PHILIPPINE BIDDING DOCUMENTS

Procurement of INFRASTRUCTURE PROJECTS

Government of the Republic of the Philippines

REBIDDING OF PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM

IB No.: DA-RFO 1-2024-INFRA-023-R

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 REBIDDING OF PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM

1. The Department of Agriculture - Regional Field Office 1 (DA-RFO 1), through the GAA FY 2024 intends to apply the sum of **Seven Million Forty Thousand Seven Hundred Twenty Pesos and Eighty-Two Centavos (PhP7,040,720.82)** with project identification number **DA-RFO-1-2024-INFRA-023-R** being the Approved Budget for the Contract (ABC) to payments under the contract for each lot, to wit:

Project Title	ABC (Php)
REBIDDING OF LOT 1: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. SAN PEDRO, MABINI PANGASINAN AND BRGY. ABONAGAN, MALASIQUI, PANGASINAN	2,011,691.88
REBIDDING OF LOT 2: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. LABIT WEST, URDANETA CITY, PANGASINAN; BRGY. IMELDA, SAN JACINTO, PANGASINAN AND BRGY. AMLANG, ROSARIO, LA UNION	3,017,410.70
REBIDDING OF LOT 3: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SIBSIBU SAN EMILIO SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. SIBSIBU, SAN EMILIO, ILOCOS SUR	1,005,791.62
REBIDDING OF LOT 4: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF MORONG BADOC SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. MORONG, BADOC, ILOCOS NORTE	1,005,826.62
TOTAL	**7,040,720.82**

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

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

SPECIFICATIONS

Lot 1:

Project Location/Site:

1. Brgy. San Pedro, Mabini, Pangasinan

Project Description: Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH and development of Water Source

Scope of work to be done:

Description	Qty	Unit
I. MOBILIZATION AND DEMOBILIZATION	1.00	l.s
II. PROVISION OF CONSTRUCTION SAFETY AND HEALTH PROGRAM (PPE, SIGNAGES)	1.00	l.s.
III. CONSTRUCTION OF TEMPORARY FACILITY	1.00	l.s
IV. CLEARING AND GRUBBING	100.00	sq.m
V. EARTHWORKS	10.67	cu.m
VI. RSB WORKS	205.00	kgs
VII. FORM WORKS	112.00	bd.ft
VIII. CONCRETE WORKS	3.00	cu.m.
IX. CONSTRUCTION OF WELL	1.00	l.s.
X. PV MODULE AND MOUNTING	3,640.00	watts
XI. WATER PUMP	1.00	unit
XII. PUMP CONTROLLER/INVERTER	1.00	unit
XIII. IRON WORKS (TANK STAND)	1.00	lot
XIV. CABLE AND ELECTRICAL WORKS	1.00	lot
XV. DISTRIBUTION WORKS & TANK	157.00	m
XVI. PROJECT MARKER	1.00	unit

MINIMUM TECHNICAL PERSONNEL REQUIRED:

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

MINIMUM EQUIPMENT REQUIRED:

- 1 Welding Machine
- 1 Acetylene
- 1 Generator Set
- 1 Bar Cutter
- 1 Bar Bender
- 1 One-Bagger Concrete Mixer

Completion of Works: fifty-five (55) calendar days

Project Location/Site:

2. Brgy. Abonagan, Malasiqui, Pangasinan

Project Description: Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH and development of Water Source

Scope of work to be done:

Description	Qty	Unit
I. MOBILIZATION AND DEMOBILIZATION	1.00	l.s
II. PROVISION OF CONSTRUCTION SAFETY AND HEALTH PROGRAM (PPE, SIGNAGES)	1.00	l.s.
III. CONSTRUCTION OF TEMPORARY FACILITY	1.00	l.s
IV. CLEARING AND GRUBBING	100.00	sq.m
V. EARTHWORKS	10.67	cu.m
VI. RSB WORKS	205.00	kgs
VII. FORM WORKS	112.00	bd.ft
VIII. CONCRETE WORKS	3.00	cu.m.
IX. FLOATING PUMP CAGE	1.00	l.s.
X. PV MODULE AND MOUNTING	3,640.00	watts
XI. WATER PUMP	1.00	unit
XII. PUMP CONTROLLER/INVERTER	1.00	unit
XIII. IRON WORKS (TANK STAND)	1.00	lot
XIV. CABLE AND ELECTRICAL WORKS	1.00	lot
XV. DISTRIBUTION WORKS & TANK	142.00	m
XVI. PROJECT MARKER	1.00	unit

MINIMUM TECHNICAL PERSONNEL REQUIRED:

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

MINIMUM EQUIPMENT REQUIRED:

- 1 Welding Machine
- 1 Acetylene
- 1 Generator Set
- 1 Bar Cutter
- 1 Bar Bender
- 1 One-Bagger Concrete Mixer
- 1 Cut-Off Machine

Completion of Works: fifty (50) calendar days

Lot 2:
Project Location/Site:

1. Brgy. Labit West, Urdaneta City, Pangasinan

Project Description: Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH and development of Water Source

Scope of work to be done:

Description	Qty	Unit
I. MOBILIZATION AND DEMOBILIZATION	1.00	l.s
II. PROVISION OF CONSTRUCTION SAFETY AND HEALTH PROGRAM (PPE, SIGNAGES)	1.00	l.s.
III. CONSTRUCTION OF TEMPORARY FACILITY	1.00	l.s
IV. CLEARING AND GRUBBING	100.00	sq.m
V. EARTHWORKS	10.67	cu.m
VI. RSB WORKS	205.00	kgs
VII. FORM WORKS	112.00	bd.ft
VIII. CONCRETE WORKS	3.00	cu.m.
IX. CONSTRUCTION OF WELL	1.00	l.s.
X. PV MODULE AND MOUNTING	3,640.00	watts
XI. WATER PUMP	1.00	unit
XII. PUMP CONTROLLER/INVERTER	1.00	unit
XIII. IRON WORKS (TANK STAND)	1.00	lot
XIV. CABLE AND ELECTRICAL WORKS	1.00	lot
XV. DISTRIBUTION WORKS & TANK	99.00	m
XVI. PROJECT MARKER	1.00	unit

MINIMUM TECHNICAL PERSONNEL REQUIRED:

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

MINIMUM EQUIPMENT REQUIRED:

- 1 Welding Machine
- 1 Acetylene
- 1 Generator Set

- 1 Bar Cutter
- 1 Bar Bender
- 1 One-Bagger Concrete Mixer

Completion of Works: fifty-five (55) calendar days

Project Location/Site:

2. Brgy. Imelda, San Jacinto, Pangasinan

Project Description: Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH and development of Water Source

Scope of work to be done:

Description	Qty	Unit
I. MOBILIZATION AND DEMOBILIZATION	1.00	l.s
II. PROVISION OF CONSTRUCTION SAFETY AND HEALTH PROGRAM (PPE, SIGNAGES)	1.00	l.s.
III. CONSTRUCTION OF TEMPORARY FACILITY	1.00	l.s
IV. CLEARING AND GRUBBING	100.00	sq.m
V. EARTHWORKS	10.67	cu.m
VI. RSB WORKS	205.00	kgs
VII. FORM WORKS	112.00	bd.ft
VIII. CONCRETE WORKS	3.00	cu.m.
IX. CONSTRUCTION OF WELL	1.00	l.s.
X. PV MODULE AND MOUNTING	3,640.00	watts
XI. WATER PUMP	1.00	unit
XII. PUMP CONTROLLER/INVERTER	1.00	unit
XIII. IRON WORKS (TANK STAND)	1.00	lot
XIV. CABLE AND ELECTRICAL WORKS	1.00	lot
XV. DISTRIBUTION WORKS & TANK	154.00	m
XVI. PROJECT MARKER	1.00	unit

MINIMUM TECHNICAL PERSONNEL REQUIRED:

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

MINIMUM EQUIPMENT REQUIRED:

- 1 Welding Machine
- 1 Acetylene
- 1 Generator Set

- 1 Bar Cutter
- 1 Bar Bender
- 1 One-Bagger Concrete Mixer

Completion of Works: fifty-five (55) calendar days

Project Location/Site:

3. Brgy. Amlang, Rosario, La Union

Project Description: Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH and development of Water Source

Scope of work to be done:

Description	Qty	Unit
I. MOBILIZATION AND DEMOBILIZATION	1.00	l.s
II. PROVISION OF CONSTRUCTION SAFETY AND HEALTH PROGRAM (PPE, SIGNAGES)	1.00	l.s.
III. CONSTRUCTION OF TEMPORARY FACILITY	1.00	l.s
IV. CLEARING AND GRUBBING	100.00	sq.m
V. EARTHWORKS	10.67	cu.m
VI. RSB WORKS	205.00	kgs
VII. FORM WORKS	112.00	bd.ft
VIII. CONCRETE WORKS	3.00	cu.m.
IX. PV MODULE AND MOUNTING	3,640.00	watts
X. WATER PUMP	1.00	unit
XI. PUMP CONTROLLER/INVERTER	1.00	unit
XII. IRON WORKS (TANK STAND)	1.00	lot
XIII. CABLE AND ELECTRICAL WORKS	1.00	lot
XIV. DISTRIBUTION WORKS & TANK	556.00	m
XV. PROJECT MARKER	1.00	unit

MINIMUM TECHNICAL PERSONNEL REQUIRED:

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

MINIMUM EQUIPMENT REQUIRED:

- 1 Welding Machine
- 1 Acetylene
- 1 Generator Set
- 1 Bar Cutter
- 1 Bar Bender

- 1 One-Bagger Concrete Mixer

Completion of Works: forty-five (45) calendar days

Lot 3:

Project Location/Site: Brgy. Sibsibu, San Emilio, Ilocos Sur

Project Description: Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH and development of Water Source

Scope of work to be done:

Description	Qty	Unit
I. MOBILIZATION AND DEMOBILIZATION	1.00	l.s
II. PROVISION OF CONSTRUCTION SAFETY AND HEALTH PROGRAM (PPE, SIGNAGES)	1.00	l.s.
III. CONSTRUCTION OF TEMPORARY FACILITY	1.00	l.s
IV. CLEARING AND GRUBBING	100.00	sq.m
V. EARTHWORKS	10.67	cu.m
VI. RSB WORKS	205.00	kgs
VII. FORM WORKS	112.00	bd.ft
VIII. CONCRETE WORKS	3.00	cu.m.
IX. CONSTRUCTION OF WELL	1.00	l.s.
X. PV MODULE AND MOUNTING	3,640.00	watts
XI. WATER PUMP	1.00	unit
XII. PUMP CONTROLLER/INVERTER	1.00	unit
XIII. IRON WORKS (TANK STAND)	1.00	lot
XIV. CABLE AND ELECTRICAL WORKS	1.00	lot
XV. DISTRIBUTION WORKS & TANK	139.00	m
XVI. PROJECT MARKER	1.00	unit

MINIMUM TECHNICAL PERSONNEL REQUIRED:

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

MINIMUM EQUIPMENT REQUIRED:

- 1 Welding Machine
- 1 Acetylene
- 1 Generator Set
- 1 Bar Cutter
- 1 Bar Bender

- 1 One-Bagger Concrete Mixer

Completion of Works: fifty-five (55) calendar days

Lot 4:

Project Location/Site: Brgy. Morong, Badoc, Ilocos Norte

Project Description: Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH and development of Water Source

Scope of work to be done:

Description	Qty	Unit
I. MOBILIZATION AND DEMOBILIZATION	1.00	l.s
II. PROVISION OF CONSTRUCTION SAFETY AND HEALTH PROGRAM (PPE, SIGNAGES)	1.00	l.s.
III. CONSTRUCTION OF TEMPORARY FACILITY	1.00	l.s
IV. CLEARING AND GRUBBING	100.00	sq.m
V. EARTHWORKS	10.67	cu.m
VI. RSB WORKS	205.00	kgs
VII. FORM WORKS	112.00	bd.ft
VIII. CONCRETE WORKS	3.00	cu.m.
IX. CONSTRUCTION OF WELL	1.00	l.s.
X. PV MODULE AND MOUNTING	3,640.00	watts
XI. WATER PUMP	1.00	unit
XII. PUMP CONTROLLER/INVERTER	1.00	unit
XIII. IRON WORKS (TANK STAND)	1.00	lot
XIV. CABLE AND ELECTRICAL WORKS	1.00	lot
XV. DISTRIBUTION WORKS & TANK	157.00	m
XVI. PROJECT MARKER	1.00	unit

MINIMUM TECHNICAL PERSONNEL REQUIRED:

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

MINIMUM EQUIPMENT REQUIRED:

- 1 Welding Machine
- 1 Acetylene
- 1 Generator Set

- 1 Bar Cutter
- 1 Bar Bender
- 1 One-Bagger Concrete Mixer

Completion of Works: fifty-five (55) 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 **May 3-23, 2024** 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 following amounts:

Project Title	Bid Docs Fee
REBIDDING OF LOT 1: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. SAN PEDRO, MABINI PANGASINAN AND BRGY. ABONAGAN, MALASIQUI, PANGASINAN	5,000.00
REBIDDING OF LOT 2: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. LABIT WEST, URDANETA CITY, PANGASINAN; BRGY. IMELDA, SAN JACINTO, PANGASINAN AND BRGY. AMLANG, ROSARIO, LA UNION	5,000.00
REBIDDING OF LOT 3: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SIBSIBU SAN EMILIO SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. SIBSIBU, SAN EMILIO, ILOCOS SUR	5,000.00
REBIDDING OF LOT 4: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF MORONG BADOC SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. MORONG, BADOC, ILOCOS NORTE	5,000.00

The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.

NOTE: For lot procurement, the maximum fee for the Bidding Documents for each lot shall be based on its ABC, in accordance with the Guidelines issued by the GPPB; provided that the total fees for the Bidding Documents of all lots shall not exceed the maximum fee prescribed in the Guidelines for the sum of the ABC of all lots.

