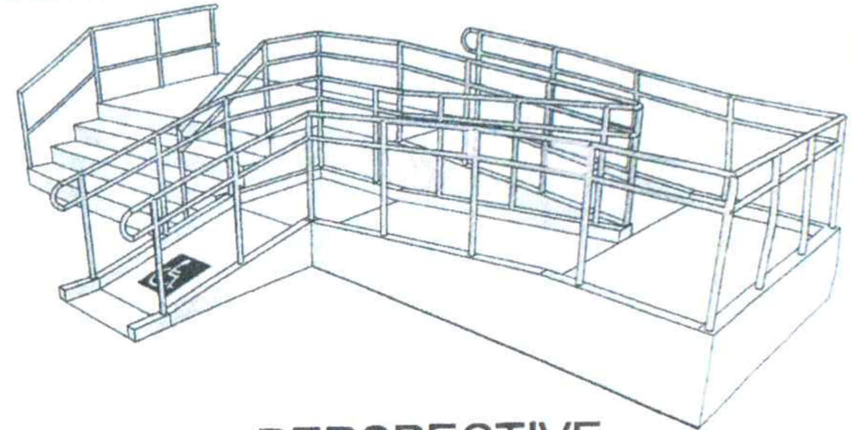
PREPARED FROM THE OFFICE OF THE	PROJECT TITLE	PREPARED BY	CHECKED & REVIEWED BY	RECOMMENDING APPROVAL	APPROVED	SHEET CONTENTS	SHEET NO.
DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CABUGAO, ILOCOS SUR	ROLANDO J. CADAWAS, ABE ENGINEER I, RAED	MARK HARRY C. PASTOR, ABE Chief, RAED	DENNIS F. TACTAC, ABE RTD for Operations	JOHN B. PASCUAL, DVM OIC, REGIONAL EXECUTIVE DIRECTOR	DOORS & WINDOWS SHEDULE BLOW-OUT DETAILS HANDS-FREE SINK DETAILS	14 / 21

02 Rev. 00, Eff.Date: 01/20/2024

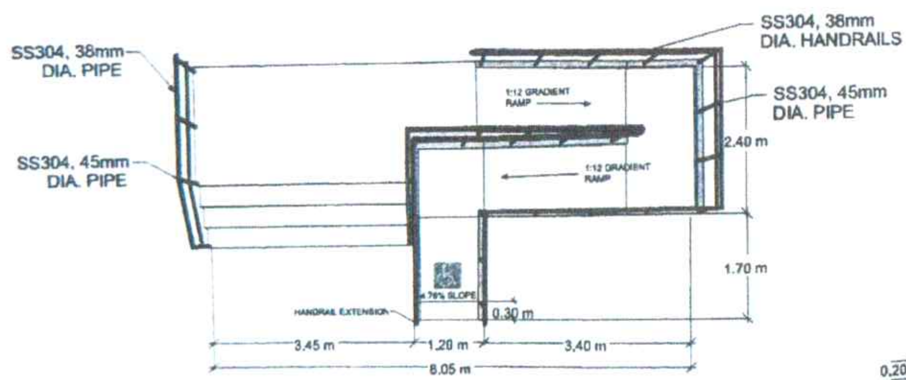


HANDS-FREE SINK DETAILS

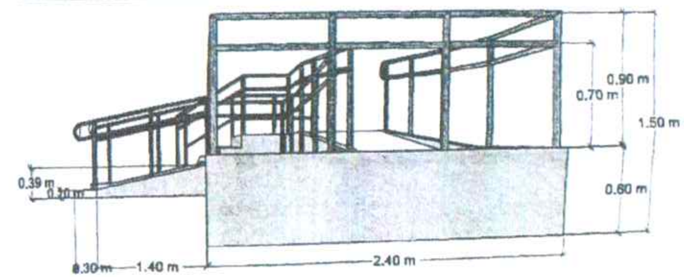
SCALE 1:20



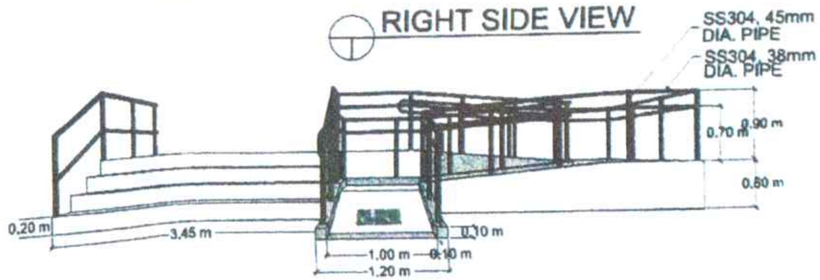
PERSPECTIVE



TOP VIEW



RIGHT SIDE VIEW



FRONT VIEW

STAIR & RAMP DETAILS

SCALE NTS

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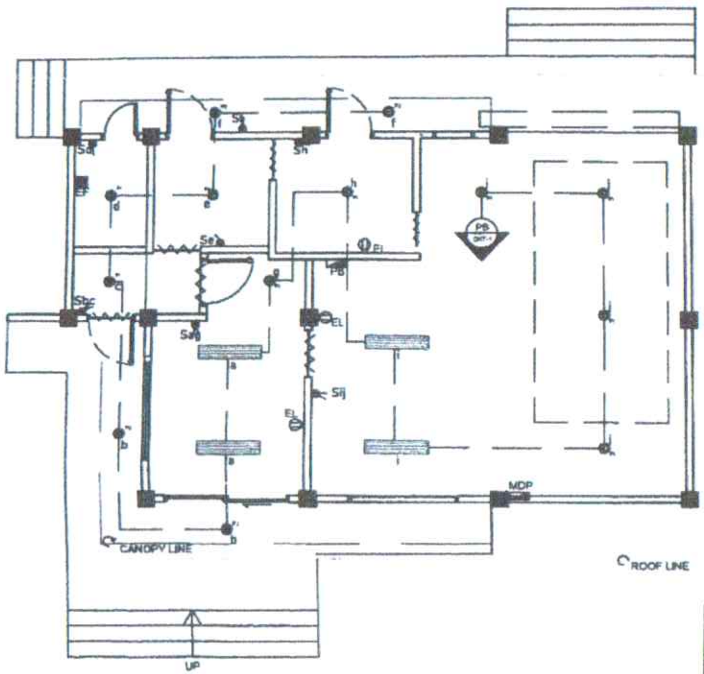
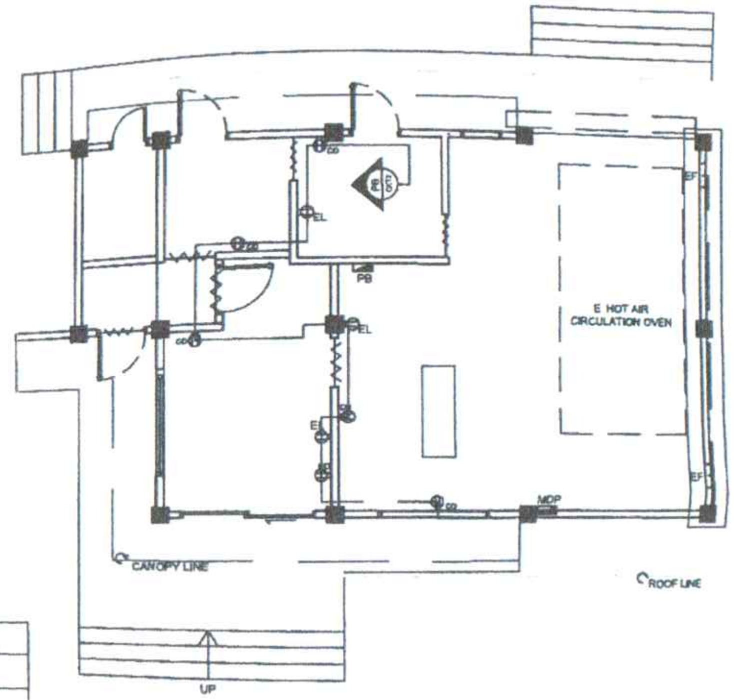
02 Rev. 00. Eff.Date: 01/20/2024



LIGHTING LAYOUT
SCALE 1:100



CONVENIENCE OUTLET LAYOUT
SCALE 1:100

LEGEND: ELECTRICAL SYMBOLS

Symbol	Description
	INDUSTRIAL WALL EXHAUST FAN 16"
P1	LED RECCESSED ROUND DOWNLIGHT 18 WATTS DAYLIGHT
P2	SURFACE MOUNTED LED DOWNLIGHT 12 WATTS DAYLIGHT
	1FT X 4FT RECESSED FLOURESCENT LAMP W/ 2PCS T8 TUBE LIGHTS
Sa	ONE GANG SWITCH
Sab	TWO GANG SWITCH
	PANEL BOX
CO	TWO GANG CONVENIENCE OUTLET (UNIVERSAL)
EF	ONE GANG CONVENIENCE OUTLET (EXHAUST FAN)
EL	ONE GANG CONVENIENCE OUTLET (EMERGENCY LIGHT)
	CIRCUIT HOMERUN - NO. INDICATED
	KILOWATT- HOUR METER
	SERVICE ENTRANCE
	CEILING EXHAUST FAN 8"

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REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CABAYAN, ILOCOS SUR	ROLANDO J. CADAWAS, ABE ENGINEER I, RAED	MARK HARRY G. PASTOR, ABE Chief, RAED	DENNIS I. TACTAC, ABE RTD for Operations	JOHN B. PASCUAL, DVM OIC, Regional Executive Director	LIGHTING LAYOUT CONVENIENCE OUTLET LAYOUT	16/21

3-PHASE 3-WIRE + GROUND 230 VOLTS SURFACE MOUNTED

MDP CKT No.	LOAD DESCRIPTION	LOAD (VA)	LOAD AMPERE PER PHASE AB	CA	BC	ABC	CIRCUIT BREAKER POLE	AF	AT	KAIC	SIZE OF CONDUCTOR MM² THHN + MM² THHN (G)	SIZE OF CONDUIT IN MMØ
1	HOT AND AIR CIRCULATION OVEN	60000				300.96	3		350		3-5.5 + 1-3.5 (G)	63
2	PANEL BOX	3400				17	2		30		3-5.5 + 1-3.5 (G)	15

FEEDER COMPUTATION:
IFL @ 60% D.F. = [301.74 +(14.78 x0.25)] x 0.8= 304.686 AMPS
TOTAL USE : 3-125 MM² THHN(3P) CU. WIRE
1-14 MM² THHN(G) CU. WIRE
IN 63 MMØ RSC

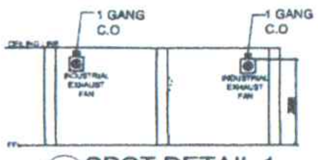
PROTECTION :
USE : 300 AT, 350 AF 3P
230V MAIN CB @ MDP

PB SCHEDULE OF ELECTRICAL LOADS & COMPUTATIONS

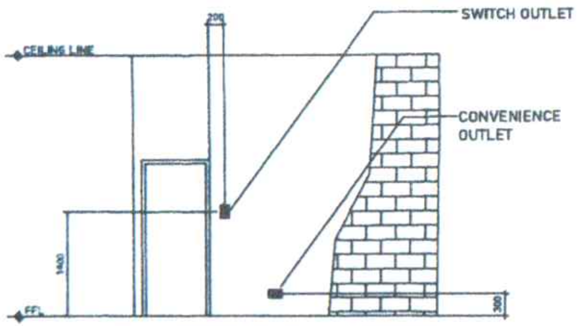
PB	CKT. NO.	LOC.	LOAD DESC.	TYPE OF LOAD L.O.	C.O.	Others	SNAP SWITCHES S1	S2	S3	S4	Typical	TOTAL	VA per CKT	LOAD (AMP.)	CKT. BREAKER	WIRE SIZE TW (SQ.MM.)	CONDUIT SIZE (PVC) MM.
	C-1	GF	LO	17		EL	4	3			100	1700	1.70	7.73	15	2 – 2.0 MM²	15 MM ø
	C-2	GF	CO		11	EF					180	1980	1.98	9.00	20	2 – 3.5 MM²	15 MM ø
	C-3	GF	SPARE		1						1000	1000	1.00	4.55	20	2 – 3.5 MM²	15 MM ø
			TOTAL	17	12		4	3	#	##		4680	4.680000	21.272727			

AMSC = (SC X D.F.) / 230 =	16.29	AMP.	MAIN CIRCUIT BREAKER	USE:	30 AMPS. PLUG IN TYPE MAIN CIRCUIT BREAKER
			FOR SERVICE ENTRANCE	USE:	2 PCS –5.5 MM². THHN AWG IN 20" ø PVC PIPE
			GROUND WIRE	USE:	

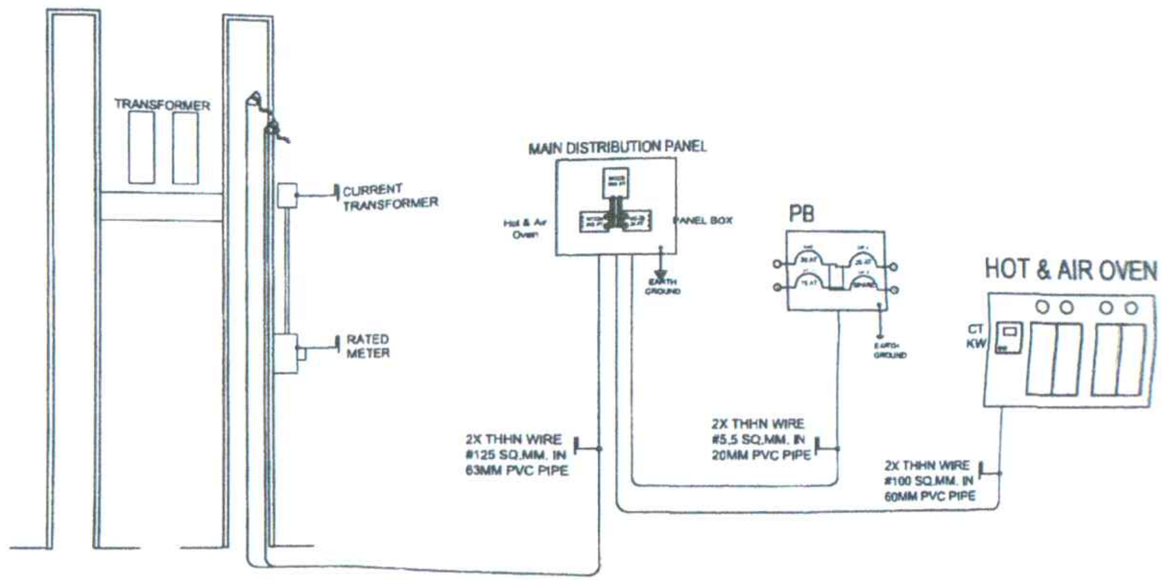
ELECTRICAL SPECIFICATION



SPOT DETAIL 1
SCALE NTS



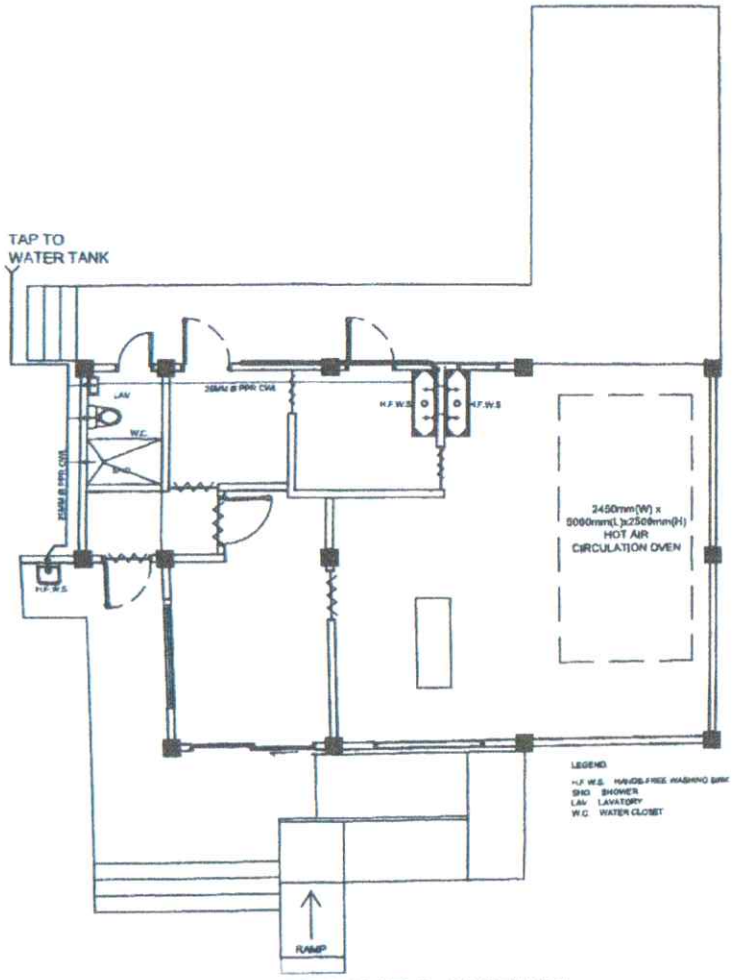
SWITCH & C.O LAYOUT
SCALE NTS



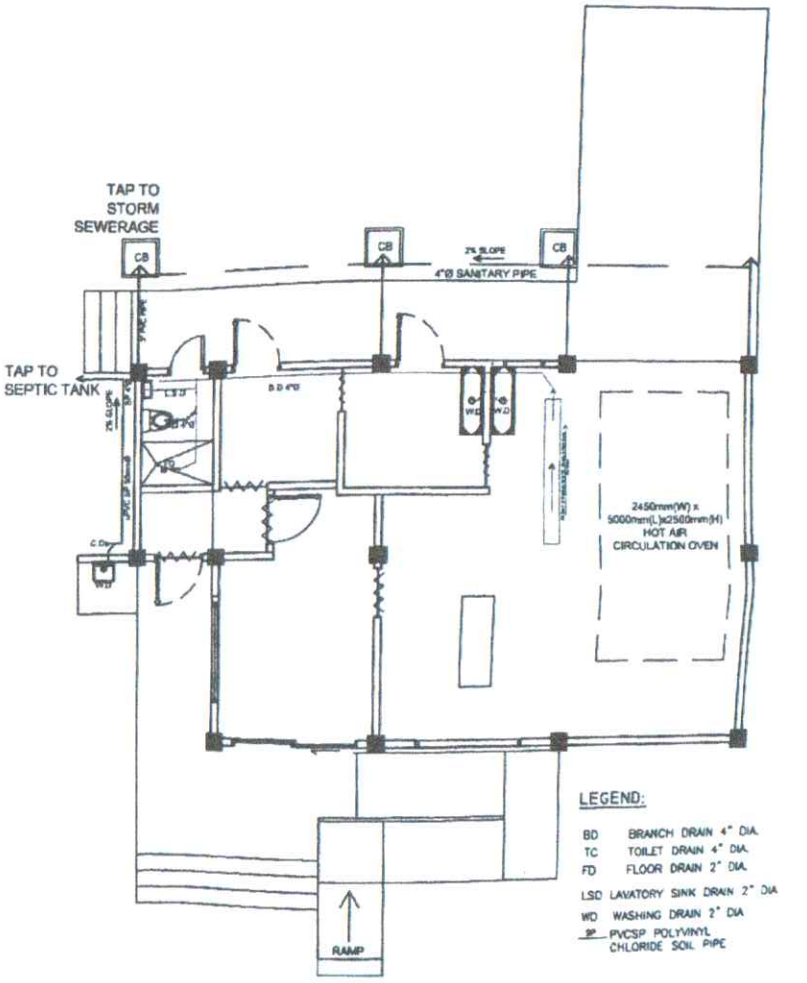
* THIS DRAWING IS A SCHEMATIC REPRESENTATION OF THE SYSTEM ONLY.

RISER DIAGRAM
SCALE NTS

PREPARED FROM THE OFFICE OF THE	PROJECT TITLE	PREPARED BY	CHECKED & REVIEWED BY	RECOMMENDING APPROVAL	APPROVED	SHEET CONTENTS	SHEET NO.
Republic of the Philippines DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. DON ALEJANDRO QUIROLGICO, CAMAYAN, ILOCOS SUR	ROLANDO J. CADAWAS, ABE Engineer / RAED	MARK HARRY G. PASTOR, ABE Chief, RAED	DENNIS I. TACTAC, ABE RTD for Operations	JOHN B. PASCUAL, DVM OIC, Regional Executive Director	RISER DIAGRAM SPOT DETAILS SWITCH & C.O. LAYOUT	17 / 21



WATERLINE LAYOUT
SCALE 1:100



SANITARY LAYOUT
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DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 REGIONAL AGRICULTURAL ENGINEERING DIVISION	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. SAN ALEJANDRO (SUBLEGUE), CAGAYAN, ILOCOS SUR	ROLANDO J. CADAWAS, ABE ENGINEER I / RAEO	MARK HARRY G. CASTOR, ABE Chief, RAED	DENNIS C. TACPAC, ABE RED	JOHN B. PASCUAL, DVM OIC-REGIONAL EXECUTIVE DIRECTOR	WATER LINE LAYOUT SANITARY LAYOUT	18 21

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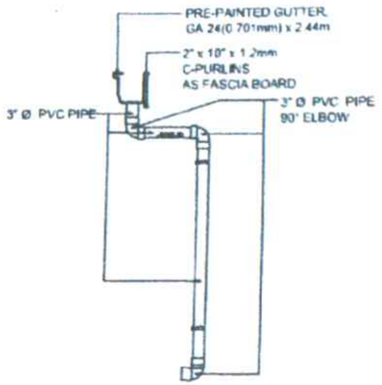
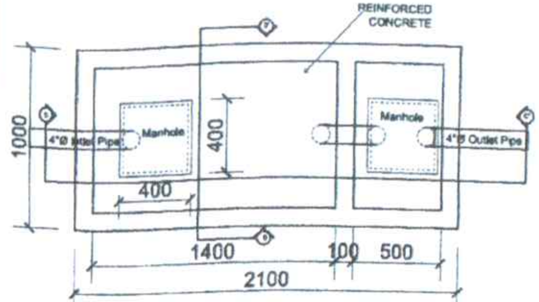


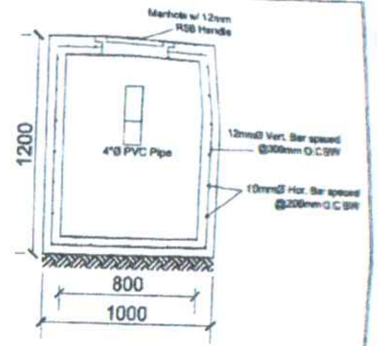
PLUMBING NOTES

1. ALL PLUMBING WORKS INCLUDED HEREIN SHALL BE EXECUTED ACCORDING TO THE REQUIREMENTS OF THE PHILIPPINE PLUMBING CODE.
2. COORDINATE THE DRAWING WITH OTHER RELATED DRAWINGS AND SPECIFICATIONS. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY FOUND THEREIN.
3. THE PLUMBING LAYOUT IS ONLY DIAGRAMMATIC. PIPES, CLEANOUTS, AND CHECK VALVES SHALL BE CONCEALED.
4. ALL SLOPE OF HORIZONTAL BRANCHES (SEWER), MAINTAIN 1% (MINIMUM), UNLESS NOTED OTHERWISE.
5. AIR CHAMBER: ALL INDIVIDUAL BRANCHES TO FIXTURE OR GROUP OF FIXTURES AND / OR EQUIPMENT SHALL BE PROVIDED WITH AIR CHAMBER OF CAPPED VERTICAL PIPE EXTENSION OF DIMENSION AS SHOWN IN THE DETAIL.
6. ALL FLOOR DRAINS SHALL BE VENTED INDIVIDUALLY.
7. ALL CLEAN OUTS SHALL BE FLUSH MOUNTED TO WALL. DO NOT INSTALL FLOOR CLEAN OUT EXCEPT AT LINES ON GRADE AND SERVICE AREAS NOT SUBJECTED TO TRAFFIC.
8. ALL BRANCHES OF FIXTURE OR GROUP OF FIXTURES SHALL BE PROVIDED WITH AIR CHAMBER MADE OF CAPPED VERTICAL EXTENSION PIPE.
9. ALL UNDERGROUND GALVANIZED IRON PIPE (G.I) INDIRECT CONTACT WITH SOIL SHALL BE PROVIDED WITH TWO (2) COATS OF TAR COVERING AND WRAPPED WITH JUTE CLOTH.
10. ALL PVC PIPES SHALL BE OF APPROVED QUALITY AND POLYPROPYLENE PIPES FOR WATER DISTRIBUTION PIPES SHALL BE TYPE 20.
11. ALL PLUMBING WORKS THEREIN SHALL BE UNDER THE DIRECT SUPERVISION OF A REGISTERED MASTER PLUMBER OR A DULY LICENSED SANITARY ENGINEER.
12. WATER METER SHOULD BE LOCATED OUTSIDE THE PROPERTY LINE.
13. WATER SUPPLY FOR CISTERN AND SUPPLY LINE FOR THE BUILDING MUST BE LOCATED ALONG THE PERIMETER FENCE 400 METERS HEIGHT ABOVE DRIVE WAY LEVEL WITH 3 LAYERS OF JUTE SACK AND BLACK COAL TAR.
14. WATER LINE LAYOUT FOR WASHROOM TO SUPPLY UNITS.
15. ALL WATER SUPPLY LINE FOR WASHROOMS SHALL NOT BE EMBEDDED IN SLAB. BLOCK OUTS SHALL BE PROVIDED FOR POSSIBLE DIRECTION OF PIPES.
16. ALL FINAL LOCATION OF TOILET FIXTURES SHALL BE BASED ON THE MODULAR SETTING OF TILES.
17. DOUBLE DRAINS FOR BATH TUBS.
18. DOWEL FOR DOWNSPOUTS AND REINFORCEMENT 15 mmØ @ 600mm STAGGERED.
19. PVC CEMENT FOR JOINTS WITH EPOXY OUTSIDE BONDING.
20. RISER SHOUL NOT CROSS MASTERS BEDROOM OR OTHER MAIN AREAS.
21. G.I. PIPES SHOULD BE PAINTED WITH RED LEAD OR BLACK COAL TAR. IT SHOULD NOT BE EMBEDDED ON SLAB, SLEEVING OF PIPE IS REQUIRED ON BEAM. FOLLOW WATER LINE LAYOUT AS PER PLAN.