6. The **DA-RFO 1** will hold a Pre-Bid Conference on **10 May 2024, 10:00 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 **23 May 2024, 10:00 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 **23 May 2024, 10:00 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.
e. The Technical Specifications (as part of Tab f - Project Requirements), to be signed by the bidder/authorized representative and submit during bid opening, of the unit offered must be duly SIGNED/COUNTERSIGNED AND SEALED by a Licensed Agricultural and Biosystems Engineer in accordance with Republic Act 10915, dated 21 July 2016, otherwise known as "Philippine Agricultural and Biosystems Engineering Act of 2016" and Department of Agriculture (DA) Memorandum Order No. 50, Series of 2020. The Technical Specification must be supported with the following:
    - Colored, clear and readable original copies of brochures (in English language) of the offered goods (pump, inverter/controller and solar module/panel).
    - Other technical specification requirements:
        - With minimum warranty of 1 year on pump and controller/inverter, accessories, and services
        - With minimum warranty of 15 years on PV Module

f. Valid AMTEC Test Report for the pump is required during bid opening. Upon completion of the project the RAED shall conduct Acceptance testing. If the system fails to meet the prescribed specifications and performance standards, the contractor shall institute corrective measures for the system to conform to specifications and standards as requirement for payment. Otherwise, the procuring entity shall not accept the project and proceed with the termination of contract on the ground that the supplier/ winning bidder, who is in default, fails to perform its obligation under the Contract.
g. Permit to Operate and Notification Letter from BAFE shall be verified during post-qualification.

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:

FLORENTINO A. ADAME, DVM
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: darfo1.bacsec1@gmail.com

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/

May 2, 2024

Approved by:

(Sgd.) FLORENTINO A. ADAME, DVM
Chairperson, Bids and Awards Committee

Invitation to Bid Identification No. DA-RFO 1-2024-INFRA-023-R

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 **REBIDDING OF PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGAM** with Project Identification Number **DA-RFO 1-2023-INFRA-023-R.**

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 2024 in the amount of **Seven Million Forty Thousand Seven Hundred Twenty Pesos and Eighty-Two Centavos (PhP7,040,720.82),** which is broken down as follows:

Project Title	ABC (Php)
REBIDDING OF LOT 1: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. SAN PEDRO, MABINI PANGASINAN AND BRGY. ABONAGAN, MALASIQUI, PANGASINAN	2,011,691.88
REBIDDING OF LOT 2: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. LABIT WEST, URDANETA CITY, PANGASINAN; BRGY. IMELDA, SAN JACINTO, PANGASINAN AND BRGY. AMLANG, ROSARIO, LA UNION	3,017,410.70
REBIDDING OF LOT 3: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SIBSIBU SAN EMILIO SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. SIBSIBU, SAN EMILIO, ILOCOS SUR	1,005,791.62
REBIDDING OF LOT 4: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF MORONG BADOC SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. MORONG, BADOC, ILOCOS NORTE	1,005,826.62

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** and/or through videoconferencing/webcasting} as indicated in paragraph 6 of the **IB.**

9. Clarification and Amendment of Bidding Documents

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

10. Documents Comprising the Bid: Eligibility and Technical Components

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

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

10.3. A valid 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 **September 20, 2024.** 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><td>ITB Clause</td><td></td></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:
INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS)</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 (for each unit) set below:

Lots 1-4 (All sites)

<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 (for each unit) are the following:

Lots 1-4<table><tr><th>Equipment</th><th>Capacity</th><th>No. of Units</th></tr><tr><td>Welding Machine</td><td></td><td>1</td></tr><tr><td>Acetylene</td><td></td><td>1</td></tr><tr><td>Generator Set</td><td></td><td>1</td></tr><tr><td>Bar Cutter</td><td></td><td>1</td></tr><tr><td>Bar Bender</td><td></td><td>1</td></tr><tr><td>Concrete Mixer</td><td>one-bagger</td><td>1</td></tr><tr><td>Cut-off Machine
(for Lot 1: Abonagan, Malasiqui, Pangasinan SPIS only)</td><td></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 amounts:</td></tr>
</table>

Name of the Contract/Project	Cash, cashier's/manager's check, Bank draft/guarantee or irrevocable letter of Credit (PhP) 2%	Surety Bond, Which Includes GSIS Insurance (PhP) 5%
REBIDDING OF LOT 1: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. SAN PEDRO, MABINI PANGASINAN AND BRGY. ABONAGAN, MALASIQUI, PANGASINAN	40,233.84	100,584.59
REBIDDING OF LOT 2: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. LABIT WEST, URDANETA CITY, PANGASINAN; BRGY. IMELDA, SAN JACINTO, PANGASINAN AND BRGY. AMLANG, ROSARIO, LA UNION	60,348.214	150,870.54
REBIDDING OF LOT 3: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SIBSIBU SAN EMILIO SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. SIBSIBU, SAN EMILIO, ILOCOS SUR	20,115.83	50,289.58
REBIDDING OF LOT 4: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF MORONG BADOC SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. MORONG, BADOC, ILOCOS NORTE	20,116.53	50,291.33

<table>
<tr><td>19.2</td><td>The project will be awarded as separate contracts per lot.
<table>
<tr><th>Project Title</th><th>ABC (Php)</th></tr>
<tr><td>REBIDDING OF LOT 1: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. SAN PEDRO, MABINI PANGASINAN AND BRGY. ABONAGAN, MALASIQUI, PANGASINAN</td><td>2,011,691.88</td></tr>
<tr><td>REBIDDING OF LOT 2: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. LABIT WEST, URDANETA CITY, PANGASINAN; BRGY. IMELDA, SAN JACINTO, PANGASINAN AND BRGY. AMLANG, ROSARIO, LA UNION</td><td>3,017,410.70</td></tr>
<tr><td>REBIDDING OF LOT 3: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF SIBSIBU SAN EMILIO SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. SIBSIBU, SAN EMILIO, ILOCOS SUR</td><td>1,005,791.62</td></tr>
<tr><td>REBIDDING OF LOT 4: PROVISION OF LABOR, MATERIALS, EQUIPMENT RENTAL AND OTHER INCIDENTALS NEEDED FOR THE INSTALLATION OF MORONG BADOC SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM IN BRGY. MORONG, BADOC, ILOCOS NORTE</td><td>1,005,826.62</td></tr>
</table></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 and stated in the BDS.</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	The site investigation reports are: • Certificate of Site Inspection signed by the Project Recipient/s or LGU (MAO or Brgy. Captain or Brgy. Officials).
7.2	[In case of semi-permanent structures, such as buildings of types 1, 2, and 3 as classified under the National Building Code of the Philippines, concrete/asphalt roads, concrete river control, drainage, irrigation lined canals, river landing, deep wells, rock causeway, pedestrian overpass, and other similar semi-permanent structures:] Five (5) years.
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:

LOT 2: INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM (OAP)

PROJECT LOCATION: **BRGY. AMLANG, ROSARIO, LA UNION**

PROJECT DESCRIPTION:

Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
	SCOPE OF WORK:				
I.	MOBILIZATION AND DEMOBILIZATION	l.s	1.00		
II.	PROVISION OF CONSTRUCTION SAFETY AND HEALTH PROGRAM (PPE, SIGNAGES)	l.s	1.00		
III.	CONSTRUCTION OF TEMPORARY FACILITY	l.s	1.00		
IV.	CLEARING AND GRUBBING	sq.m	100.00		
V.	EARTHWORKS	cu.m	10.67		
VI.	RSB WORKS	kgs	205.00		
VII.	FORM WORKS	bd.ft	112.00		
VIII.	CONCRETE WORKS	cu.m	3.00		
IX.	PV MODULE AND MOUNTING	watts	3,640.00		
X.	WATER PUMP	unit	1.00		
XI.	PUMP CONTROLLER/INVERTER	unit	1.00		
XII.	IRON WORKS (TANK STAND)	lot	1.00		
XIII.	CABLE AND ELECTRICAL WORKS	lot	1.00		
XIV.	DISTRIBUTION WORKS & TANK	m	556.00		
XV.	PROJECT MARKER	unit	1.00		
				GRAND TOTAL	

NUMBER OF DAYS TO COMPLETE THE PROJECT: 45 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

BILL OF QUANTITIES

PROJECT NAME:

LOT 2: INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM (OAP)

PROJECT LOCATION: **BRGY. IMELDA, SAN JACINTO, PANGASINAN**

PROJECT DESCRIPTION:

Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH and development of Water Source.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
	SCOPE OF WORK:				
I.	MOBILIZATION AND DEMOBILIZATION	l.s	1.00		
II.	PROVISION OF CONSTRUCTION SAFETY AND HEALTH PROGRAM (PPE, SIGNAGES)	l.s	1.00		
III.	CONSTRUCTION OF TEMPORARY FACILITY	l.s	1.00		
IV.	CLEARING AND GRUBBING	sq.m	100.00		
V.	EARTHWORKS	cu.m	10.67		
VI.	RSB WORKS	kgs	205.00		
VII.	FORM WORKS	bd.ft	112.00		
VIII.	CONCRETE WORKS	cu.m	3.00		
IX.	CONSTRUCTION OF WELL	l.s.	1.00		
X.	PV MODULE AND MOUNTING	watts	3,640.00		
XI.	WATER PUMP	unit	1.00		
XII.	PUMP CONTROLLER/INVERTER	unit	1.00		
XIII.	IRON WORKS (TANK STAND)	lot	1.00		
XIV.	CABLE AND ELECTRICAL WORKS	lot	1.00		
XV.	DISTRIBUTION WORKS & TANK	m	154.00		
XVI.	PROJECT MARKER	unit	1.00		
				GRAND TOTAL	

NUMBER OF DAYS TO COMPLETE THE PROJECT: 55 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

BILL OF QUANTITIES

PROJECT NAME:
LOT 2: INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM (OAP)

PROJECT LOCATION: **BRGY. LABIT WEST, URDANETA CITY, PANGASINAN**

PROJECT DESCRIPTION:
Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH and development of Water Source.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
	SCOPE OF WORK:				
I.	MOBILIZATION AND DEMOBILIZATION	l.s	1.00		
II.	PROVISION OF CONSTRUCTION SAFETY AND HEALTH PROGRAM (PPE, SIGNAGES)	l.s	1.00		
III.	CONSTRUCTION OF TEMPORARY FACILITY	l.s	1.00		
IV.	CLEARING AND GRUBBING	sq.m	100.00		
V.	EARTHWORKS	cu.m	10.67		
VI.	RSB WORKS	kgs	205.00		
VII.	FORM WORKS	bd.ft	112.00		
VIII.	CONCRETE WORKS	cu.m	3.00		
IX.	CONSTRUCTION OF WELL	l.s.	1.00		
X.	PV MODULE AND MOUNTING	watts	3,640.00		
XI.	WATER PUMP	unit	1.00		
XII.	PUMP CONTROLLER/INVERTER	unit	1.00		
XIII.	IRON WORKS (TANK STAND)	lot	1.00		
XIV.	CABLE AND ELECTRICAL WORKS	lot	1.00		
XV.	DISTRIBUTION WORKS & TANK	m	99.00		
XVI.	PROJECT MARKER	unit	1.00		
				GRAND TOTAL	

NUMBER OF DAYS TO COMPLETE THE PROJECT: 55 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

INSTALLATION OF AMLANG ROSARIO SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP)

Brgy. Amlang, Rosario, La Union

REPUBLIC OF THE PHILIPPINES

DEPARTMENT OF AGRICULTURE

REGIONAL FIELD OFFICE NO. 1

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

PROJECT NAME : INSTALLATION OF AMLANG ROSARIO SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER OAP
LOCATION : BRGY. AMLANG, ROSARIO, LA UNION
COORDINATES : 120.479462°, 17.237865°

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FARM DEVELOPMENT PLAN & DISTRIBUTION LINE SCHEDULE	3 OF 10
ENGINEERING DESIGN	
DETAILS OF DUG WELL DETAILS OF WELL CASING OUTLET DETAILS	4 OF 10
TANK STAND PLAN FRONT ELEVATION SIDE ELEVATION	5 OF 10
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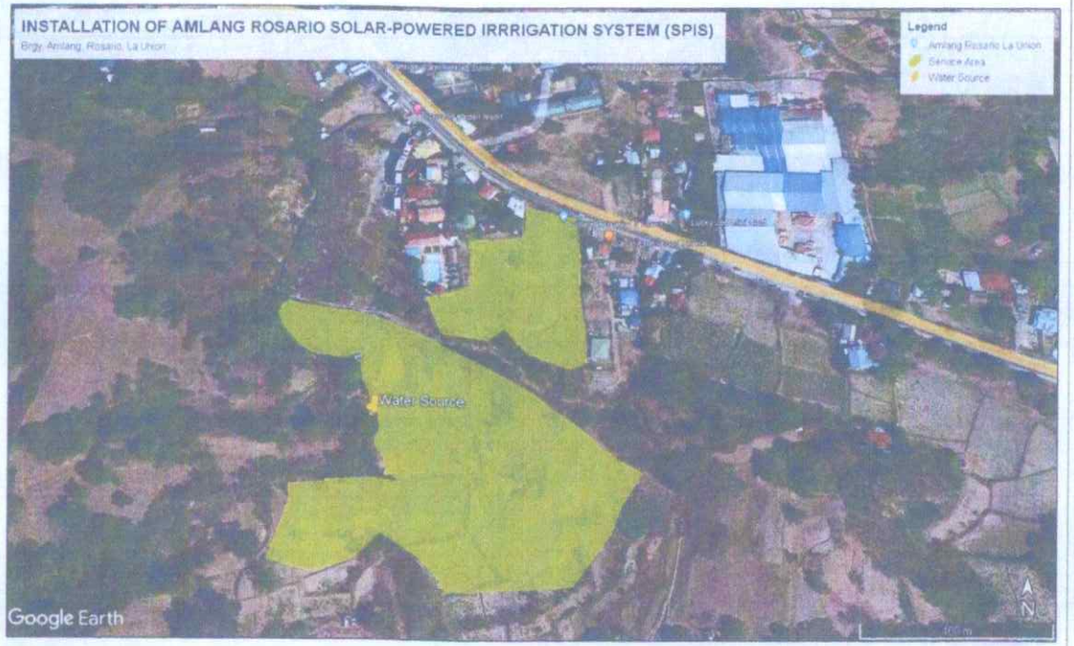
MOUNTING OVERVIEW C2F2 DETAILS	9 OF 10
MARKER PLAN	10 OF 10

MAIN PROJECT FEATURES	
1. PROJECT FACILITIES	DIMENSION/ SPECIFICATIONS
A. PV MODULE	
a.1 Material	high density monocrystalline PERC
a.2 Efficiency	up to 20.0% Max.
a.3 Orientation	Shall tilt at an angle 15° facing south
B. WATER PUMP	
b.1 Borehole Diameter	'4"
b.2 Rated Power	1.7 kW
b.3 Motor Speed	900 - 3300 rpm
b.4 Total Dynamic Head	18m (Max.)
b.5 Output/day	160 cu.m./day
C. PUMP CONTROLLER / INVERTER	
c.1 Power	1.8 kW
c.2 Input Voltage	200 V (Max)
c.3 Optimum VMP	> 102V
c.4 Motor Current	14.0A (Max.)
c.5 Efficiency	97.0 (Max.)
2. DESIGN SERVICE AREA	3.0 has.
3. APPROVED PROJECT COST	PHP1,005,813.46