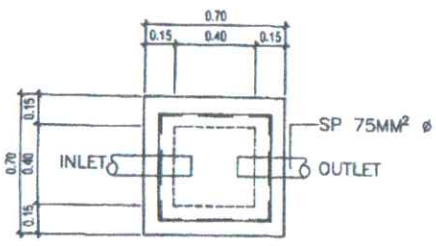
VENT AND DOWNSPOUT - 50 TO 150 mm. Ø SHALL BE POLYVINYL CHLORIDE (PVC) PIPE.
DRAINAGE LINE - 50 TO 150 mm. Ø SHALL BE POLYVINYL CHLORIDE (PVC) PIPE, SERIES 1000 MANUFACTURED ACCORDING TO ASTM 2729
SEWER LINE - 50 TO 150 mm. Ø SHALL BE POLYVINYL CHLORIDE (PVC) PIPE. SDR.35, MANUFACTURED ACCORDING TO ASTM 3034
WATER LINE - SHALL BE POLYPROPYLENE PIPES "BOR PLUS", "UNITEC" OR "VESBO"



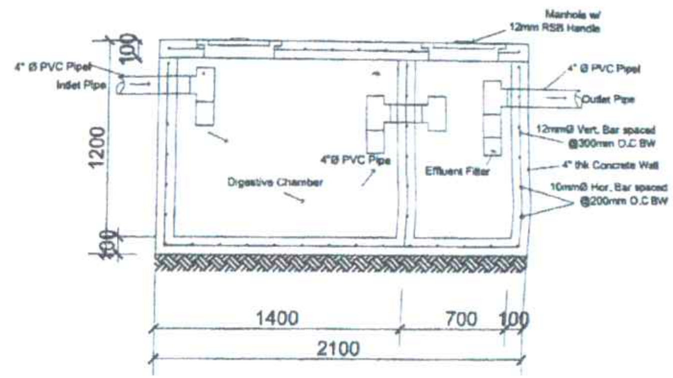
SEPTIC TANK PLAN



X-SECTION D-D'



PLAN



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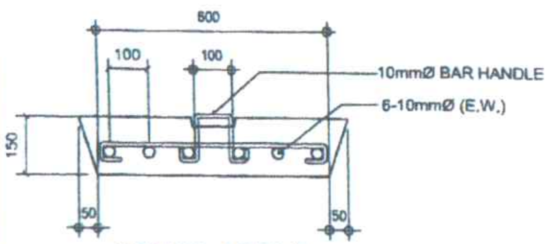
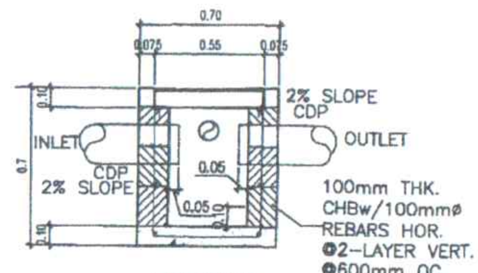


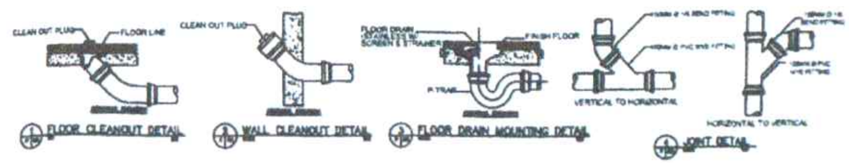
COVER DETAIL



SECTION

CATCH BASIN DETAILS

SCALE 1:75



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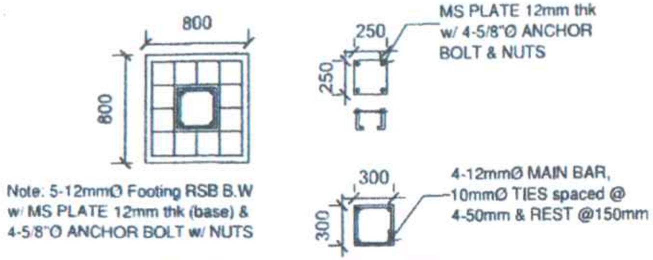
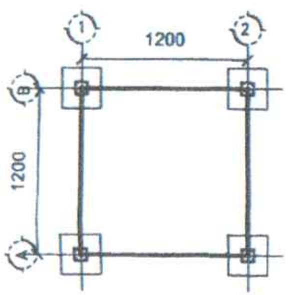
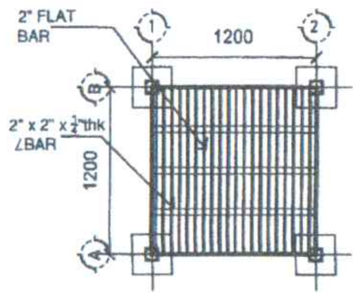
DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY LOCATION: BRGY. SAN ALEJANDRO QUIRINO, ILOCOS SUR	ROLANDO J. CADAWAS, ABE ENGINEER I, RAED	MARK HARRY C. PASTOR, ABE Chief, RAED	DENNIS I. TACTAC, ABE RTD for Operations	JOHN B. PASCUAL, DVM OIC, REGIONAL EXECUTIVE DIRECTOR	CATCH BASIN DETAILS SEPTIC TANK DETAILS	19/21



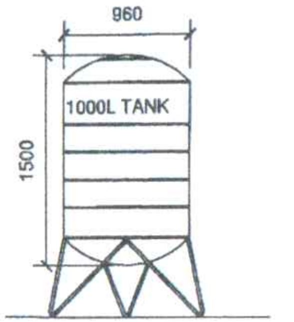
COLUMN & FOOTING DETAILS



FOUNDATION PLAN

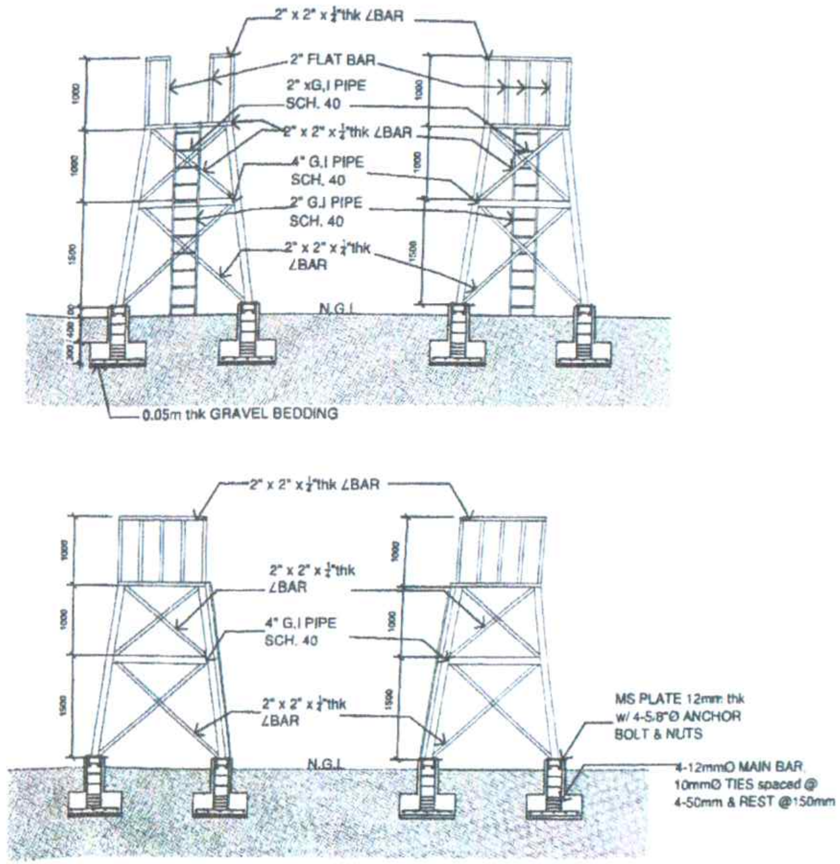


WATER TANK STAND PLAN



WATER STORAGETANK PLAN

PERSPECTIVE



WATER TANK ELEVATION
SCALE 1:100

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DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 Regional Agricultural Engineering Division	CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY	ROLANDO J. CADAWAS, ABE	MARK HARRY C. PASTOR, ABE Chief, RAED	DENNIS L. TACTAC, ABE	JOHN B. PASCUAL, DVM	WATER STORAGE TANK DETAILS	20/21

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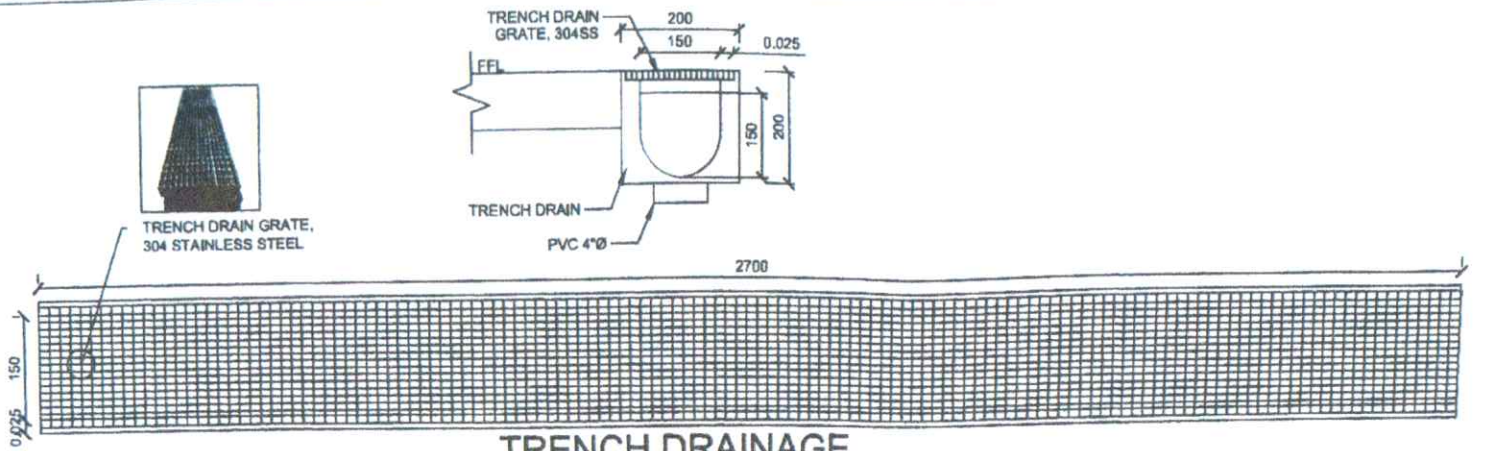
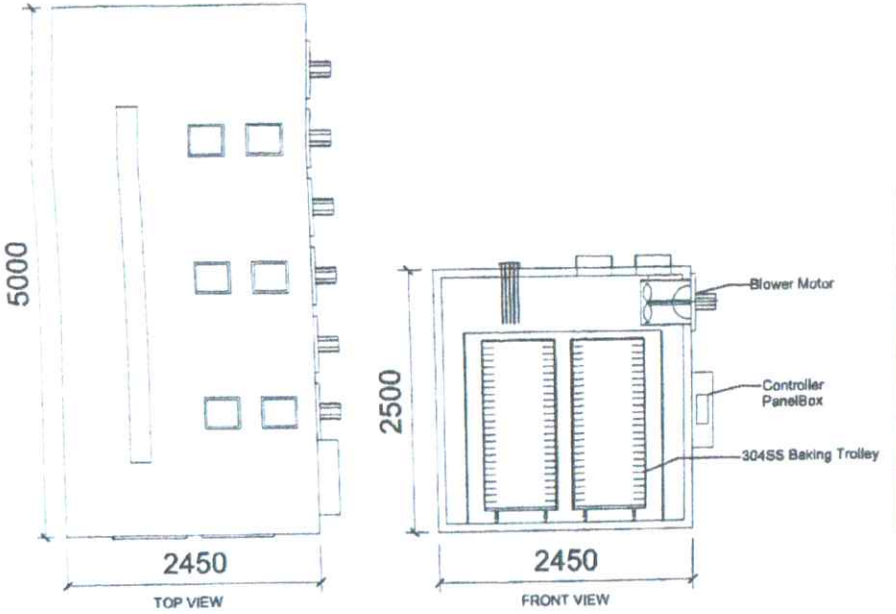
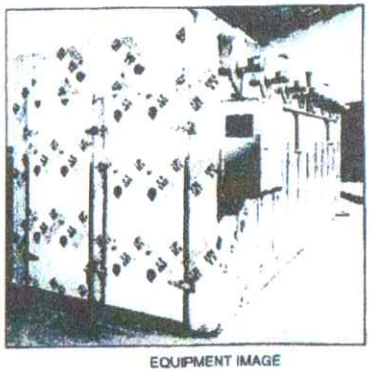