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	INSTALLATION OF AMLANG ROSARIO SOLAR POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP) LOCATION: BRGY. AMLANG, ROSARIO, LA UNION	JEMMICA RAE O. URBIZTONDO, ABE Technical Staff, RAED	MARK HARRY G. PASTOR, ABE OIC, RAED	DENNIS I. TACTAC, ABE RTD for Operations	ANNIE Q. BARES, DVM Regional Executive Director	TABLE OF CONTENTS PROJECT PROFILE	1/10



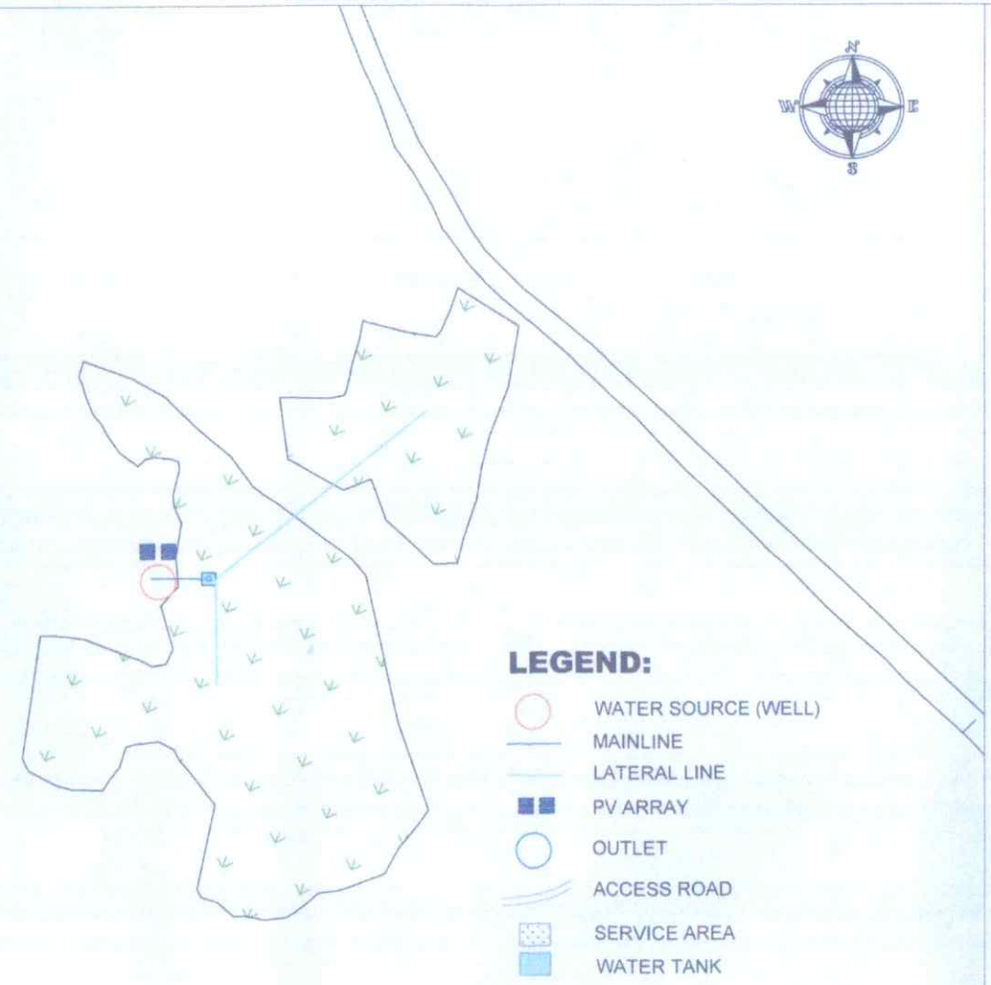
VICINITY MAP

SCALE NTS

PERSPECTIVE

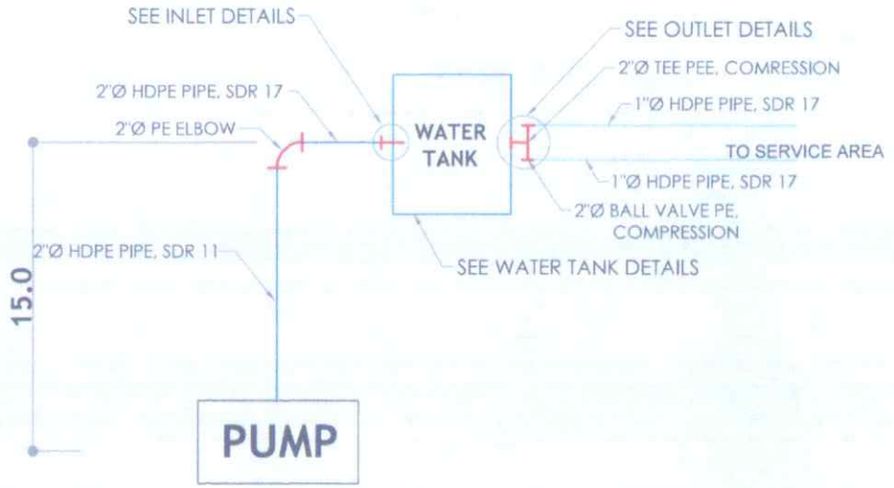
SCALE NTS

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	INSTALLATION OF AMLANG ROSARIO SOLAR POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP) LOCATION: BRGY. AMLANG, ROSARIO, LA UNION	JEMMICA RAE D. URBIZTONDO, ABE Technical Staff, RAED	MARK HARRY G. PASTOR, ABE OIC, RAED	DENNIS T. TACTAC, ABE RTD for Operations	ANNIE Q. BARES, DVM Regional Executive Director	- VICINITY MAP - PERSPECTIVE	2 10



FARM DEVELOPMENT PLAN

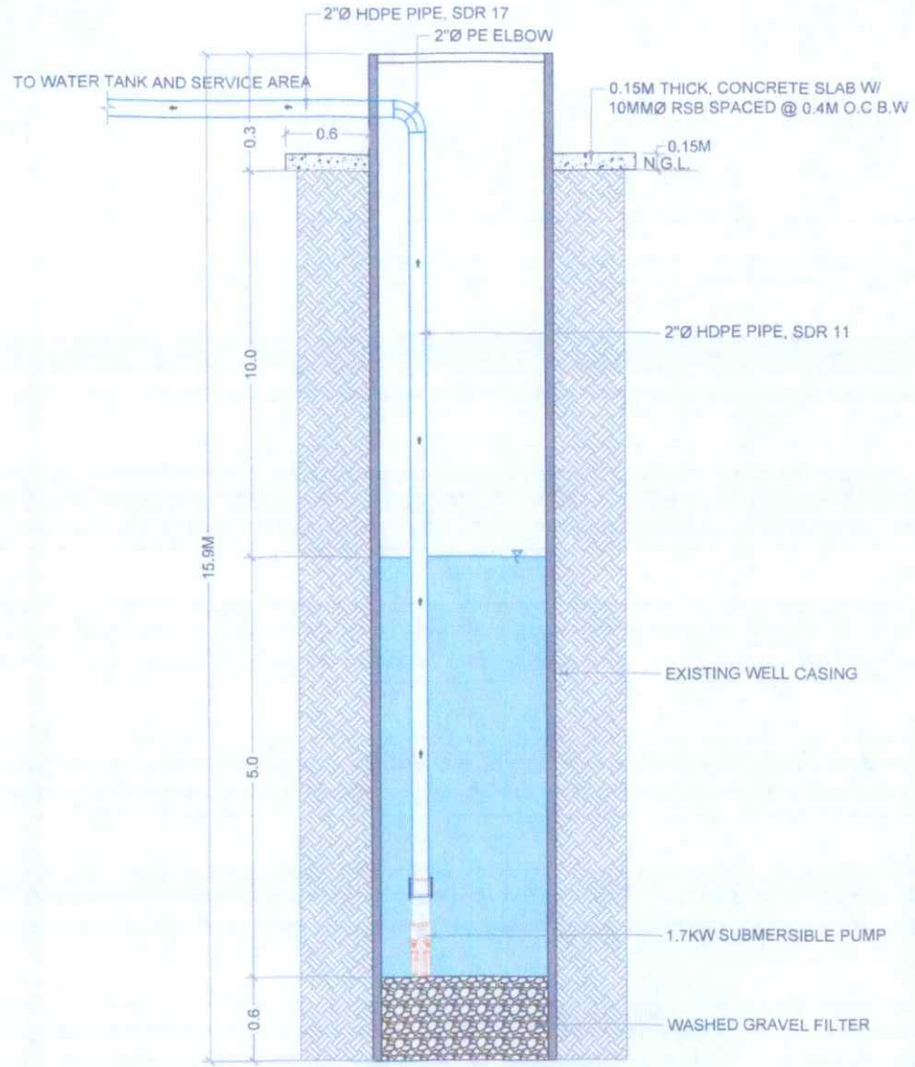
SCALE NTS



NO.	ITEM / DESCRIPTION	MATERIALS	QUANTITY
1	MAIN LINE	2"Ø HDPE PIPE, SDR 11	15.0 m
2	SECONDARY LINE	2"Ø HDPE PIPE, SDR 17	7.0 m
3	LATERAL LINE	1"Ø HDPE PIPE, SDR 17	534.0 m
4	ELBOW	2"Ø PE, COMPRESSION	5 PCS.
5	TEE	2"Ø PE, COMPRESSION	1 PC.
6	ELBOW REDUCER	2"-1"Ø PE, COMPRESSION	2 PCS.
7	BALL VALVE	2"Ø PE, COMPRESSION	2 PCS.
		TOTAL LENGTH (M)	**556.0 m**

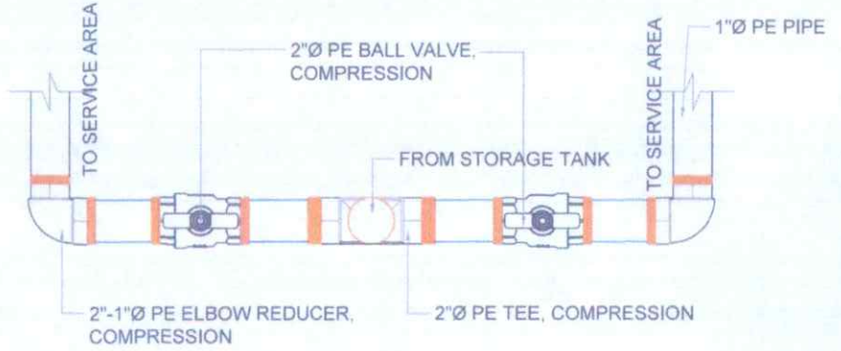
DISTRIBUTION LINE SCHEDULE

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	INSTALLATION OF AMLANG ROSARIO SOLAR POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP) LOCATION: BRGY. AMLANG, ROSARIO, LA UNION	JEMMICA RAE O. URBIZTONDO, ABE Technical Staff, RAED	MARK HARRY C. PASTOR, ABE OIC, RAED	DENNIS I. TACTAC, ABE RTD for Operations	ANNIE Q. BARES, DVM Regional Executive Director	FARM DEVELOPMENT PLAN DISTRIBUTION LINE SCHEDULE	3 10



DETAILS OF DUG WELL

SCALE NTS



OUTLET DETAILS

SCALE NTS

PREPARED FROM THE OFFICE OF THE	PROJECT TITLE	PREPARED BY	CHECKED & REVIEWED BY	RECOMMENDING APPROVAL	APPROVED	SHEET CONTENTS	SHEET NO.
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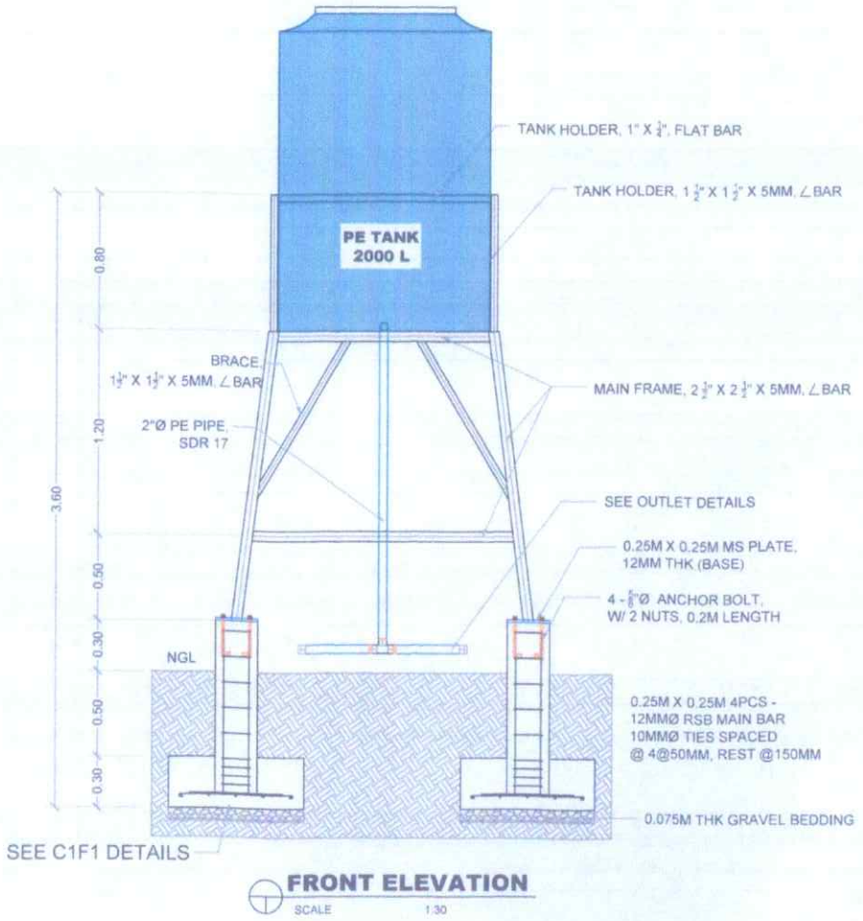
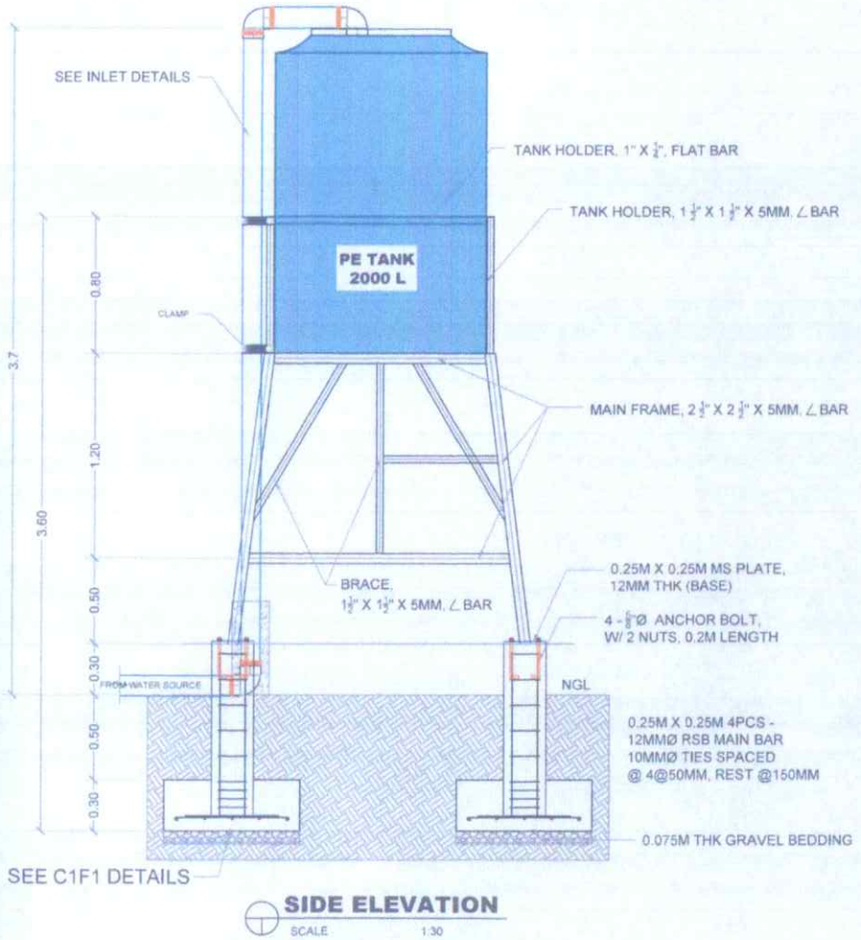
TANK STAND



FRONT ELEVATION
SCALE 1:30



SIDE ELEVATION
SCALE 1:30

PREPARED FROM THE OFFICE OF THE	PROJECT TITLE	PREPARED BY	CHECKED & REVIEWED BY	RECOMMENDING APPROVAL	APPROVED	SHEET CONTENTS	SHEET NO
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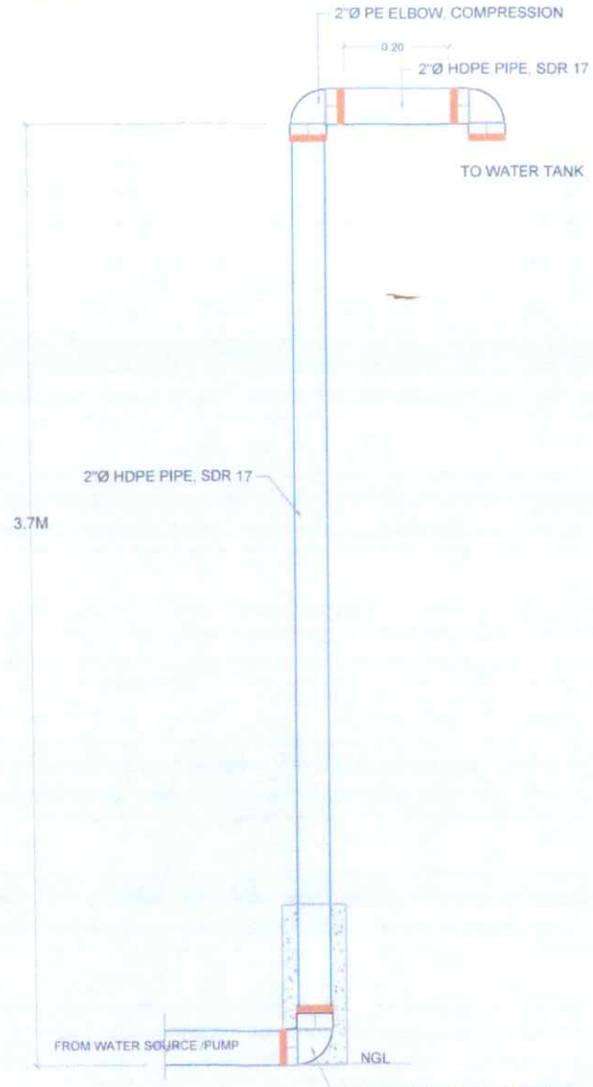
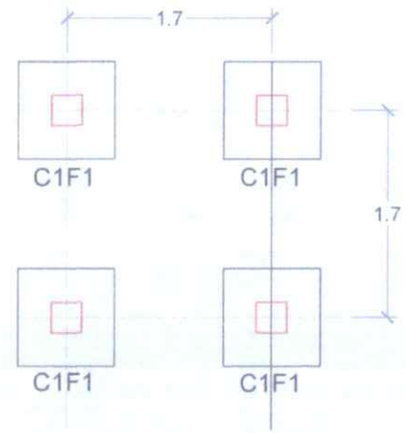
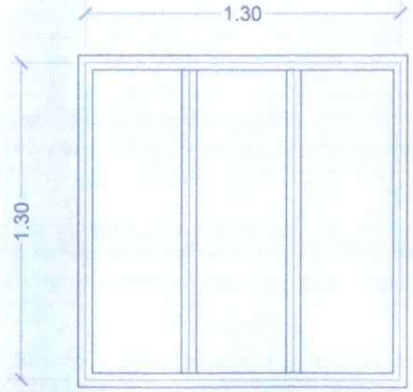


INLET DETAILS
SCALE NTS

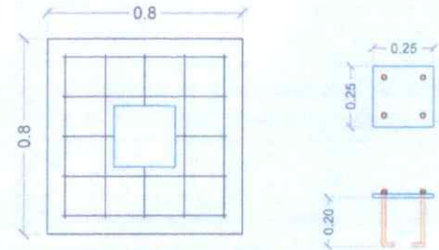


FOUNDATION PLAN
SCALE 1:50

ALL MEMBERS, 2-1/2"X2-1/2"X5MM, ∠ BAR



FLOORING DETAILS
SCALE 1:20



NOTE: 5 - 12MMØ FOOTING
RSB BOTHWAYS

C1F1 DETAIL
SCALE 1:20

PREPARED FROM THE OFFICE OF THE	PROJECT TITLE	PREPARED BY	CHECKED & REVIEWED BY	RECOMMENDING APPROVAL	APPROVED	SHEET CONTENTS	SHEET NO.
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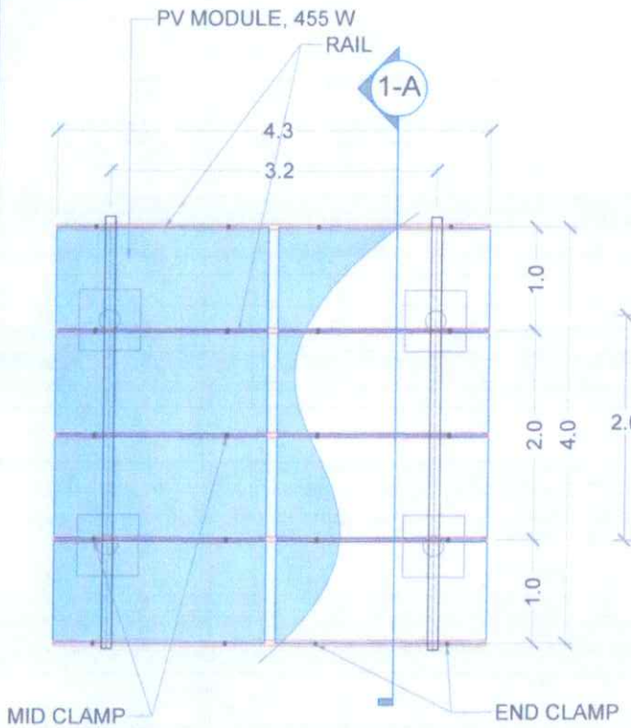
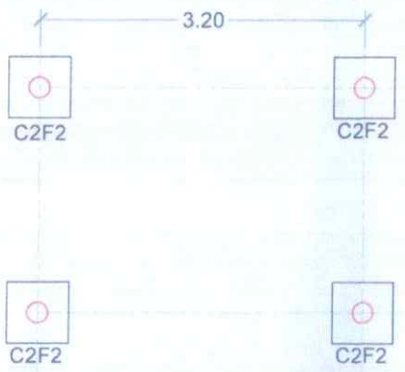


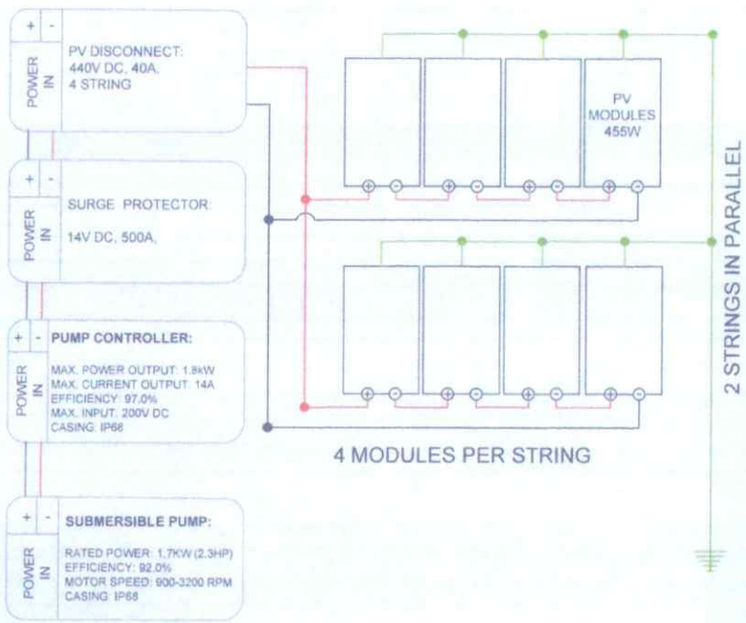
NOTE: TOTAL OF 8 PCS PV MODULE

PV ARRAY PLAN
SCALE 1:100



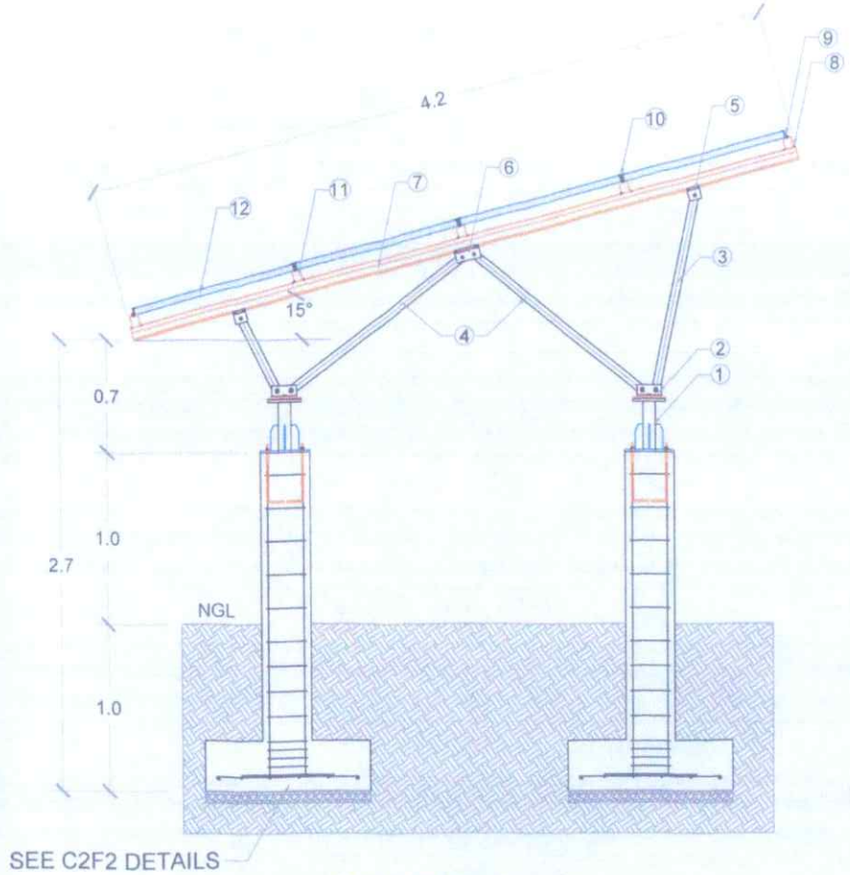
FOUNDATION PLAN
SCALE 1:100

PV MODULE CONNECTION



ELECTRICAL DIAGRAM
SCALE NTS

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	INSTALLATION OF AMLANG ROSARIO SOLAR POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP) LOCATION: BRGY. AMLANG, ROSARIO, LA UNION	JEMMICA RAE O. URBIZTONDO, ABE Technical Staff, RAED	MARK HARRY G. PASTOR, ABE OIC-RAED	DENNIS I. TACTAC, ABE FTD for Operations	ANNIE Q. BARES, DVM Regional Executive Director	PV ARRAY PLAN FOUNDATION PLAN ELECTRICAL DIAGRAM	7 10



SECTION 1-A

SCALE 1:30

LEGEND

NO.	ITEM / DESCRIPTION	MATERIALS
1	3"Ø, 3MM THK POST W/ BACK RING FLANGES, BASE, STIFFENER	ASTM A36 / Q235 STEEL HOT DEEPED GALVANIZED
2	BOTTOM BASE W/ 2 - BOLTS & NUTS, M12, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
3	POST W/ CONNECTOR, 2"X2"	ANODIZED ALUMINUM (AL6005-T5)
4	ADJUSTABLE INCLINED SUPPORT, 2"X2"	ANODIZED ALUMINUM (AL6005-T5)
5	H-BEAM CONNECTOR #1, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
6	H-BEAM CONNECTOR #2, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
7	SUPPORT BEAM, 2" X 4", 2MM THK	ANODIZED ALUMINUM (AL6005-T5)
8	RAIL CONNECTOR	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
9	END CLAMP, 50 MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
10	MID CLAMP, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
11	RAIL, 50MMX70MMX2.5MM	ANODIZED ALUMINUM (AL6005-T5)
12	PV MODULES, 455 WATTS	MONOCRYSTALINE