TRENCH DRAINAGE



HOT AIR CIRCULATION OVEN DETAIL



EQUIPMENT IMAGE

NO.	ITEM / DESCRIPTION	
1	DIMENSION	2450 (W) X 5000 (L) X 2500MM (H)
2	WORKING SIZE	1700 X 4800 X 1700MM
3	HEATING MODE	380V / 50HZ
4	CIRCULATING FAN	0.75kW
5	MOISTURE EXHAUST FAN	0.37kW
6	NO. OF TROLLEY	10 SETS
7	DRYING TROLLEY SIZE	700 X930 X 1750MM
8	DRYING LAYER	24 LAYERS
9	BAKING TRAY TYPE	STAINLESS STEEL MESH PLATE
10	BODY MATERIALS	304 STAINLESS STEEL
11	BATCH CAPACITY	800kg - 1000kg per BACTH

PREPARED FROM THE OFFICE OF THE:
DEPARTMENT OF AGRICULTURE
REGIONAL FIELD OFFICE NO. 1
REGIONAL AGRICULTURAL ENGINEERING DIVISION

PROJECT TITLE:
CONSTRUCTION OF FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY
LOCATION: BRGY. DAP-DAP, ALILEM, ILOCOS SUR

PREPARED BY:
ROLANDO J. CADAWAS, ABE
ENGINEER I

CHECKED & REVIEWED BY:
MARK HARRY G. PASTOR, ABE
Chief, RAED

RECOMMENDING APPROVAL:
DENNIS I. TACTAC, ABE
RTD for Operations

APPROVED:
JOHN G. PASCUAL, DVM
OIC-REGIONAL EXECUTIVE DIRECTOR

SHEET CONTENTS:
DEHYDRATION EQUIPMENT
TRENCH DRAINAGE

SHEET NO.
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02 Rev. 00, Eff.Date: 01/30/2024

Republic of the Philippines
DEPARTMENT OF AGRICULTURE
Regional Field Office No. 1
Aguila Road, Sevilla, San Fernando City, La Union
Tel. Nos.: 888-43-05; 888-31-79; 888-2045
888-0341; 242-10-45 to 10-46

SCOPE OF WORK AND SPECIFICATIONS

PROJECT NAME:	**Construction of Fruits and Vegetables Dehydration Processing Faciltiy**
LOCATION:	**Brgy. Don Alejandro Quirolgico, Caoayan, Ilocos Sur**
PROJECT DESCRIPTION:	**Construction of fruits and vegetables dehydration processing facility with equipment**
AMOUNT:	**PHP. 6,000,000.00**

GENERAL PROVISIONS

The contractor/implementer of the project shall verify all dimensions and conditions of the site and shall notify the DA Project Engineer for any discrepancies between actual conditions and information shown in the drawing before proceeding with the work.

The structural drawings and specifications represent the general framework of the structure. They do not indicate methods of construction, unless so stated, the contractor/implementer shall provide all necessary measures to protect the structure, the contractor/ implementer's obligation to notify the DA Project Engineer of any conditions that may endanger the stability or cause distress in the structure during phases of construction.

This set of specifications shall govern the methods of construction and kinds of materials to be used for the proposed Project shown on the accompanying plans and detailed drawings.

All parts of the construction shall be finished with first class workmanship to the fullest talent and meaning of plans and the specifications, and to the satisfaction of the Department of Agriculture through its Project Engineer. Any defective material or poor workmanship should be replaced or improved by the contractor without additional cost to the owner.

All other materials specifically indicated and illustrated on plans shall be taken as part of this specification regardless whether or not written and such other materials shall be approved by the owner before they are set in place.

DESCRIPTION

I. GENERAL REQUIREMENTS (PERMITS & PROJECT BILLBOARD)

- The contractor shall be responsible for securing all necessary permits related to the project, which shall include but not limited to building permits, occupancy permit, etc.).
- All related documents shall be submitted to the End User.
- The contractor is responsible to secure and obtain information from the regulatory agencies in municipality for all and any other required permits not listed below. A copy of the required permits shall be submitted to the end user within 24 hours of obtaining such permits.
- Building Permit/s, including the demolition of the building, the foundation are the general contractor's responsibility.

- Electrical permit and plans (if required by Building Official), is the contractor's responsibility.
- Health department approval and septic connections, contractor's responsibility. Contractor is required to check with the department to obtain information on the required plans and permits, if any.
- The new billboard design layout and dimension shall be installed on a standard billboard, measuring 1200mm x 2440mm (4' x 8') using 12mm (1/2 inch) thick marine plywood or tarpaulin posted on 5mm (3/16 inch) marine plywood.
- For each building project, the billboard shall be installed in front of the project site.

II. PROVISION OF SAFETY AND HEALTH

- Building premises shall have adequate fire, emergency or danger sign and safety instructions of standard colors and sizes visible at all times.
- Other visible signs that may be needed to direct the driver of motorized vehicle such as STOP, YIELD, and DO NOT ENTER, properly positioned within the compound of the establishment shall be used to increase safety especially during the night.
- Good housekeeping shall be maintained at all times through cleanliness of building, yards, machines, equipment, regular waste disposal, and orderly arrangement of processes, operations, storage and filing of materials.
- All buildings, permanent or temporary shall be structurally safe and sound to prevent their collapse.
- The contractor shall, at his own expense furnish his workers with protective equipment for the eyes, face, hands and feet, protective shields and barriers whenever necessary by reason of the hazardous nature of the process or environment, chemical or radiological or other mechanical irritants or hazards capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.
- Deduction for the loss or damage of personal protective equipment shall be governed by Article 114, Book III, Labor Code of the Philippines, and Section 14, Rule VIII, Book III, Omnibus Rules Implementing the Labor Code.
- At every construction site there shall be organized and maintained a Healthy and Safety Committee conforming with the rules of OSH.
- In the application of this Rule, the construction, steps, and arrangement of materials used may vary provided that the strength of the structure is at least equal to that herein prescribed.
- Fire Protection equipment shall be provided in accordance with the requirements.
- The Contractor should comply with the latest Occupational Safety and Health Standards by the Department of Labor and Employment.
- Any work done beyond the height of 3m, the worker should wear a full body harness suspended on a solid anchor and to a life line.

III. MOBILIZATION AND DEMOBILIZATION

- The work shall consist of the mobilization and demobilization of the contractor's personnel, equipment and construction supplies to the site necessary for performing the work required under the contract.
- The Contractor shall mobilize and move into the Project Site (in accordance with his approved Construction Program and Equipment Moving-in and Utilization Schedule) the required construction equipment needed for the successful completion of the Contract Work immediately after receipt of the approved Construction Program.
- All roads, culverts, sidewalks, structures, etc. shall be protected from damages by the equipment.

- Access road shall be as shown on the drawings. If alternate routes are obtained by the contractor, they must be approved by the municipal engineer or the project engineer before use.
- Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not required or included in the contract from the site; including the disassembly, removal and site clean-up, of offices, buildings and other facilities assembled on the site specifically for this contract.
- This work includes mobilization and demobilization required by the contract at the time of award. If additional mobilization and demobilization activities and costs are required during the performance of the contract as a result of changed, deleted, or added items of work for which the Contractor is entitled to an adjustment in contract price, compensation for such costs will be included in the price adjustment for the item or items of work changed or added.

IV. ESTABLISHMENT OF TEMPORARY FACILITY

- The contractor shall install/construct temporary facilities and/or rent a vacant house to expeditiously execute the work and shall remove them from the site when no longer required.
- The contractor shall obtain temporary and maintain in good condition a supply of potable water for construction use.
- The contractor shall install temporary electric services with sufficient capacity to supply proper current for various types of construction tools, motors, welding machines, pumps, testing, and other work required.

V. EARTHWORKS

EXCAVATION

- Stumps remaining from clearing operations shall be cut flush or removed as directed by the Owner. All stump holes shall be filled and the area rough graded. All debris shall be disposed of as specified in Paragraph 4 of Specification CAR-SH-CH-3 "Clearing and Grubbing." Burying of debris shall not be permitted within 1000ft of the area grubbed.
- During the course of all excavation work located in areas beyond the clearing and grubbing lines shown on the drawings, extreme care shall be exercised by the Contractor to preserve and avoid damage to trees, shrubs and all other vegetation which does not directly hamper work progress. The Contractor's plans for the dimensions and routes of required access roads shall be subject to the approval of the End-user.
- Adequate barricades shall be erected and maintained around excavations where required for safety.
- Unclassified excavation shall consist of the removal, storage and/or disposal of all materials required to be removed such as topsoil, clay, sand, gravel, rock fragments, boulders, soft and disintegrated rock or any other material that can be effectively removed.
- It is likely that fissures, cracks, joints, cavities, overhangs, or other irregularities in the rock surface may be encountered that will require excavation in excess of the foundation lines and grade initially shown on the drawings or specified. The right is reserved by the Owner to vary the depth, width and length of excavation and to increase or decrease the slopes of the excavations for the purpose of obtaining the most stable or economical foundation or the most desirable final result. The right is also reserved by the End-user to require that the additional excavation be performed after excavation has been commenced or has been completed to the lines and/or grades shown on the drawings, previously specified, ordered, or staked on the ground.

BACKFILL

- Backfill material around masonry structures shall not be placed until released by the End-user after consideration of curing and strength requirements for the concrete.
- Care shall be taken to place backfill symmetrically, and in uniform layers, to prevent harmful eccentric loading on a structure or foundation.
- Unless otherwise specified or directed by the End-user, heavy hauling or compacting equipment shall be permitted no closer than three feet to any structure or foundation during backfilling. In all areas closer than three feet, or where workspace is limited, portable equipment such as vibratory plates, rammers, or pneumatic tampers shall be used. The equipment and procedures used shall be subject to the approval of the Owner.

GRAVEL FILL

- All such unsuitable materials shall be removed from the site and spread uniformly over the areas adjacent to the project site, or otherwise disposed of as maybe directed by the Architect or Engineer in charge of the construction.

VI. RSB WORKS

- All reinforcement shall be placed in accordance with plans furnished by the Engineer. In case of any doubt or ambiguity in placing of steel, the Contractor shall consult the Engineer whose decision shall be final in such cases.
- Steel reinforcing bars to be used for this project shall consist of standard deformed structural bars meeting ASTM specifications. All reinforcement shall be placed in accordance with plans furnished by the Engineer.
- All reinforcing steel bars used shall be new and free from rust, oil, defects, grease or links. All loose rust or scale, adhering materials and all oil or either material which tend to destroy bond between the concrete and the reinforcement shall be removed before placing the steel and before concreting begins.
- Metal reinforcement shall be accurately placed and adequately secured by concrete or metal chair spacers. The minimum distance between the parallel bars shall be one and one-half times the diameter for round bars and twice the side dimensions for square bars. In no case shall the clear distance between bars shall be less one or more than one and one-third times the minimum size of the coarse aggregates. Where bars are used in two or more layers, the bars in the upper layers at distance of not less than one inch.
- All steel reinforcing bars shall be accurately placed and secured against displacement by tying them together at each bar intersection with Gauge No. 16 galvanized iron wire.
- All main reinforcing steel used in the structure shall conform to ASTM Grade 40 (Intermediate Grade) with yield strength of 40 ksi (276 MPa).
- All temperature bars shall conform to ASTM Grade 30 Structural Grade with minimum yield strength of 30 ksi (207 MPa).
- Always apply red oxide for the exposed RSB to eliminate rusting.
- All hooks shall be in accordance with all standard hooks and anchorages specified in ACI 318-83 Building Code.

VII. CONCRETE WORKS (Class A)

- This section covers all the materials as cement, aggregates, water, admixtures and proportioning, mixing, transporting, placing, finishing, curing and protecting of concrete, including supplies, equipment, tools and all other incidentals necessary for concrete works.
- All the applicable provisions of the latest revision of the ACI Building Code (ACI- 318 -85) and American Society for Testing Materials (ASTM) shall govern in all cases not specifically provided for herein.

- All cement requirements of concrete works for the contract shall contractor-furnished. The cement shall conform to the requirements of the standard specification of Portland Cement (ASTM: C150 Type 1).

Materials

- Fine aggregates shall be clean, well-graded, hard, natural sand or manufactured sand or a combination of both. The minimum size of the aggregates shall not be larger than one-fifth (1/5) of the narrowest dimension between forms and not larger than three-fourths (3/4) of the minimum clear spacing between reinforcing bars, and in no case larger than two inches in diameter. Coarse aggregates shall be hard, durable, uncoated gravel, crushed gravel, free from any deleterious materials like alkali, loam, silt and any organic matter.
- Water used in making the concrete mass shall reasonably clean, potable, and free from injurious amount of oils, acids, alkali organic materials and other deleterious substances.

Mixing of concrete

- All concrete shall be machine-mixed for at least one and one-half minutes after all materials, including water, are in the mixing drum.
- The mixer shall be approved size and type which will ensure a uniform distribution of materials throughout the mass. It shall be equipped with a device for accurately measuring and controlling the amount of water in each batch.
- The first batch of concrete materials placed in the mixer shall contain a sufficient excess of cement, sand and water to coat inside of the drum without reducing the cement content of the mix to be discharged.

Specified Compressive Strength

Class	Psi	MPa
AA	4,000	27.57
A	3,000	20.68
B	2,500	17.23
C	2,000	13.78

- Class AA: For septic tanks and other work as indicated. (Not indicated in the plan).
- Class A: For slabs, beams, and wall above grade, columns and for all reinforced work not otherwise indicated or specified.
- Class B: For slabs on grade, and the beams, footings and for such concrete work as indicated or specified. (Not indicated in the plan).
- Class C: For all concrete not reinforce except as otherwise indicated or specified. (Not indicated in the plan).

Conveying and Placing of Concrete

- Concrete shall be conveyed from mixer to form as rapidly as practicable. There will be no vertical drop greater than 1.50 meters except where suitable equipment is provided to prevent segregation and where specifically authorized by the Architect and or the Structural Engineer.
- Concrete shall be worked readily into the corners and angles of the forms and around all reinforcements and embedded items without permitting materials to segregate. Concrete shall be deposited as close as possible to its final position so that flow within the mass does not exceed two meters and consequently segregation is reduced to a minimum near forms or embedded items, or elsewhere is directed, the discharge shall be so controlled that the

concrete may be effectively connected into horizontal layers not exceeding 30 centimeters in depth within the maximum lateral movement specified.

Curing

- Compressive strength of concrete at 28 days curing period shall attain 3000 psi (20.7 MPa) with well graded aggregates having a maximum size of 2 inches (50mm).

VIII. FORMS WORKS & SCAFFOLDINGS

- Provide forms that will produce correctly aligned concrete. Column forms shall be checked for plumpness before concrete is deposited. Hand holes shall be provided in column forms at lowest points of pour lifts to render this space accessible for cleaning.
- Joints in forms shall be horizontal or vertical. Lumber once used in forms shall be nailed withdrawn and surfaces to be in contact with concrete shall be thoroughly wetted with water in advance of pouring. Woods to be used shall be kiln dried and treated with anti-termite chemical. And all lumber surfaces in contact with concrete and masonry shall receive one brush of bituminous paint.
- Immediately after the removal of the form, all projecting wires and bolts and other devices used for holding forms shall be cut off at least one-half centimeter beneath the finished surfaces. All holes and defects shall be thoroughly wetted and then painted up solid with cement putty mortar of the same proportions as the mortar used in the body of the work. All parts protruding beyond the surfacing shall be treated in such manner as to effectively remove all the lines and marks impressed by the form works.
- Forms shall be removed in a manner which will prevent damage to the concrete and shall not be removed until the concrete has attained sufficient strength to support its own weight and any loads that may be placed on it. Side forms of beams and girders may be removed earlier than the bottom forms but additional posts or shoring must be placed under the beams or girders until they have attained their strength. Forms shall not be removed until approval of the Design Engineer. Any repair of surface imperfections shall be performed at once and airing shall be started as soon as the surface is sufficiently hard to permit it without further damage.
- Use Phenolic Board and Good Lumber
- No scaffold shall be erected, moved, dismantled, or altered except under the supervision of qualified and authorized certifying engineer and by competent workmen possessing adequate experience of such work under valid permit. All materials for any scaffold shall be inspected by authorized certifying engineer on each occasion before using.
- Only cup-lock type scaffolding material shall be used. In case it is not feasible to use cup-lock type scaffolding material. Clearance shall be obtained from Engineer in charge to use other type of steel scaffolding materials.
- For any overhead job at height of 2.0 meters and above, scaffolding with railing and toe board is to be erected at working platforms. And it will be mandatory to use double hook type safety belt with fail arrester and safety nets in construction and maintenance activities.
- Steel scaffoldings should be erected and used in accordance with manufacture's recommendations, proper seating and locking of all connections, using the corrective devices.
- During setting up and dismantling of scaffolds, warning signs, safety cordons and other safety measures shall be provided to ensure safety.

IX. MASONRY WORKS (Including Plastering)

- All hollow blocks are contemplated herein shall be of good quality and readily available in the locality.
- The cells of the concrete hollow blocks to be laid shall be filled with 1:3 cement mortars (1 part Portland cement and three parts sand, by volume). They shall be reinforcing with 10mm diameter horizontal deformed bars every three blocks and 10mm diameter vertical bars

deformed bars at 800mm O.C. Unless specified on the elevation drawing, the cement plaster mixture for masonry walls shall be 1:3 (1 part cement, and 3 parts sand, by volume).

Minimum Compressive Strength of Concrete Hollow Blocks is as follows:

Class A	900 psi
Class B	750 psi

- Held in place by horizontal and vertical reinforcing and interior surfaces of hollow blocks shall be thoroughly soaked with water before laying. Hold all units in storage for a period not less than 28 days (including curing period) and do not deliver prior to that time unless strength and other tests indicate compliance with specification.
- Mortar aggregates shall be natural river sand, clean and free from soluble slats and organic matter, graded from fine to coarse, compatible with the thickness of joints in which used. Mix mortar from three to five minutes in such quantities as are needed for immediate use. No re tempering will be permitted if mortar stiffens because of premature setting. Discard such materials as well as those which have not been used within one hour after mixing.
- Lay units in common bond with uniform causing and jointing. All concrete block jointing shall be of uniform thickness. Butler vertical and horizontal jointing full with mortar. Bond course and corners and intersections and tie to abutting walls. Do not lay cracked, broken or deface blocks. Cut edges shall be clean and sharp. The FIRST row of block shall be properly and thoroughly anchored to the concrete columns, walls of slabs. Course shall be laid straight and well plumbed.

PLASTERING

- Plastering is the finishing coat which protects the masonry and gives a decent look. I t also enhance the hygienic condition in the building.
- Cement and sand mortar are used in plastering with different thickness according to the requirements in accordance the drawing design.
- Use Portland cement and Sand 20mm thick. Mixture is [1:3] and plastering of the exterior and interior walls as per the requirements of the work.
- The plaster should be in straight line levelled, plumbed and the join must be in right angle.
- Before starting the plaster, the surface should be raked and properly cleaned by wire brush and it should be wet for 24 hours.
- Door and window frames, water supply lines and electric fittings shall be fitted appropriately before starting the plastering work.
- All unnecessary cement mortar shall be removed from the frames and electric fittings instantly after finishing the plaster.
- It shall be cured the plaster surface properly and cured at least for 7 days to get desired strength.

X. STEEL WORKS (Includes Elevated Water Storage Tank)

- This specification shall only apply to members specifically designated on the design drawing as "architecturally exposed structural steel" which shall be fabricate and handled and erected as directed in these specifications, and except as noted in conformity with the American Institute of Steel Construction Specification for the design. Fabrication and erection of Structural Steel for Buildings. All fabrication tolerance of the code of the standard practice.
- Materials shall be the same as specified for Structural Steel by AISC Specification.
- Overall profile dimensions of built-up members shall be adequate to provide for the accumulated permissible overrun of the component parts.

- Fabrication shall be performed with special care and necessary straightening to maintain the condition of the material as described above.
- Shop details, shall show clearly the required fabrication tolerances. Erection plans and/or anchor bolt plans shall show the required tolerances for setting embedded items.
- Where the fit-up of adjacent members is such that permissible tolerances specified in Sections 2b and 2c may result in unsightly joint, the Architect shall specify on the design plans tolerances required. These tolerances shall be maintained by special attention in detailing the joint, or if necessary, by refined fabrication techniques.
- Faces of welds exposed to view shall have as welded surfaces that are reasonably smooth and uniform. No finishing or grinding shall be required except where clearances or fit of other items may so necessitate, or as specifically required by design drawings.
- Butt and plug welds exposed to view shall have as welded surfaces that are reasonably smooth and uniform and shall not project more 1/6" above the surfaces joined. No finishing or grinding shall be required except where clearances or fit of other items may so necessitate, or as specially required by design drawings.
- After inspection and approval and before leaving the shop, all steel works shall be cleaned by hand wire brushing, or by other means, erected by fabricator, or loose mill scale, loose rust, accessible weld slag on flux deposit, dirt and other foreign matter. Oil and grease deposits shall be removed by solvent.
- After cleaning all steel works shall be given one coat of shop paint applied thoroughly and evenly to dry surfaces, by rush, spray, roller coating, flow coating or dripping, at the selection of the fabricator.
- Surfaces within two inches of any field weld location shall be free of materials that would prevent proper welding or produce objectionable fumes while welding is being done. If shop painted surfaces to be welded shall be wire brushed in the field before welding to reduce the paint film to a minimum.
- The erection shall use special care in unloading, handling and erecting the steel to avoid bending, twisting or otherwise distorting the steel members. The erector shall handle the material in such a way as to minimize the damage to shop coat paint.
- The erector plans and executes the erection in such a way that the close fit and meets appearance of the joints and the structure as a whole will not be impaired. If temporary braces or erection clips re-employed, care shall be taken to avoid any unsightliness upon removal. Tacks welds shall be ground smooth and holes shall be filled with weld metal or body solder and smoothed by grinding or filling.

XI. TINSMITHRY WORKS

- The work includes furnishing all materials and performing all operations to provide metal color roofing and bended sheet metal items as required providing a watertight installation. Surfaces to which roofing is to be applied shall be thoroughly clean and dry and free from any detect that might affect the application.
- Specific installation details shall be in accordance with recognized sheet metal installation practice.
- Pre-painted long span roofing 0.60mm thick, Rib type GA 26.
- Except as specified herein, all materials shall be installed in accordance with the manufacturer's printed erection instruction.
- Flashing shall be done according to standard procedures in securing non-leakage and or capillary action of water through joints and laps.
- The roofing shall be pre painted with roof guard. All design and brand of roofing is specified by the end user.

XII.	CEILING WORKS (Including eaves)

- The work covered by this item shall consists of furnishing all ceiling finishes, equipped with fixing accessories in accordance with Plan and as herein specified.
- Use 4'x8'x1/4" thick fiber cement boards with 1/8" groove on T-runner with fixed hanger support; puttied, sanded and ready to receive paint primer coating.
- Ensure adequate hanger and support to all the utilities on the area
- Framing is not required for ceilings attached to structural members, except for framing openings as specified. Furring as hereinafter specified shall be attached directly to structural members.
- Steel channels or steel studs shall be provided where steel furring is indicated for screw attachment of fiber cement (FiCem) board.
- Hat – shaped furring members shall be spaces 0.40m on centers and securely attached across suspended runner channels or structural framing members with wire clips or double-strand of 1.0mm tie wire saddle-tied at each crossing. End of wire tire shall receive three full twists. Furring shall be spliced with 0.20m nested laps securely tied near each end lap, with two loops of 1.0mm tire wire. Splices shall be staggered. Furring channels shall be located within 50mm of walls. Where wallboards abut dissimilar wall materials, perimeter of ceilings shall be finished with an edge bead trim strip applied to wall and accurately aligned with the finished ceiling. Wallboard edges adjoining walls shall be laid on the horizontal leg of the trim strip against a continuous bead of approved type sealant.
- Ceiling Runners - Shall be accurately aligned and securely attached to floors and structural ceilings or roof deck except where partition ceiling runners are applied directly to finished material of continuous ceilings. Attachment shall be by expansion shields, machine bolts or other approved method, at no more than 0.60m on centers and to furred ceilings by wallboard screws at each furring member. Furring will be provided at ceiling runners oriented parallel to the direction of furring members. Runners shall extend beyond open-end partitions for 3.0m.
- Shall be applied on ceilings and walls indicated and specified on the room finish schedule and shall include furred beams, columns, soffits and other appurtenances prepared for fiber cement board.
- The ceilings and walls of area indicated shall be constructed of fire-retardant fiber cement board.
- For non-load bearing walls and partitions is included in this section. Fiber cement board shall be screw applied to steel members.
- For ceilings and walls as well as ceiling framing system are included in this section. Fiber cement board shall be screw applied to steel members.

XIII.	PAINTING WORKS

- Furnish all labor, materials, equipment, plant and other facilities to complete all painting and varnishing as shown and hereafter as specified.
- The contractor shall examine the Specifications for the various other trades and shall thoroughly familiarize himself with all of the items and surfaces of work to be included.
- All work included under this Division shall be subject to the General Conditions accompanying these specifications. The Contractor and Sub-contractor for the type of job in this Division are enjoined to strictly follow the provision thereto.
- This work includes interior and exterior painting and varnishing and finishing of all items as required to produce a finished painting job throughout all of the areas affected by work under this contract, except items which are specifically excluded. Complete color scheme for the painting and varnishing of the building [exterior and interior] shall be furnished by the Architect to the Contractor. Color schemes and varnish samples required by these Specifications and/or by the Architect shall be submitted by the Contractor for approval at his expense.