PREPARED FROM THE OFFICE OF THE	PROJECT TITLE	PREPARED BY	CHECKED & REVIEWED BY	RECOMMENDING APPROVAL	APPROVED	SHEET CONTENTS	SHEET NO.
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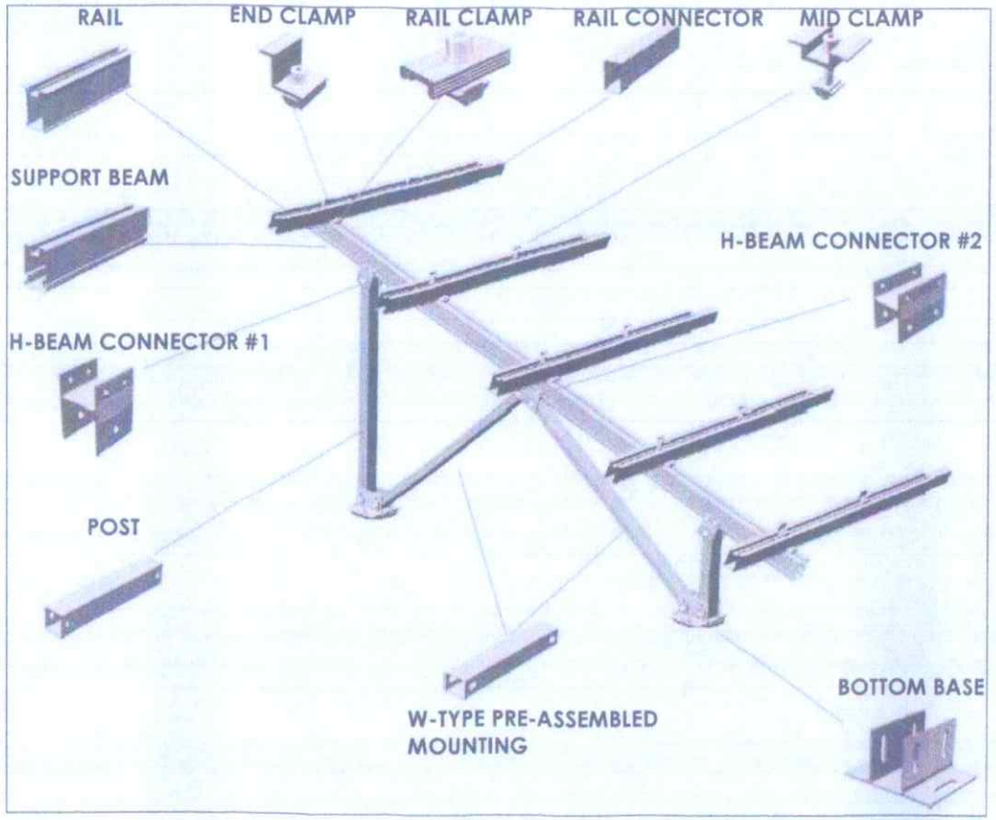
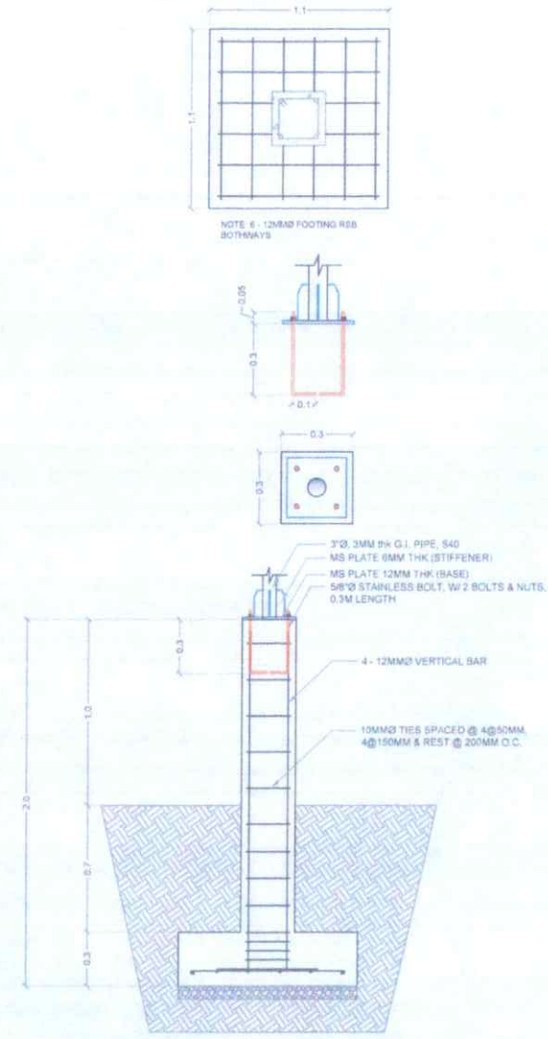


MOUNTING OVERVIEW

SCALE NTS

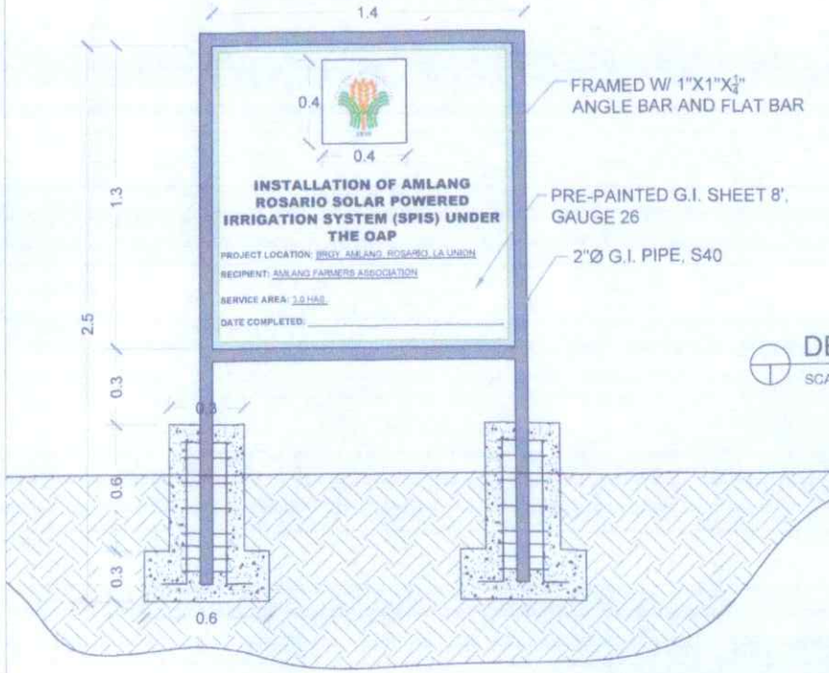


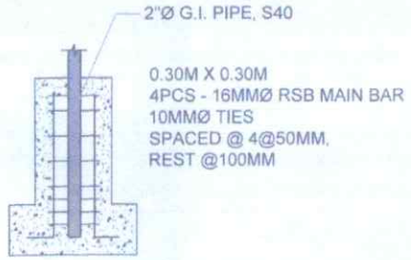
C2F2 DETAIL

SCALE 1:30

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	INSTALLATION OF AMLANG ROSARIO SOLAR POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP) LOCATION: BRGY. AMLANG, ROSARIO, LA UNION	JEMMICA KAE O. URBIZTONDO, ABE Technical Staff, RAED	MARK HARRY G. PASTOR, ABE OIC, RAED	DENNIS T. TACTAC, ABE RTD for Operations	ANNIE Q. BARES, DVM Regional Executive Director	MOUNTING OVERVIEW C2F2 DETAIL	9 10

FRONT

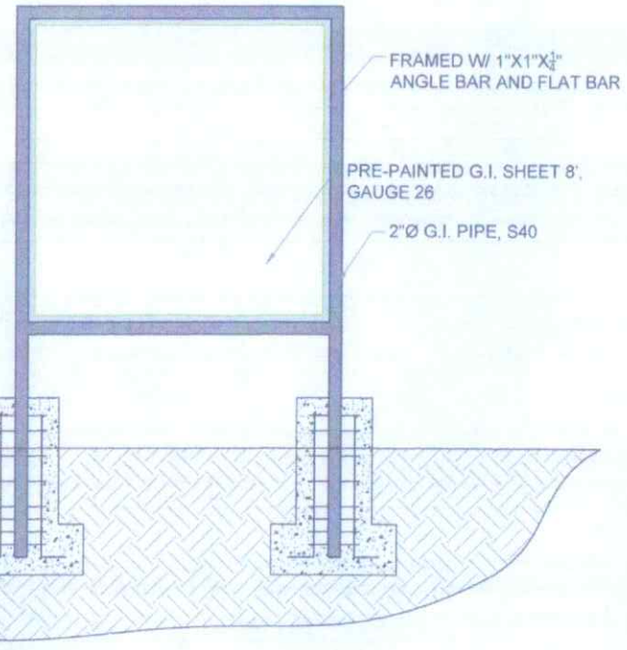




DETAIL CONCRETE POST

SCALE 1:20

BACK



MARKER PLAN

SCALE 1:20

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	INSTALLATION OF AMLANG ROSARIO SOLAR POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP) LOCATION: BRGY. AMLANG, ROSARIO, LA UNION	JEMMICA RAE O. URBIZTONDO, ABE Technical Staff, RAED	MARK HARRY G. PASTOR, ABE OIC, RAED	DENNIS I. TACTAC, ABE RTD for Operations	ANNIE Q. BARES, DVM Regional Executive Director	MARKER PLAN	10/10

REPUBLIC OF THE PHILIPPINES

DEPARTMENT OF AGRICULTURE

REGIONAL FIELD OFFICE NO. 1

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

INSTALLATION OF IMELDA SAN JACINTO SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP)

Brgy. Imelda, San Jacinto, Pangasinan

REPUBLIC OF THE PHILIPPINES

DEPARTMENT OF AGRICULTURE

REGIONAL FIELD OFFICE NO. 1

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

PROJECT NAME : INSTALLATION OF IMELDA SAN JACINTO SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER OAP
LOCATION : BRGY. IMELDA, SAN JACINTO, PANGASINAN
COORDINATES : 120.449366°, 17.04754°

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MAIN PROJECT FEATURES	
1. PROJECT FACILITIES	DIMENSION/ SPECIFICATIONS
A. PV MODULE	
a.1 Material	high density monocrystalline PERC
a.2 Efficiency	up to 20.0% Max.
a.3 Orientation	Shall tilt at an angle 15° facing south
B. WATER PUMP	
b.1 Borehole Diameter	'4"
b.2 Rated Power	1.7 kW
b.3 Motor Speed	900 - 3300 rpm
b.4 Total Dynamic Head	18m (Max.)
b.5 Output/day	160 cu.m./day
C. PUMP CONTROLLER / INVERTER	
c.1 Power	1.8 kW
c.2 Input Voltage	200 V (Max)
c.3 Optimum VMP	> 102V
c.4 Motor Current	14.0A (Max.)
c.5 Efficiency	97.0 (Max.)
2. DESIGN SERVICE AREA	3.0 has.
3. APPROVED PROJECT COST	PHP1,005,791.62

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	INSTALLATION OF IMELDA SAN JACINTO SOLAR POWERED IRRIGATION SYSTEM (SPIS) UNDER ORGANIC AGRICULTURE PROGRAM (OAP) LOCATION: BRGY. IMELDA, SAN JACINTO, PANGASINAN	JEMMICA RAE O. URBIZTONDO, ABE Technical Staff, RAED	MARK HARRY G. PASTOR, ABE OIC, RAED	DENNIS T. TACTAC, ABE RTD for Operations	ANNIE Q. BARES, DVM Regional Executive Director	TABLE OF CONTENTS PROJECT PROFILE	1 10