- All exposed work shall be protected while the building is being painted or vanished. The floors, steps and all other surfaces not to be painted shall be well protected during painting with sufficient covers. Any stain, dirt, smear, etc. shall be removed by the Contractor to the satisfaction of the Architect.
- Neither paint nor varnish shall be applied on finished surfaces like washout finish, synthetic rubble finish, adobe rubble facing, glazed tiles, glass plastic brass, bronze, aluminum, chrome and other non-corrosive metal finishes.
- The Contractor shall inspect all surfaces to be painted and all defects shall be remedied before starting the work. Commencing of work by the Contractor indicates his acceptance of the surface. No work shall be started unless the Contractor shall have made certain as to dryness of surfaces. Tests shall be made, in the presence of the Architect or his authorized representative, to verify dryness of surfaces to be painted.
- All concrete shall be allowed to weather for two [2] months or applications of concrete neutralizes before painting.
- Clean all surfaces to be painted and varnished of loose dirt and dust. Do the customary amount of sanding, depending on the Architect's opinion to make the surface acceptable for painting or varnishing.
- Inspect all surfaces to insure suitability. In the event imperfections due to materials or workmanship appear on any surface after the application of paint, the cost of all correction shall be borne by the Contractor. Damage to any painted or varnished finish due to carelessness or negligence shall be corrected.
- Patch up all knots, pitch streaks and sappy spots with shellac or other approved sealer. Putty nail holes, cracks, etc. after the first coat non-shrinking putty of a color to match that of the finish.
- Wash all metal surfaces with mineral spirits or detergent to remove any dirt or grease before applying materials. Where rust or scale is present, clean by wire brush or sandpaper before painting. Where shop coats of paint have become marred, clean and touch up with rust inhibitive primer. Treat all galvanized metal surfaces with a compound designed for this purpose, or approved acid solution before applying the first coat paint.
- Prepare masonry surface to be painted by removing all dirt, dust, oil and grease stains and efflorescence. The method of surface preparation shall be left to the discretion of the Contractor, provided that, the results are satisfactory to the Architect. Masonry surfaces to be painted shall be free from alkali and thoroughly dry before paint is applied.
- Before applying succeeding coats, primers and undercoats shall be completely integral and performing the functions for which they are specified.
- Property prepares and touches up scratches, abrasions or any other disfigurement and removes any foreign matter before proceeding with the following coat.
- Do not apply final coat on interior work until after other trades are finished with their work in any given area in normal sequence and all materials and debris removed, and the premises left in satisfactory broom cleaned condition as approved.
- Remove or protect hardware, hardware accessories, plates, fixtures and similar items prior to painting. Move equipment and furniture adjacent to walls to permit painting of areas covered by them. Upon completion of the job, place back, reconnect and reposition all items accordingly.
- Paint the backsides of access panels, removable or hinged covers and the like.
- All woodwork shall be sanded lightly with No. 100 sandpaper between coats. Paint coats shall be thoroughly dried before sanding.
- All exposed nail head shall be countersunk and puttied after application of primer. Putty shall be whiting putty tinted to match that of finish.
- All painting and varnish work shall be done by skilled house painters and varnishes only.
- All materials shall be evenly applied so as to form a film of uniform thickness, free from sags, runs, crawls or other defects.

- Paints shall be thoroughly stirred so as to have the pigment evenly in suspension while paint is applied.
- In general, and unless otherwise specified, and/or instructed by the Architect due to actual conditions on the job, no less than 24 hours time shall elapse between application of succeeding coats. Each coat of paint shall be allowed to dry thoroughly and inspected for approval before the succeeding coat is applied.
- No paint shall be done in damp weather.
- Except where otherwise noted or specified, all paints shall be applied in three [3] coats [priming, body, finish coats]. Each coat shall be roller or brush applied, [except as otherwise noted], spread evenly and in full covering body.
- No work shall be done under conditions unsuitable for the production of good results. No painting or varnishing on woodwork shall be done while plastering is in process or is drying.
- Surfaces which cannot be satisfactorily finish on the number of coats specified shall have additional coats, or such preparatory coats and subsequent coats as may be required to produce satisfactory finished work at the expenses of the Contractor.
- Spray gun application shall be used wherever specified.
- All parts of moldings and ornamentals shall be left clean and true to details.
- All finishes shall be uniform as to sheen, color, texture, except when glazing is required.
- The painting Contractor, being the last tradesman on the project, shall include in his work all final clean-up and washing of window glass, spots on the floors, hardware, fixtures, etc.
- The types of paint specified are intended to illustrate the quality and are taken from Davies paints catalogue. Equivalent materials from the manufacturer's listed herein, which the Contractor desires to use other than those specified accompany proposal with such request in writing for approval of the Architect. Give manufacturer's name, and the specific name of each product offered as substitute. After the award, no substitution of materials for those mentioned in the accepted proposal will be permitted.
- Provide Application of Termite Control. For flooring provide Rubberized Paint of 3 coatings. Ceilings are also painted finish. All steel/metals works should be applied with epoxy paint.

XIV. ELECTRICAL WORKS

- The work under this Section shall be subjected to the requirements of the General Conditions, which shall be included as part of this Specifications and which shall apply to all work to be performed under the Electrical Division. The contract documents, instructions, drawings and specifications shall be considered as one. Whatever is called for by any of the documents shall be binding as if called for by all.
- The work to be done under this Division of the Specification consists of the fabrication, furnishing, delivery, and installation, complete in all detail of Electrical Work at the subject premises and all work materials incidental to the proper completion of the projects, except those portions of the work which are expressly stated to be done by others. All work shall be in accordance with the governing Codes and Regulations and with the Specifications, except where some shall conflict with codes, etc., which the latter shall then govern. The requirements in regard to materials and workmanship specify the required standard for the furnishing of all labor, materials and appliances necessary for the complete installation of the work specified herein and indicated on the drawings. These specifications are intended to provide a broad outline of the required equipment but are not intended to include all details of the design and construction.
- Under this Division and together with the specifications, provide all materials and equipment and perform all the work necessary for the complete execution of the electrical system shown on the electrical drawings with reference to the general construction drawings as herein specified, or both except as otherwise excluding the generality of the foregoing, shall include both not limited to the following principal items of works;
- Supply and installation of complete power, telephone and auxiliary system services.
- Supply and installation of the complete grounding system.

- Supply and installation of the lighting fixtures, battery operated exit and emergency lights and wiring devices.
- Supply and installation of capacitor banks.
- Painting of all exposed electrical conduits, enclosures and equipment.
- Termination of all electrical system.
- Complete testing and commissioning of all electrical and auxiliary systems.
- Securing and payment of electrical wiring permit and certificate of electrical inspections.
- If anything has been omitted for any items or materials usually furnished, which are necessary for the completion of the entire work as outlined herein before, then such items must be and hereby included in this division of work.
- The work under this Contract is to install according to the requirements of the latest Philippine Electrical Code, the rules and regulations of the municipality, and the requirements of the local power and Telephone Company. Nothing contained in these specifications or shown on the drawings shall be constructed as to conflict with the National and local Ordinances or Laws governing the installation of the electrical work and all such laws and ordinances are hereby made part of these specifications. The Contractor is required to meet the requirements thereof.
- All permits and electrical fees required for this work shall be obtained by and at the expense of the Contract. The Contractor shall furnish the Architect, the Engineers, Project Managers and the Owner the final certificate of inspection and approval from the proper government authorities after the completion of the work. The Contractor shall prepare all "As-Built" electrical plans and all paperwork required by the approving authorities.
- The work throughout shall be executed in the best and thorough manner under the direction of and to the satisfaction of the Architect and the Engineer, who will jointly interpret the meaning of the drawings and specifications and shall have the power to reject any work and materials which, in their judgement are not in full accordance therewith.
- The Contractor shall have in his file, for ready access and reference, a set of drawings indicating all work as normally installed, incorporating in same all changes and additions. Upon the termination of the Contract, he shall prepare a set of tracings indicating thereon on the electrical work as actually and finally installed and tested. These tracings turned over to the Engineer.
- Approval of equipment and materials: All electrical materials shall b new and must meet the requirements of the specifications and shall bear the inspection label wherever such standard has been established. As soon as practiceable and within thirty [30] days after the official award of the Contract and before any materials or equipment is ordered, the Contractor shall submit to the Engineer for approval, one complete list of materials, apparatus and equipment, in triplicate, giving the manufacturer's name, address, descriptive data, trade name of items, rated capacities, certified analysis catalogue number, etc. and when called upon to do so, the complete specifications and cut of drawings of such item, of whole or portion of list, as required by the Engineer, which he proposes to use or install.
- Ground Test: The entire installation shall be free from improper ground and from short circuits. These shall be made and recorder in the presence of a representative of the Owner, Project Manager and the Engineer. Each panel shall be tested with main connected to the feeder, branches connected and switches closed, all fixtures in placed and permanently connected, lamp removed or omitted from the sockets, ballast disconnected and all wall switches closed. Each individual power feeder shall be tested with the power equipment connected for proper and intended operation. In no case shall be the insulation resistance is less than that allowed by the regulations for electrical equipment and buildings. Failures shall be corrected in a manner satisfactory to the Engineers.
- Performance Test: It shall be the responsibility of the Electrical Contractor to test all items of the entire electrical installation for proper operational conditions. This condition shall apply to the power, lighting and auxiliary installation. Where sequence operation is required,

the electrical contractor shall test for proper sequence and he shall leave the entire electrical installation in satisfactory working conditions.

- Cutting and Fittings: The Contractor shall do all cutting and fittings required for the installation of the work to make and join the several parts joint and coordinate with the work of other trades, in accordance with the drawings and in a manner satisfactory to the Engineer.
- Protection: The Contractor shall effectually protect his own work from damage during and as maybe necessary after installation and he shall likewise protect adjoining work of other trades from damage resulting from the installation of electrical work.
- All wires shall be copper, soft-drawn and annealed, shall be of 99% conductivity, shall be smooth and true and of cylindrical form and shall be within 1% of the actual size called for.
- Wires and cables for lighting, power and auxiliary system shall be nylon jacketed, plastic insulated for 600 volts working pressure, type THNN/THWN unless otherwise noted on plans.
- For lighting and power system, no wire smaller than 2.0mm diameter [AWG No. 12 solid] shall be used and must be color coded.
- All wires and cables shall be color coded wires are as follows:

Line A – Black	Ground -	Green
Line B – Red	Control wire #01	White
Line C – Yellow	Control wire #02	Blue

- Metallic conduits for interior and exterior system shall be a standard weight, mild steel, hot dip galvanized with an interior coating as manufactured.
- No conduit shall be used in any system smaller than 15mm diameter electric trade size, nor shall have more than four 90 degrees bends in any one run and when necessary, pull boxes shall be provided as directed. Location and sizes of pull boxes shall be cleared to the Engineer prior to fabrication and installation.
- No wires shall be pulled into any conduits unless the conduit system is complete in all detail. In case of concealed work, until all rough plastering or masonry has been completed and in the case of exposed work, until the conduit has been completed in every detail.
- The ends of all conduits shall be tightly plugged to exclude plaster, dust and moisture while the building is in the process of construction.
- All pipes and fittings on exposed work shall be secured by means of KINDORFF CHANNELS and CLAMPS. Conduit lay outing, in all cases shall run perfectly straight and rule, satisfactory to the Architect and to the Engineer.
- All outlets of whatever kind, for all items, shall be provided with suitable fittings, which shall be either a box or other devices especially designed to receive the type of fittings to be mounted thereon.
- The Contractor shall consult with the Architect and the Engineer as to the nature of the various fittings to be used before installing and shall conform strictly in the use of such fittings when finished will be completed design.
- In the case of fixtures, the outlet fittings shall be provided with suitable fixture supports of a size and kind required for the fixture to be hung Fixture studs in general shall be 9.375mm diameter.
- At all outlets on concealed conduit work, provide galvanized deep-type pressed-steel outlet boxes of standard make. These boxes shall be especially designed for apparatus required and, in all cases, where such boxes are not available on the market, special boxes shall be made by the Contractor at his own expense. Outlet boxes shall be deep type gauge #16 as manufactured by Matsushita, Steel City, HKK or approved equal.
- For all exposed installations provided cast-device boxes and the necessary conduit bodies, boxes and fittings. Brand of cast device shall be either Appleton or Crouse-hinds or approved equal.

- Bus bars and circuit breaker gutters shall be powdering finished sheet steel having code required minimum thickness and cross-section and shall be provided with a cover along one side hinged with galvanized screw. The length shall fit into each other [male-female] or shall be bolted in a manner approved by the Engineer. Gutter shall be installed complete with all fittings and accessories and supports as shown on drawings and/ directed by the Engineer. Each section of the gutters shall be fixed in at least two places and shall be effectively grounded in accordance with code requirements.
- Cables shall not be terminated in gutters until the whole gutters have been erected. Insulated bushing shall be used in all conduit entries and all such entries shall be made dust-tight, moisture or waterproof as required.
- Bus bar shall be 99% pure copper with regular cross sections. All bus bars shall be silver plated. Ground bus shall be sized at 50 % of the phase buses.
- Bus bar must be braces enough to withstand the expected fault current as indicated in the local schedule.
- Quality controlled and approved panels and cabinets as far as possible shall be used assembled on the job. All panels shall be dead-front construction furnished with trims for flush or surface mounting as required. Cabinets shall be of code gauge steel with gutter at least 150mm and wider, if necessary. The trim for all panels shall be finished in gray enamel over a rust inhibitor.