VICINITY MAP

SCALE NTS

PERSPECTIVE

SCALE NTS

PREPARED FROM THE OFFICE OF THE	PROJECT TITLE	PREPARED BY:	CHECKED & REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS:	SHEET NO:
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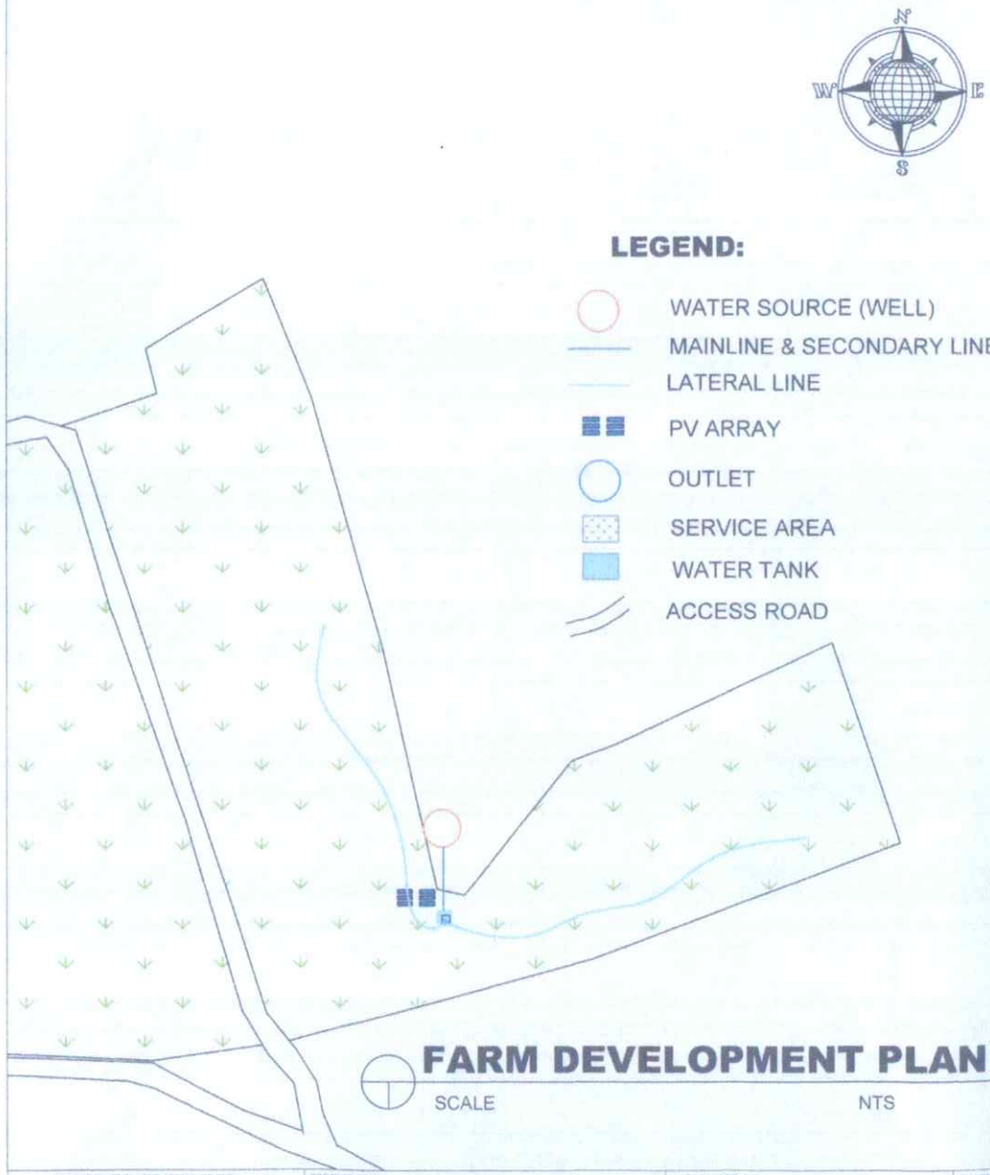
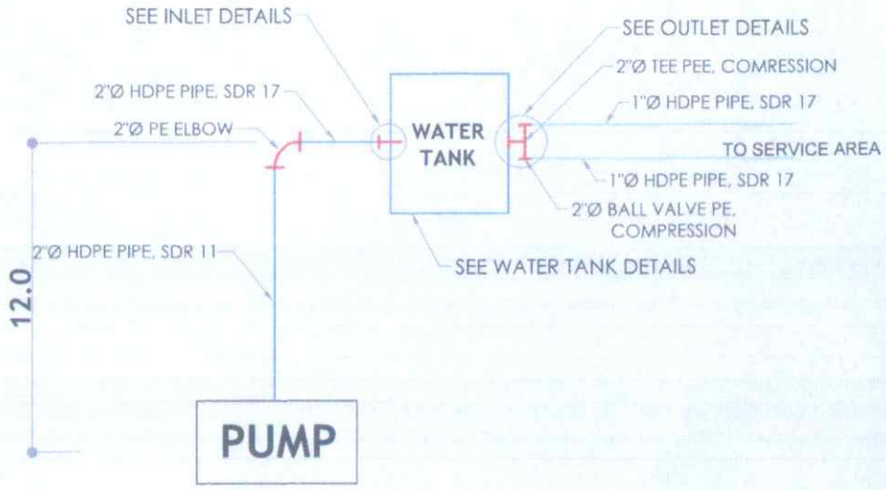


FARM DEVELOPMENT PLAN

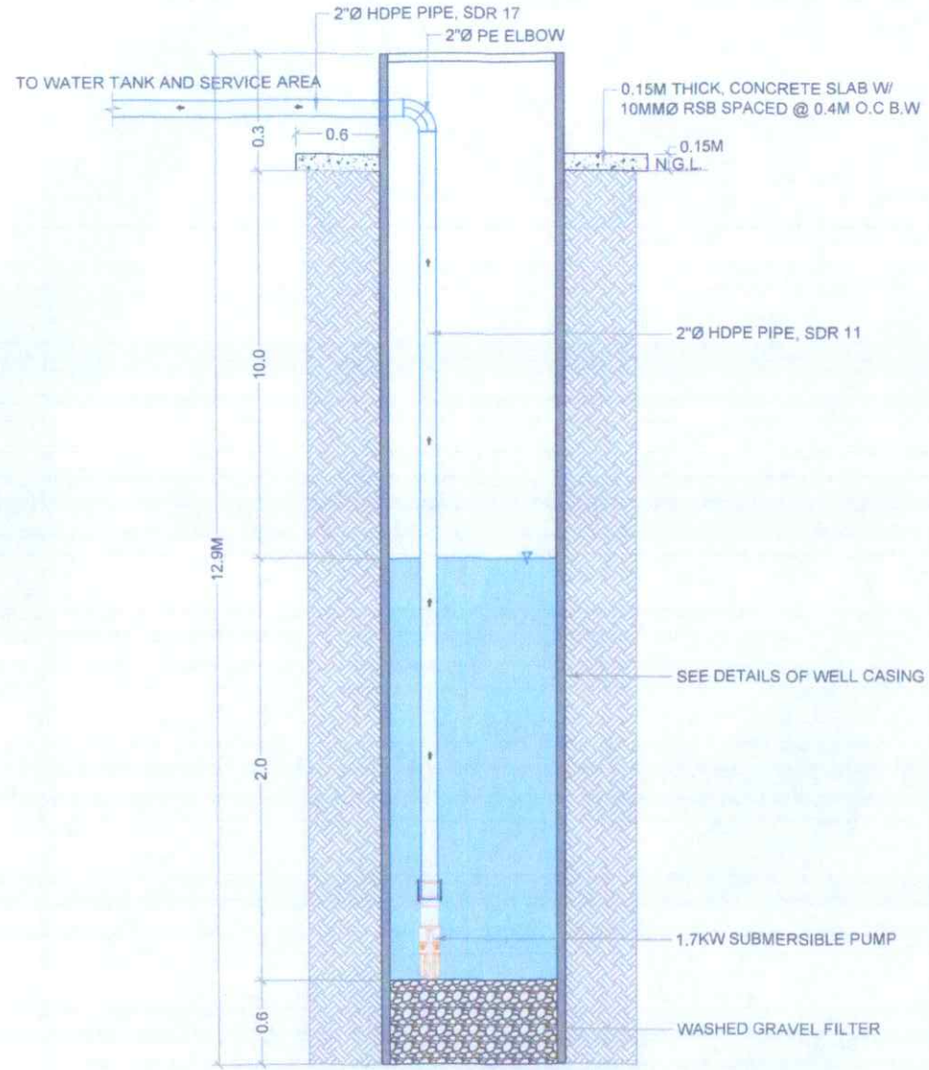
SCALE NTS



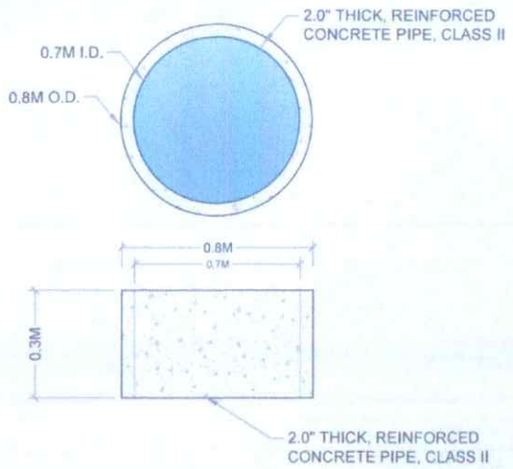
NO.	ITEM / DESCRIPTION	MATERIALS	QUANTITY
1	MAIN LINE	2"Ø HDPE PIPE, SDR 11	12.0 m
2	SECONDARY LINE	2"Ø HDPE PIPE, SDR 17	9.0 m
3	LATERAL LINE	1"Ø HDPE PIPE, SDR 17	133.0 m
4	ELBOW	2"Ø PE, COMPRESSION	5 PCS
5	TEE	2"Ø PE, COMPRESSION	1 PC.
6	ELBOW REDUCER	2"-1"Ø PE, COMPRESSION	2 PCS
7	BALL VALVE	2"Ø PE, COMPRESSION	2 PCS
		TOTAL LENGTH (M)	**154.0m**

DISTRIBUTION LINE SCHEDULE

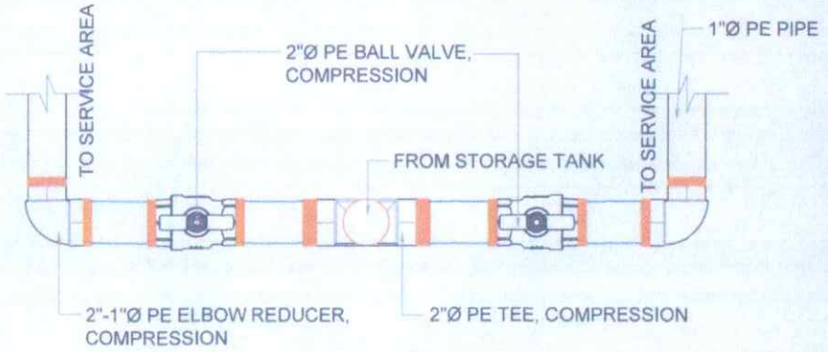
PREPARED FROM THE OFFICE OF THE:	PROJECT TITLE:	PREPARED BY:	CHECKED & REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED:	SHEET CONTENTS:	SHEET NO.
REPUBLIC OF THE PHILIPPINES DEPARTMENT OF AGRICULTURE REGIONAL FIELD OFFICE NO. 1 REGIONAL AGRICULTURAL ENGINEERING DIVISION	INSTALLATION OF IMELDA SAN JACINTO SOLAR POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP) LOCATION: BRGY. IMELDA, SAN JACINTO, PANGASINAN	JEMMICA RAE O. URBIZTONDO, ABE Technical Staff, RAED	MARK HARRY G. PASTOR, ABE OIC, RAED	DENNIS L. FACTAC, ABE RTO for Operations	ANNIE Q. BARES, DVM Regional Executive Director	FARM DEVELOPMENT PLAN DISTRIBUTION LINE SCHEDULE	3 10



DETAILS OF DUG WELL
SCALE NTS



DETAILS OF WELL CASING
SCALE NTS



OUTLET DETAILS
SCALE NTS

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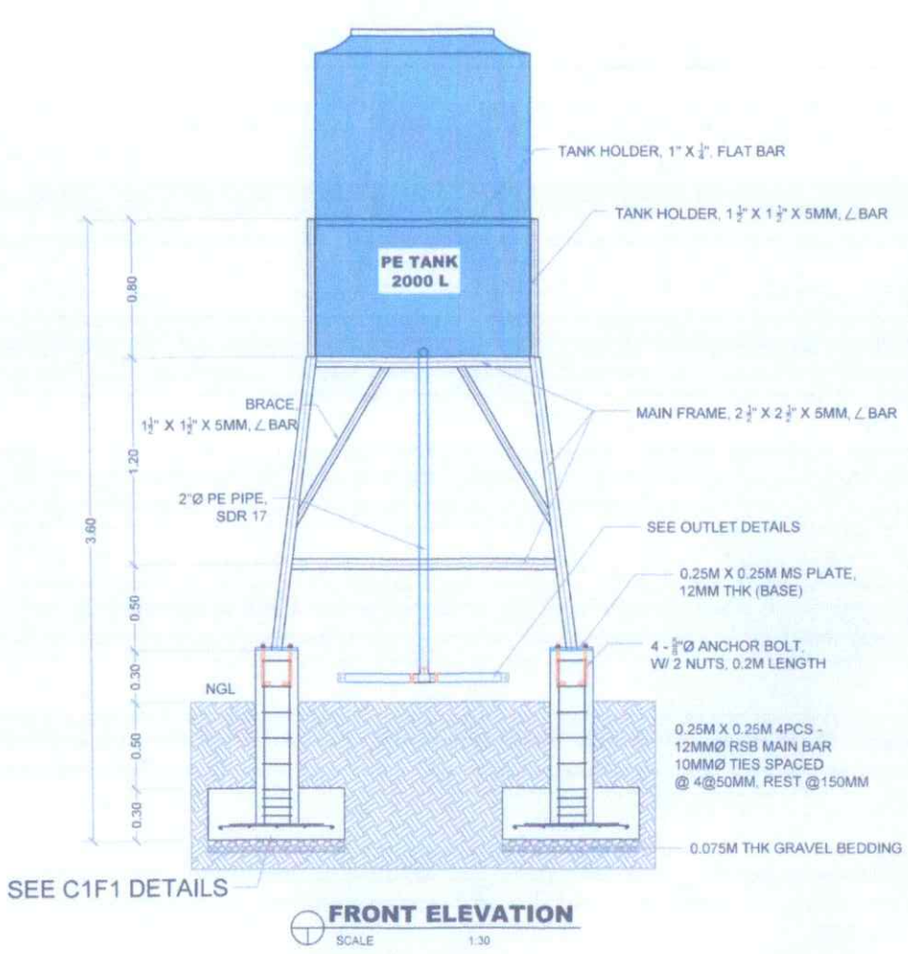
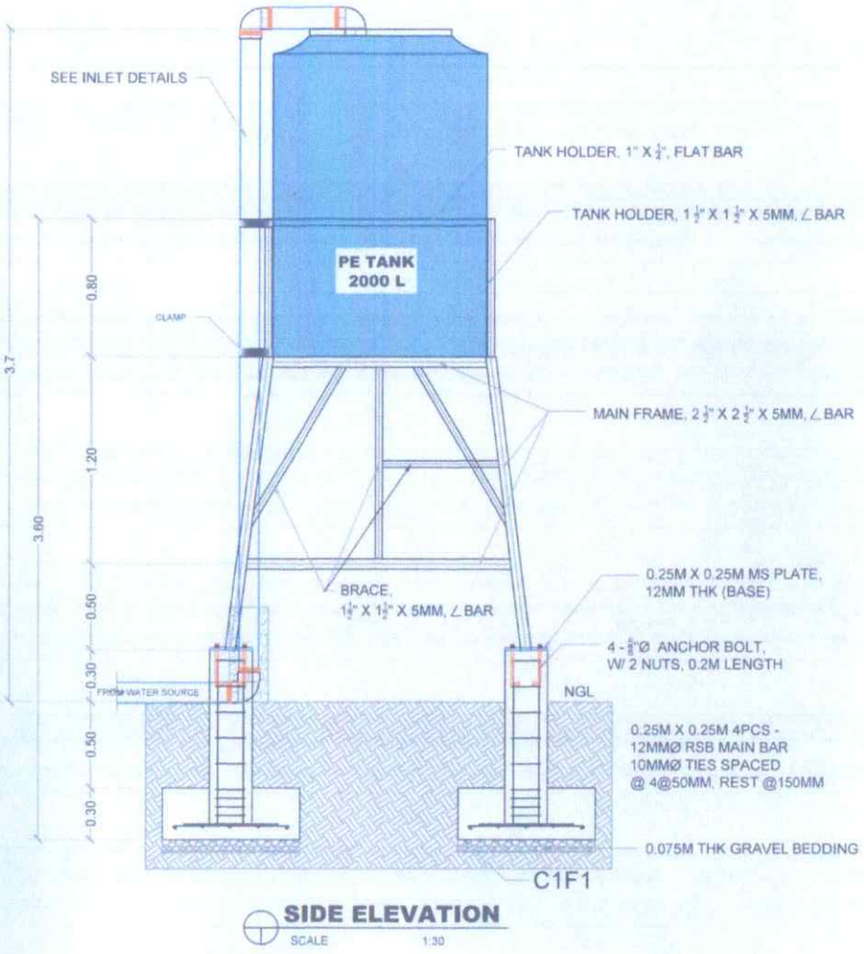
TANK STAND



FRONT ELEVATION
SCALE 1:30



SIDE ELEVATION
SCALE 1:30

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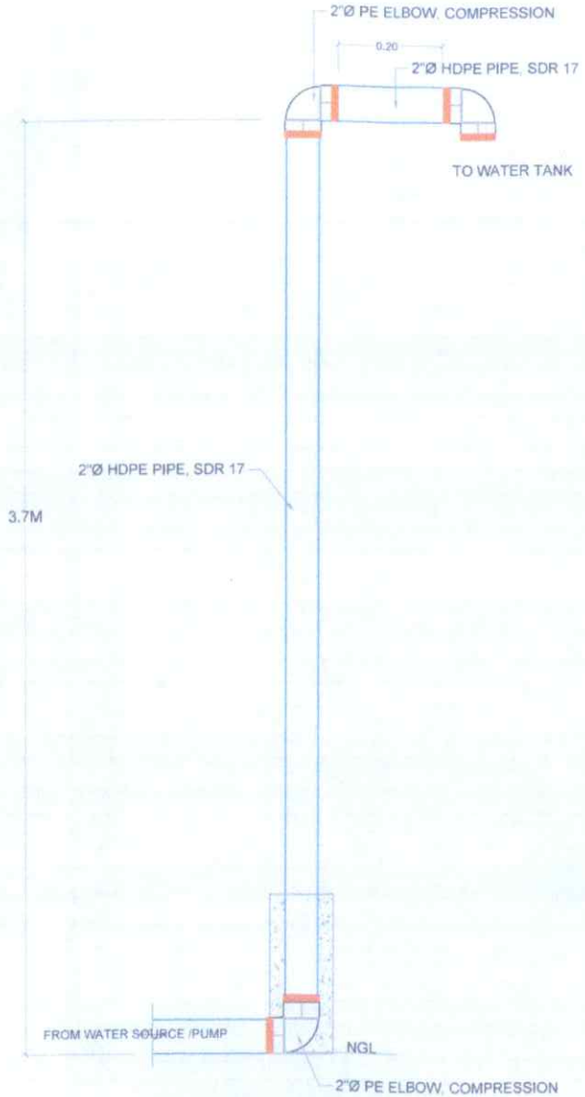
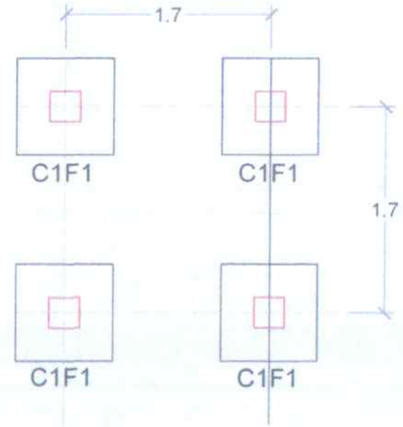
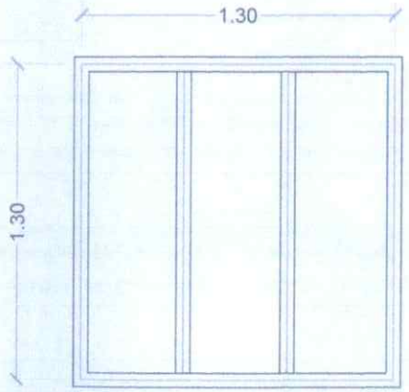


INLET DETAILS
SCALE NTS

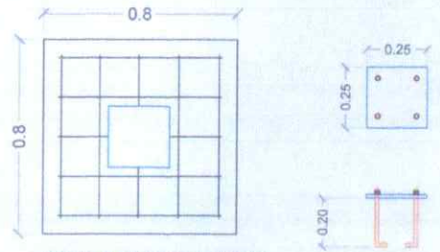


FOUNDATION PLAN
SCALE 1:50

ALL MEMBERS, 2-1/2"X2-1/2"X5MM, ∠ BAR



FLOORING DETAILS
SCALE 1:20



NOTE: 5 - 12MMØ FOOTING
RSB BOTHWAYS

C1F1 DETAIL
SCALE 1:20

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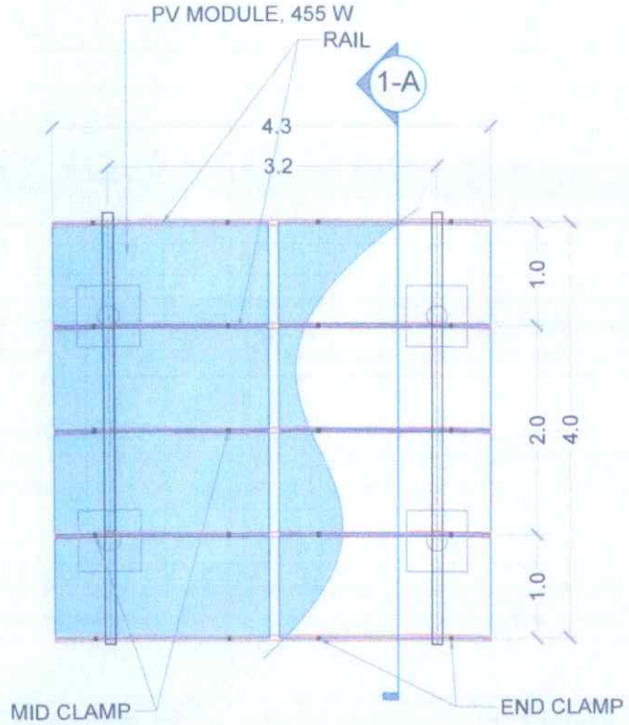
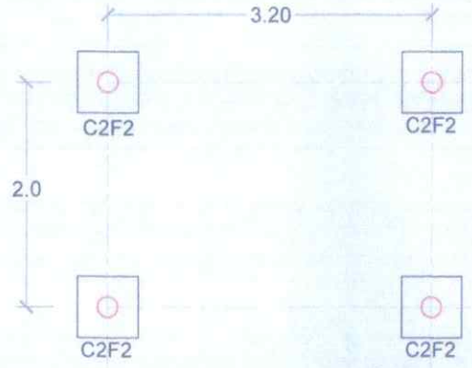


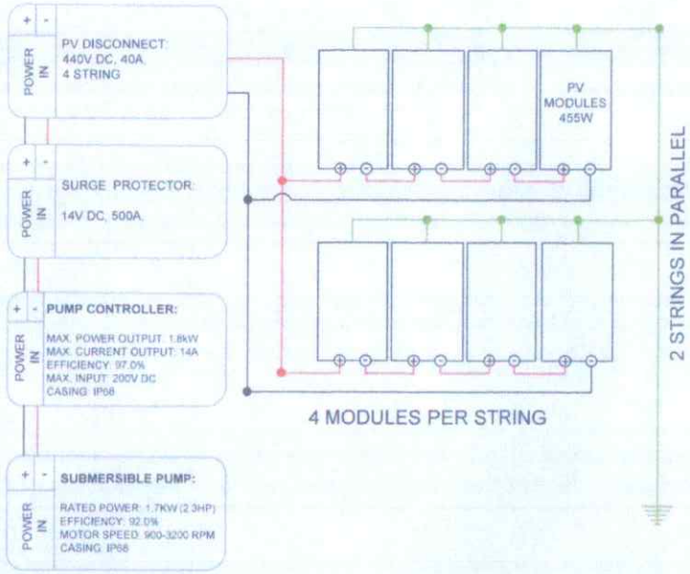
NOTE: TOTAL OF 8 PCS PV MODULE

PV ARRAY PLAN
SCALE 1:100



FOUNDATION PLAN
SCALE 1:100

PV MODULE CONNECTION



ELECTRICAL DIAGRAM
SCALE NTS

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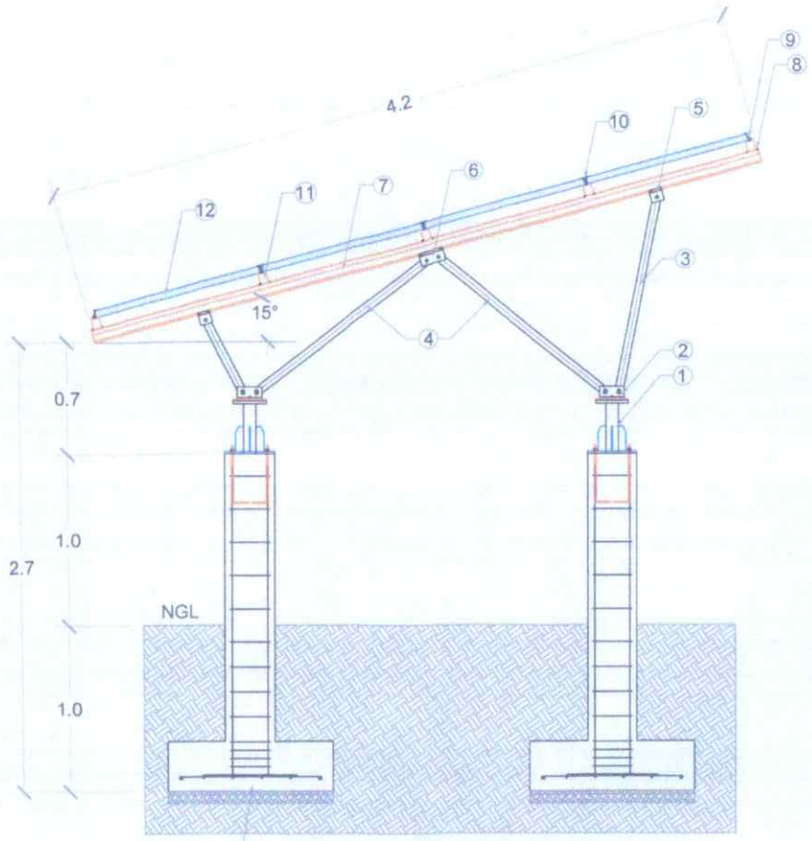

SECTION 1-A

SCALE 1:30

LEGEND

NO.	ITEM / DESCRIPTION	MATERIALS
1	3"Ø, 3MM THK POST W/ BACK RING FLANGES, BASE, STIFFENER	ASTM A36 / Q235 STEEL HOT DEEPED GALVANIZED
2	BOTTOM BASE W/ 2 - BOLTS & NUTS, M12, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
3	POST W/ CONNECTOR, 2"X2"	ANODIZED ALUMINUM (AL6005-T5)
4	ADJUSTABLE INCLINED SUPPORT, 2"X2"	ANODIZED ALUMINUM (AL6005-T5)
5	H-BEAM CONNECTOR #1, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
6	H-BEAM CONNECTOR #2, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
7	SUPPORT BEAM, 2" X 4", 2MM THK	ANODIZED ALUMINUM (AL6005-T5)
8	RAIL CONNECTOR	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
9	END CLAMP, 50 MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
10	MID CLAMP, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
11	RAIL, 50MMX70MMX2.5MM	ANODIZED ALUMINUM (AL6005-T5)
12	PV MODULES, 455 WATTS	MONOCRYSTALINE

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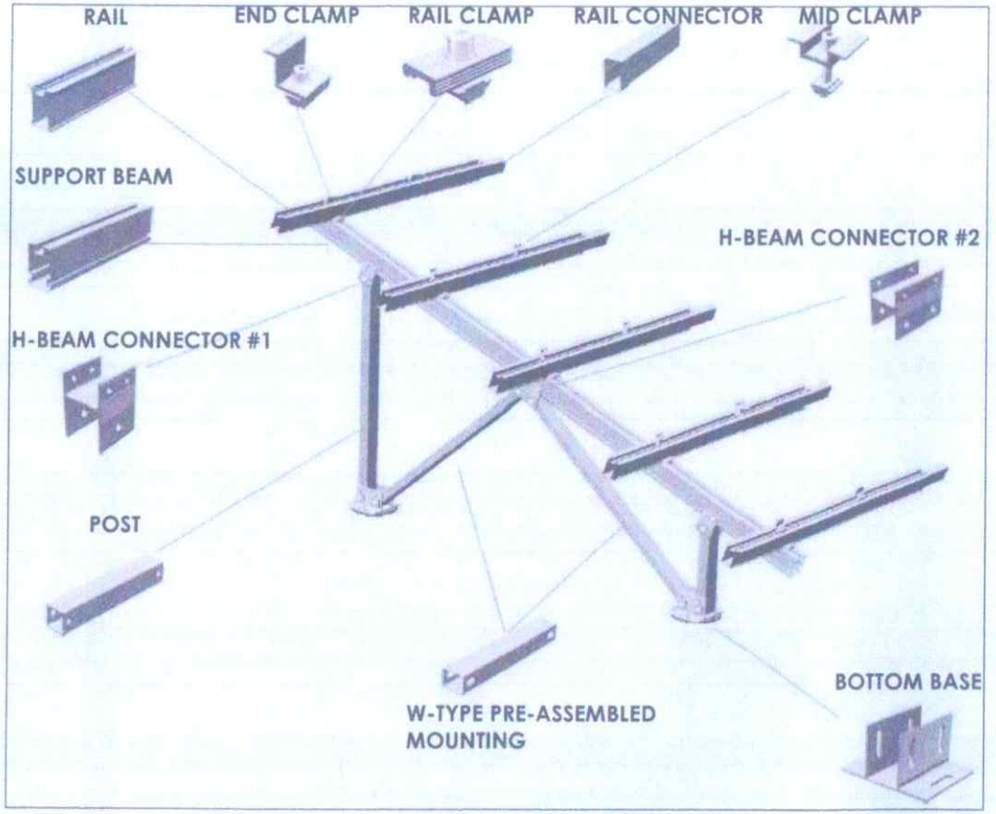
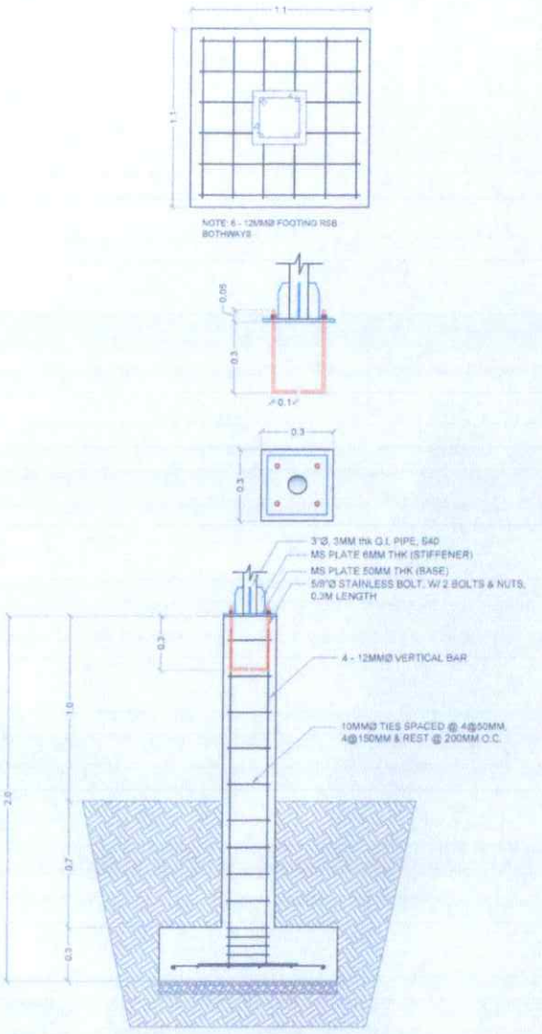