    - Panels and cabinets shall be fabricated by a reputable fabricator. Fabricator's shop drawings in triplicate copies shall be submitted for approval before fabricating the panels. Only one brand of circuit breaker and fabricator shall be used for the entire requirements of the project. Combinations of brand shall be rejected.
    - Lighting panels shall be required with two-pole-circuit breaker in the branch circuits and in the main unless noted otherwise on the plans.
    - The Contractor shall coordinate his work with all trades involved so that exact locations maybe obtained for all outlets, apparatus, appliance and equipment. The circuit numbers indicated as numbers 1, 2, 3 may not correspond to actual panel circuit connection numbers but must be balanced for better load distribution.
    - The locations of outlet shown on diagrammatic wiring plans shall be considered as approximate and it shall be incumbent upon the Contractor, before installation of outlet boxes, to study all pertinent drawings and obtain precise information from the architectural schedules, scale drawings, large scale and full-size details of finished rooms and the approved shop drawings of the other trades or from the Architects. In centering the outlets, due allowance shall be made for window and door trims, variations in thickness of pouring, plastering, etc. as erected, regardless of conditions which maybe otherwise shown on small scale drawings. Outlet incorrectly located shall be properly relocated at the contractor's expense> Local switches shown near the doors shall be verified with the Architect's drawings before installation.
    - Furnished and install lighting receptacle and power panels as indicated on plans and panel boards schedules.
    - From the main breaker, install feeders to the various outlying panels, motor or equipment as shown on the plans. Feeders shall be underground in reinforced concrete encasement unless otherwise noted.

    - The lighting system shall be complete in every respect, all as indicated on the plans as specified.
    - All wiring shall be indicated in electrical metallic tubing or as indicated in the plans and in general shall be concealed in the structure.

Mounting heights of devices shall be as detailed on the plans or as follows:

- Local Switches 1370mm from the center of device to finished floor line
- Receptacles 300mm floors or 150mm above counters, or as shown in the architectural plans.
- Provide all lighting fixtures and lamps at locations shown on the plans or as directed by the Architect.

XV. DOORS AND WINDOWS (Including Installations)

- This section includes hygienic glass reinforced polyester (GRP) door and #304 stainless steel door (swing & sliding) and stainless-steel frames complete. Designed to meet FDA and cGMP requirements.
- GRP doors are manufactured using a pressure moulding process which create a seamless door with no joints and are non-porous.
- Door leaf is a 40mm thick pressure moulded Glass fibre Reinforced Polyester door-blade. Seamless structure, non-porous, extremely hard but lightweight for ease of use.
- Flush Doors shall be hallowing core from tanguile kiln dried frames with 6mm thick tanguile plywood veneer or marine plywood as indicated.
- This section shall include steel doors and frames as indicated in the drawings or as specified herein, complete.
- All painted doors and frames and other steel works delivered to the site shall be stored and handled in a manner as to protect them from damage during the construction period. Installation shall commence only when all flooring finishes have been completed.
- Steel doors and frames shall conform to the best commercial standard as approved and as specified herein.
- Steel-steel doors, louvers and frames shall be factory fabricated from steel conforming to ASTM Specifications A36. Steel shall be zinc coated stretcher level degree of flatness, pickled and oiled of hot rolled materials, and with manufacturer's standard gauges specified hereinafter for the various uses.
- Pressed Steel Frames for doors and other openings shall be of the combination buck, frame, frame and trim type; sizes and details as shown and shall include tubular mullions and transform bars used in conjunction with the frames. Frames shall be gauge 14, knock-down type or welded-unit type, and of continuous channel.
- Welded Unit Type Frames shall have headers and jambs secured at the corners either by internal welding of faces by welded splice plates and shall be further secured at the rabbet either by welding or by mechanical interlock.
- The headers and jambs, as an alternate, shall be secured at the corners by external welding of faces and grounded smoothly. Faces of frames at junction of head and jamb shall present neat line joints. Mullions and transform bars shall be member with heads or jambs, as applicable and shall be butt-welded thereto.
- Anchors, Frames shall be provided with a minimum of three wall anchors per jambs as required for the adjoining wall construction, including ceiling strut anchors as required by the drawings, and anchors for attachment of frame to the floor. Anchors shall be of not less than 18-gauge steel.
- Door Steel Gauges shall not be lighter than 18 gauge for 44mm thick doors nor lighter than 18 gauge for 35mm thick doors or for glazed panels. Doors shall be of the type, size, and design shown and provided with honeycomb core insulation for a high degree of sound deadening. Door clearance shall not exceed the following: 3mm at jambs and heads; 6mm at meeting stiles of pair of doors and 20mm at bottom measured from finished floor line.
- Preparation for Hardware – cutting, reinforcing, drilling and tapping of doors and frames shall be done at the factory except drilling and tapping for surface-applied hardware that shall be done in the field when the hardware is applied.

- Steel Work Painting finishes – all steel doors and frames shall be provided with anti-corrosive primer and oven-baked finish with acrylic enamel paint or powder coated as indicated. Color shall be beige, ivory or wood grain as approved.
- Workmanship – the finished items shall be rigid, neat in appearance and free from defects, warp or buckle. Molded members shall be sharp in detail, straight and true. Corner joints shall be coped or mitered, well formed, and in true alignment. Exposed welded joints shall be dressed smoothly.
- Installation – Frames shall be plumbed, leveled and rigidly secured in place. Temporary spreaders shall be installed until the wall at the frame is completed and the frame is securely anchored in its final position. Wall anchors on door frames shall be installed approximately at the hinge and strike levels. Doors shall be installed in conjunction with the application of hardware.
- Submittal Requirement – Prior to procurement and delivery, brochures or catalogs of the product to be used shall be submitted for approval.
- This section includes aluminum frame windows, complete.
- Materials shall be stored out of contact with the ground and shall be arranged to avoid bending, warping or otherwise damaging the fabricated windows.
- Shall be horizontal type; frames shall be standard sizes or as indicated with powdered coated finish. Glass shall be tempered, 6mm thick, tinted or clear, as specified in section: Glass and Glazing and as indicated.
- Windows shall be installed without forcing or distortion so that sills and heads are level and jambs are plumb. Windows frames shall be securely anchored into the supporting construction. Joints between aluminum windows and aluminum members including mullions shall be set in mastic and weather stripping of the type recommended by the window manufacturer and as approved, to provide completely water-tight joints.
- Prior to fabrication and delivery, brochure, catalogs or shop drawings, samples of aluminum frames, mullions, weather stripping, type of finish and glass shall be submitted for approval.
- Fixed windows shall be constructed of 16 ga., 304-4 finish stainless steel. The frames shall be in two parts, a "front" and a "back". Both sides shall be sloped. The glazing shall be set back from the wall 1-1/2" on the front side. The slope on the front side shall be 45°. The slope on the back side shall vary depending on wall thickness and glazing thickness but to be no more than 60° and no less than 39°. There shall be no ledge along the walls for liquids or dust to settle.
- Viewable dimensions shall be 1" smaller on all sides than the "in-clear" dimensions. Rough opening dimensions shall be ½" larger on all sides than the "in-clear" dimensions. Out-to-Out dimensions shall be 3-1/2" larger than the "in-clear" dimensions on all sides. "In-clear" dimensions will be assumed on all orders unless otherwise stated.
- Glazing may be Polycarbonate, Abrasion Resistant Polycarbonate or clear, tempered triple pane insulated glass. Any of the clear, tempered glass can be poly-coated with a 7-mil safety film so that in the event the glass breaks it cannot fall out of the frame.
- Prior to installing, ensure walls are properly prepared to receive the window. Rough opening is ½" larger than the "in-clear" dimension on all sides.
- Prepare wall with 3" of bucking on all side. Use silicone or polyurethane caulk around the perimeter of the buck opening.
- After installation, all exposed surfaces shall be thoroughly cleaned and all damaged work shall be restored to its original condition, or replaced with new work.

XVI. PLUMBING WORKS (Including Septic Tank)

- EXCAVATION

  Trenches of all underground pipelines shall be excavated to the required depth and grades. Bell holes shall be provided so that the pipe will rest on well-thumped solid ground for its entire length. Where rock is encountered, excavation shall extend to a depth six inches below the pipe bottom and before pipe is laid, the space between the bottom of pipe or other approved filling materials.

- PIPE LAYING

  Pipe in trenches shall be laid true to line and grade on a stable and suitable prepared foundation, each section of the pipe being bedded and bottom of the trench shaped to fit the lowest quadrant of the pipe circumference. All pipes, except concrete pipes, that will run underground shall be protected with concrete, Class "B" casing with a minimum protection of four inches around the perimeter of the pipe, then inches below the finished grade. Where vehicles shall pass over the pipe laying shall be made deeper, depth shall be lower than 0.90 meters. Pipes to be used for water lines must be PPR type.

- BACKFILLING

  After pipe lines have been tested, inspected and approved prior to the backfilling all forms and bracing shall be removed and the excavated materials cleaned from debris. Materials for backfilling shall be free from large or big rocks. Backfilling shall be placed in horizontal layers, properly moistened and compacted to an optimum density that will prevent excessive settlement and shrinkage. Maximum 6 inches layer of backfill shall be overlaid for another compaction process.

- INSTALLATION

  Install plumbing fixtures free and open to afford easy access for cleaning. Install plumbing fixture as indicated on drawings, furnishing all brackets, cleats, plates and anchors required to support fixtures rigidly in place. Install all fixtures and accessories in locations directed in accordance with manufacturer's instructions, minimizing pipe fittings. Protect items with approval means to maintain perfect conditions. Remove worked damage or defective and replace with perfect work without extra cost to end user.

  Provide in each bathroom and toilet a standard water closet, compact type, complete with fittings and all incidental materials of local procedures or equally good quality. Provide in each bathroom and toilet and other rooms as provided with a standard lavatory, with complete fittings. Shower heads hall be provided in all bathrooms, spray type, shivel head, chrome plated with valve. Provide and set in place soap holders for each bathroom. Provide and set in place holders in each toilet near the water closet. Provide and set in place as shown in the plans, floor drains, and traps complete.

  All soil and drainage pipes shall have a minimum slope of 1% and a maximum slope of 2%. Vertical pipes shall be secured strongly by hooks to building frame. Provide suitable brackets or chairs at the floors from which they can start. Where an end or circuit vent pipe from any fixtures or any line of fixtures is connected to a vent line serving other fixtures, connection shall be at least four feet (1.20 meters) above floor in which fixtures are located, to prevent use of any vent line as a waste. Horizontal pipes shall be supported by well-secured strap hangers.

- ROUGH-IN

Provide correctly located opening of proper sizes where required in walls and floors for past of pipes. All items to be embedded in concrete shall be thoroughly cleaned and free from all rust, scale and paint. All changes in pipe size on soil wash and draft lines shall be provided with reducing fitting or recesses reducers. For changes in pipe sizes, provide reducing fittings. High corrosive natural ground within site shall be taken into account by the plumber. Protective features shall be installed to prevent corrosion of all water pipes installed underground.

Extend piping to all fixtures, outlets and equipment from gate valves installed in the branch, near the riser. All pipes shall be cut accurately to measurements, and worked into place without springing or forcing. Care shall be taken as not to weaken structural portion of the building.

XVII. STAINLESS LETTERING AND LOGO

- Providing and fixing of Stainless DA Logo 400mm Diameter
- Providing and fixing of Stainless Steel Grade 304 letters in English with main letter of name of facility (FRUITS AND VEGETABLES DEHYDRATION PROCESSING FACILITY) of minimum height size of 6" with 25mm raising.
- The letters shall be fixed with the help of stainless steel studs on existing wall which shall not be visible from the front.
- The stainless steel studs shall be properly grouted with suitable sealant.
- Stainless Lettering must be fabricated (see Detailed Engineering Design for reference).
- Test report for conformity of material specifications shall be provided.
- The work shall be executed to the satisfaction of the Designer.
- 304# Brushed Finish: 80-140 grit Hairline pre-finished sheet, face and/or returns, no clear coating.

XVIII. INSTALLATION OF DEHYDRATION EQUIPMENT

- This hot air circulation drying oven uses a low noise and high temperature proof axial flow blower and an automatic temperature control system. The forced hot air heated by electric, steam or gas, circulates within the chamber. The whole circulation system is the fully enclosed to make that the heat efficiency of the drying oven increases from 3~7% of the traditional drying oven to 35~45% of the present one. The highest heat efficiency can reach 50%. This enhances heat transfer, increases moisture evaporation rate, and reduces drying time. It is suitable for drying a variety of foods including fruits, vegetables such as apples, bananas, mangoes, tomatoes, peppers, mushrooms, ginger, garlic, kale, etc.
    - Body Material: Stainless Steel
    - Unit Dimension: 2450mm (Width) x 5000 mm(length) x 2500mm (height) or customizable size
    - Heating Power: 66Kw
    - Heating mode: 380V/50hz
    - Circulating Fan: 0.75Kw
    - Moisture exhaust fan: 0.37kW
    - Working size: 1700 x 4800 x 1700 mm
    - No. of trolley: 10 sets
    - Drying layer: 24 layers
    - Baking tray style: Stainless steel mesh plate

- Temperature range: 120°C room temperature
- Batch Capacity: 800kg to 1000kg per batch

- The entire enclosure adopts a fully enclosed structure, enabling efficient utilization of internal circulating hot air for energy savings.
- Heating Source: provided vapor, electricity, infrared heat as well as electricity and vapor dual type.

The above specifications are intended for the Construction of Fruits and Vegetables Dehydration Processing Facility located at Brgy. Don Alejandro Quirolgico, Caoayan, Ilocos Sur

Prepared by:

ROLANDO T. CADAWAS, ABE
Engineer I

Concurred by:

MARK HARRY G. PASTOR, ABE
Chief, RAED

DEPARTMENT OF AGRICULTURE-REGIONAL FIELD OFFICE 1
NAME OF PROCURING ENTITY

PROJECT REFERENCE NO.: _____
NAME OF PROJECT: _____

STATEMENT OF ALL ON-GOING 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

CONTRACT TO BE BID: _____
BUSINESS NAME: _____
BUSINESS ADDRESS: _____

Name of Contract/ Location Project Cost	a. Owner's Name b. Address c. Telephone Nos.	NATURE OF WORK	CONTRACTOR'S ROLE		a. Date Awarded b. Date Started c. Date Completion	% Accomplishment		Value of Outstanding Works
			Description	%		Planned	Actual	

Note: This statement shall be supported with:
1. Notice of Award and/or Contract
2. Notice to Proceed issued by the Owner

Submitted by:

Name of Representative of Bidder
Position
Date: _____

DEPARTMENT OF AGRICULTURE-REGIONAL FIELD OFFICE 1
NAME OF PROCURING ENTITY

Project Reference No.: _____
Name of the Project: _____
Location of the Project: _____

Statement identifying the Bidder's Single Largest Completed Contract (SLCC) similar in nature

Contract to be Bid: _____
Business Name: _____
Business Address: _____

Name of Client	a. Owner's Name b. Address c. Telephone Nos.	Title of the Project in the Contract	Nature of Work	a. Date Awarded b. Contract Effectivity c. Date Completed	Contractor's Role (whether sole contractor, subcontractor, or partner in a JV)		a. Total Contract Value at Award b. Total Contract Value at Completion c. Contract Duration
					Description	%	
Government							
Private							

Note: This statement shall be supported with:

1. Notice of Award
2. Notice to Proceed
3. Contract
4. Owner's Certificate of Acceptance OR Constructors Performance Evaluation Summary (CPES) Rating

Submitted by : _____
(Printed Name and Signature)
Designation : _____
Date : _____

Bid Securing Declaration Form

[shall be submitted with the Bid if bidder opts to provide this form of bid security]

REPUBLIC OF THE PHILIPPINES)
CITY OF _____) S.S.

BID SECURING DECLARATION
Project Identification No.: *[Insert number]*

To: **DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE 1**
City of San Fernando, La Union

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration.

2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f),of the IRR of RA No. 9184; without prejudice to other legal action the government may undertake.

3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:

    a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
    b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right; and
    c. I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this ____ day of *[month] [year]* at *[place of execution]*.

[Insert NAME OF BIDDER OR ITSAUTHORIZED REPRESENTATIVE
[Insert signatory's legal capacity]
Affiant

[Jurat]
[Format shall be based on the latest Rules on Notarial Practice]

DEPARTMENT OF AGRICULTURE-REGIONAL FIELD OFFICE 1
NAME OF PROCURING ENTITY

Contract Reference No.: _____
Name of the Contract: _____
Location of the Contract: _____

Standard Form Number: SF-INFR-48
Revised on: August 11, 2004

(LIST) Qualification of Key Personnel Proposed to be Assigned to the Contract

Business Name: _____
Business Address: _____

		Project Manager/Engineer	Materials Engineer	Foreman	Construction Safety and Health Personnel	Other positions deemed required by the Applicant for the project
1	Name					
2	Address					
3	Date of Birth					
4	Employed since					
5	Experience					
6	Previous Employment					
7	Education					
8	PRC Licence					

Minimum Requirements : Project Manager/Engineer
: Materials Engineer
: Foreman
: Foreman

Note : Attached individual resume and PRC License of the (professional) personnel

Submitted by : _____
(Printed Name and Signature)
Designation : _____
Date : _____

One of the requirements from the bidder to be included in its Technical Envelope is a list of contractor's key personnel (viz, Project Manager, Project Engineers, Materials Engineers and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data (including the key personnel signed written commitment to work for the project once awarded the contract).

DEPARTMENT OF AGRICULTURE-REGIONAL FIELD OFFICE 1
NAME OF PROCURING ENTITY

Contract Reference Number
Name of the Contract
Location of the Contract

1. Name : _____
2. Name and Address of Owner : _____
3. Name and Address of the Owner's Engineer (Consultant) :_____
3-4. Indicate the Features of Project (particulars of the project Components and any other particular Interest connected with the project): _____
5. Contract Amount Expressed in Philippine currency : _____
6. Position : _____
7. Structures for which the employee was responsible : _____
8. Assignment Period : from _____ (months)
: to _____ (months)

_____
Name and Signature of Employee

It is hereby certified that the above personnel can be assigned to this project, if the contract is awarded to our company.

_____ _____
(Place and Date) (The Authorized Representative)

One of the requirements from the bidder to be included in its Technical Envelope is a list of contractor's key personnel (viz, Project Manager, Project Engineers, Materials Engineers and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data (including the key personnel signed written commitment to work for the project once awarded the contract).

DEPARTMENT OF AGRICULTURE-REGIONAL FIELD OFFICE 1
NAME OF PROCURING ENTITY

Contract Reference Number
Name of the Contract
Location of the Contract

Standard Form Number: SF-INFR-47
Revised on: August 11, 2004

KEY PERSONNEL
(FORMAT OF BIO-DATA

Give the detailed information of the following personnel who are to be assigned as full-time field staff for the project. Fill up a form for each person.

- Authorized Managing Officer/Representative
- Sustained Technical Employee

1. Name : _____
2. Date of Birth : _____
3. Nationality : _____
4. Education and Degrees : _____
5. Specialty : _____
6. Registration : _____
7. Length of service with the Firm : _____
8. Years of Experience : _____
9. If item 7 is less than ten (10) years, give name and length of service with previous employers for a ten (10)-year period (attach additional sheet/s), if necessary:

Name and Address of employer	Length of Service
_____	_____ year(s) from _____ to _____
_____	_____ year(s) from _____ to _____
_____	_____ year(s) from _____ to _____

10. Experience:

    This should cover the past ten (10) years of experience. (Attach as many pages as necessary to show involvement of personnel in projects using the format below).

One of the requirements from the bidder to be included in its Technical Envelope is a list of contractor's key personnel (viz, Project Manager, Project Engineers, Materials Engineers and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data (including the key personnel signed written commitment to work for the project once awarded the contract). SF-INFR-47a

DEPARTMENT OF AGRICULTURE-REGIONAL FIELD OFFICE 1
NAME OF PROCURING ENTITY

Contract Reference Number
Name of the Contract
Location of the Contract

Standard Form Number: SF-INFR-46
Revised on: August 11, 2004

Key Personnel's Certificate of Employment

Issuance Date

DIR. NESTOR
Position of the Head of the Procuring Entity
DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE 1
CITY OF SAN FERNANDO, LA UNION0

Dear Sir/Madame:

I am (*Name of Nominee*) a Licensed _____ Engineer with Professional License No. _____ issued on (*Date of Issuance*) at (*place of issuance*) .

I hereby certify that (*Name of Bidder)* has engaged my services as (*designation*) for *(name of the Contract*) , if awarded to it.

As *(designation)* , I supervised the following completed projects similar to the contract under bidding:

NAME OF PROJECT	OWNER	COST	DATE COMPLETED
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

At present, I am supervising the following projects:

NAME OF PROJECT	OWNER	COST	DATE COMPLETED
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

In case of my separation for any reason whatsoever from the above-mentioned contractor, I shall notify the (*Name of the Procuring Entity)* at least twenty one (21) days before the effective date of my separation.

As (Designation) , I know I will have to stay in the job site all the time to supervise and manage the Contract works to the best of my ability, and aware that I am authorized to hanle only one (1) contract at a time.

I do not allow the use of my name for the purpose of enabling the above-mentioned Contractor to qualify for the Contract without any firm commitment on my part to assume the post of (Designation) thereof, if the contract is awarded to him since I understand that to do so will be

a sufficient ground for my disqualification as (Designation) in any future ____(*Name of the Procuring Entity)* _____bidding or employment with anyContractor doing business with the *Name of the Procuring Entity)* _____.

_____
(Signature of Engineer)

DRY SEAL

Republic of the Philippines)
_____) S.S.

SUBSCRIBED AND SWORN TO before me this _____ day of _____ 2022 affiant exhibiting to me his/her Residence Certificate No. _____ issued on _____ at _____.

Notary Public
Until December 31, 20_____

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

*One of the requirements from the bidder to be included in its Technical Envelope is a list of contractor's key personnel (viz, Project Manager, Project Engineers, Materials Engineers and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data (including the key personnel signed written commitment to work for the project once awarded the contract).*_____SF-INFR-46a

Standard Form Number: SF-INFR-49
Revised on August 11, 2004

LIST OF EQUIPMENT, OWNED OF LEASED and/or under PURCHASE AGREEMENT, PLEADGED TO THE PROPOSED PROJECT

Business Name : _____
Business Address : _____

Description	Model/Year	Capacity/ Performance/ Size	Plate No.	Motor No./ Body No.	Location	Condition	Proof of Ownership/ Lessor or Vendor

List of minimum equipment required for the project

Submitted by : _____
(Print name and affix signature)
Designation : _____
Date : _____

Omnibus Sworn Statement (Revised)

[shall be submitted with the Bid]

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

AFFIDAVIT

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. *[Select one, delete the other:]*

   [If a sole proprietorship:] I am the sole proprietor or authorized representative of [Name of Bidder] with office address at [address of Bidder];
   [If a partnership, corporation, cooperative, or joint venture:] I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. *[Select one, delete the other:]*

   [If a sole proprietorship:] As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

   [If a partnership, corporation, cooperative, or joint venture:] I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable;)];

3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, **by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;**

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. *[Select one, delete the rest:]*

   [If a sole proprietorship:] The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the

TechnicalWorking Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a partnership or cooperative] None of the officers and members of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

7. *[Name of Bidder]* complies with existing labor laws and standards; and

8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
    a. Carefully examining all of the Bidding Documents;
    b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
    c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
    d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.

9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

10. **In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.**

IN WITNESS WHEREOF, I have hereunto set my hand this __ day of ___, 20__ at _____, Philippines.

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]
[Insert signatory's legal capacity]
Affiant

[Jurat]
[Format shall be based on the latest Rules on Notarial Practice]

COMPUTATION OF NET FINANCIAL CONTRACTING CAPACITY (NFCC)

Summary of the Applicant Supplier's/Distributor's assets and liabilities on the basis of the attached Income Tax Return and Audited Financial Statement, stamped "RECEIVED" by the Bureau of Internal Revenue or BIR authorized collecting agent for the immediately preceding year.

		Year 20___
1	Total Assets	
2	Current Assets	
3	Total Liabilities	
4	Current Liabilities	
5	Net Worth (1-3)	
6	Net Working Capital (2-4)	

The Net Financial Contracting Capacity (NFCC), which must be at least equal to the ABC to be bid, based on the above data is calculated as follows:

> **NFCC =** [(Current asset minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started

Or,

If the prospective bidder opts to submit a Committed Line of Credit (CLC), it must be at least equal to ten percent (10%) of the ABC to be bid and shall be confirmed or authenticated by a local universal or commercial bank.

Name of Bank _____ Amount _____

Herewith attached are certified true copies of the Income Tax Return and Audited Financial Statement Stamped "RECEIVED" by the BIR authorized collecting agent for the immediately preceding year.

Submitted by:

Name of Supplier/Distributor/Manufacturer

Printed Name and Signature of Authorized Representative
Date:

Bid Form for the Procurement of Infrastructure Projects

[shall be submitted with the Bid]

BID FORM

Date: _____
Project Identification No.: _____

To: **DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE 1**
City of San Fernando, La Union

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, declare that:

a. We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project*: [insert name of contract*];

b. We offer to execute the Works for this Contract in accordance with the PBDs;

c. The total price of our Bid in words and figures, excluding any discounts offered below is: *[insert information]*;

d. The discounts offered and the methodology for their application are: *[insert information];*

e. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties],* which are itemized herein and reflected in the detailed estimates,

f. Our Bid shall be valid within the period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;

g. If our Bid is accepted, we commit to obtain a Performance Security in the amount of *[insert percentage amount]* percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines12 for this purpose;

h. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;

i. We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and

j. We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.

k. We likewise certify/confirm that the undersigned, is the duly authorized representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for the *[Name of Project*] of the [*Name of the Procuring Entity].*

l. We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.

Name: _____

Legal capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Date: _____