MOUNTING OVERVIEW
SCALE NTS



C2F2 DETAIL
SCALE 1:30

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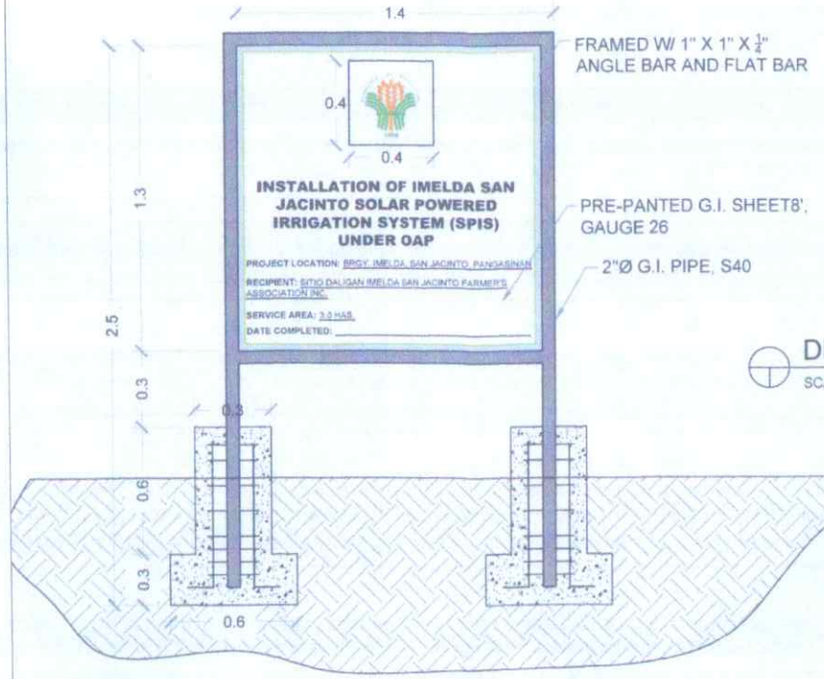
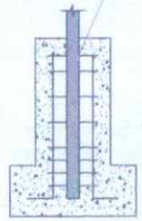
FRONT



FRAMED W/ 1" X 1" X $\frac{1}{4}$" ANGLE BAR AND FLAT BAR

PRE-PANTED G.I. SHEET8', GAUGE 26

2"Ø G.I. PIPE, S40



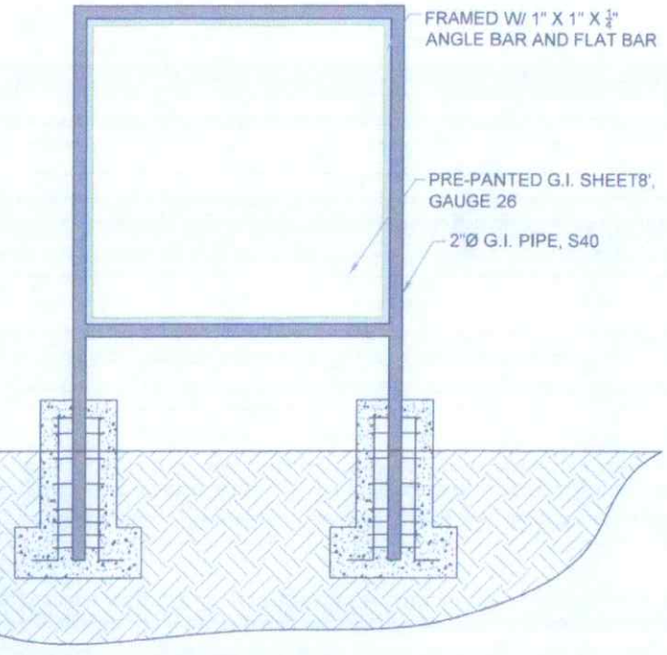
2"Ø G.I. PIPE, S40

0.30M X 0.30M
4PCS - 16MMØ RSB MAIN BAR
10MMØ TIES
SPACED @ 4@50MM,
REST @100MM

DETAIL CONCRETE POST

SCALE 1:20

BACK



FRAMED W/ 1" X 1" X $\frac{1}{4}$" ANGLE BAR AND FLAT BAR

PRE-PANTED G.I. SHEET8', GAUGE 26

2"Ø G.I. PIPE, S40

MARKER PLAN

SCALE 1:20

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REPUBLIC OF THE PHILIPPINES

DEPARTMENT OF AGRICULTURE

REGIONAL FIELD OFFICE NO. 1

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

INSTALLATION OF LABIT WEST SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP)

Brgy. Labit West, Urdaneta City, Pangasinan

REPUBLIC OF THE PHILIPPINES

DEPARTMENT OF AGRICULTURE

REGIONAL FIELD OFFICE NO. 1

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

PROJECT NAME : INSTALLATION OF LABIT WEST SOLAR-POWERED IRRIGATION SYSTEM (SPIS) UNDER
OAP LOCATION : BRGY. LABIT WEST, URDANETA CITY, PANGASINAN
COORDINATES : 120.449366°, 17.04754°

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MAIN PROJECT FEATURES	
1. PROJECT FACILITIES	DIMENSION/ SPECIFICATIONS
A. PV MODULE	
a.1 Material	high density monocrystalline PERC
a.2 Efficiency	up to 20.0% Max.
a.3 Orientation	Shall tilt at an angle 15° facing south
B. WATER PUMP	
b.1 Borehole Diameter	4"
b.2 Rated Power	1.7 kW
b.3 Motor Speed	900 - 3300 rpm
b.4 Total Dynamic Head	18m (Max.)
b.5 Output per day	160 cu.m./day
C. PUMP CONTROLLER / INVERTER	
c.1 Power	1.8 kW
c.2 Input Voltage	200 V (Max)
c.3 Optimum VMP	> 102V
c.4 Motor Current	14.0A (Max.)
c.5 Efficiency	97.0 (Max.)
2. DESIGN SERVICE AREA	3.0 has.
3. APPROVED PROJECT COST	PHP1,005,805.62

PREPARED FROM THE OFFICE OF THE	PROJECT TITLE	PREPARED BY	CHECKED & REVIEWED BY	RECOMMENDING APPROVAL	APPROVED	SHEET CONTENTS	SHEET NO.
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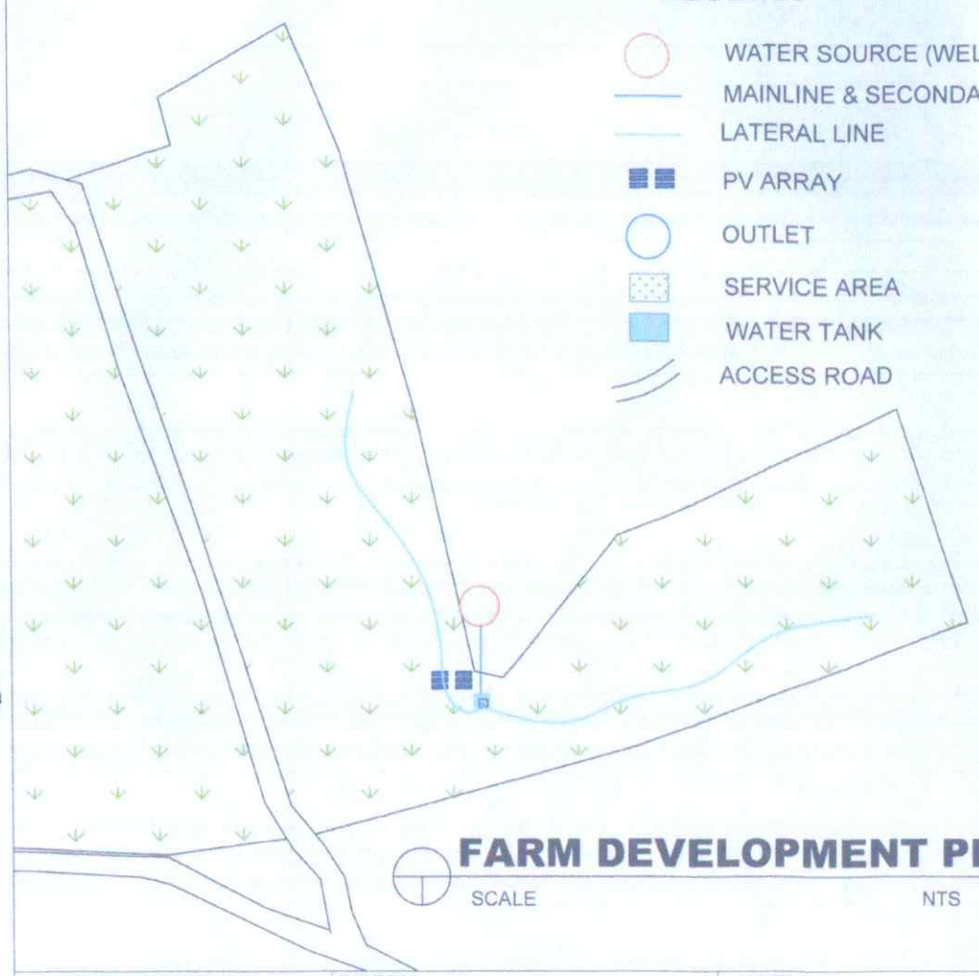
VICINITY MAP

SCALE NTS

PERSPECTIVE

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	INSTALLATION OF IMELDA SAN JACINTO SOLAR POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP) LOCATION: BRGY. IMELDA, SAN JACINTO, PANGASINAN	JEMMICA RAE O. URBIZTONDO, ABE Technical Staff, RAED	MARK HARRY G. PASTOR, ABE OIC, RAED	DENNIS L. PACTAC, ABE OIC for Operations	ANNIE Q. BARES, DVM Regional Executive Director	- VICINITY MAP - PERSPECTIVE	2 10

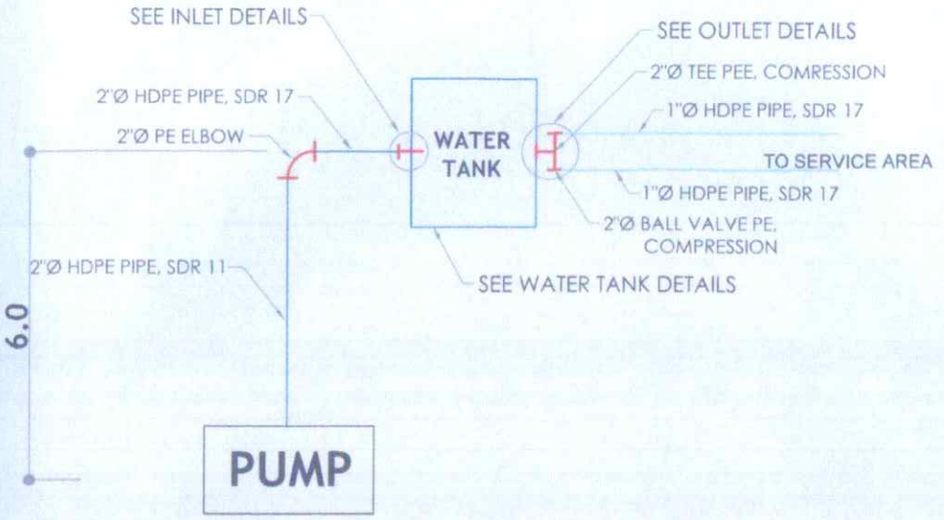


LEGEND:

- WATER SOURCE (WELL)
- MAINLINE & SECONDARY LINE
- LATERAL LINE
- PV ARRAY
- OUTLET
- SERVICE AREA
- WATER TANK
- ACCESS ROAD

FARM DEVELOPMENT PLAN

SCALE NTS



NO.	ITEM / DESCRIPTION	MATERIALS	QUANTITY
1	MAIN LINE	2"Ø HDPE PIPE, SDR 11	6.0 m
2	SECONDARY LINE	2"Ø HDPE PIPE, SDR 17	10.0 m
3	LATERAL LINE	1"Ø HDPE PIPE, SDR 17	83.0 m
4	ELBOW	2"Ø PE, COMPRESSION	5 PCS
5	TEE	2"Ø PE, COMPRESSION	1 PC.
6	ELBOW REDUCER	2"-1"Ø PE, COMPRESSION	2 PCS
7	BALL VALVE	2"Ø PE, COMPRESSION	2 PCS
		TOTAL LENGTH (M)	**99.0m**

DISTRIBUTION LINE SCHEDULE

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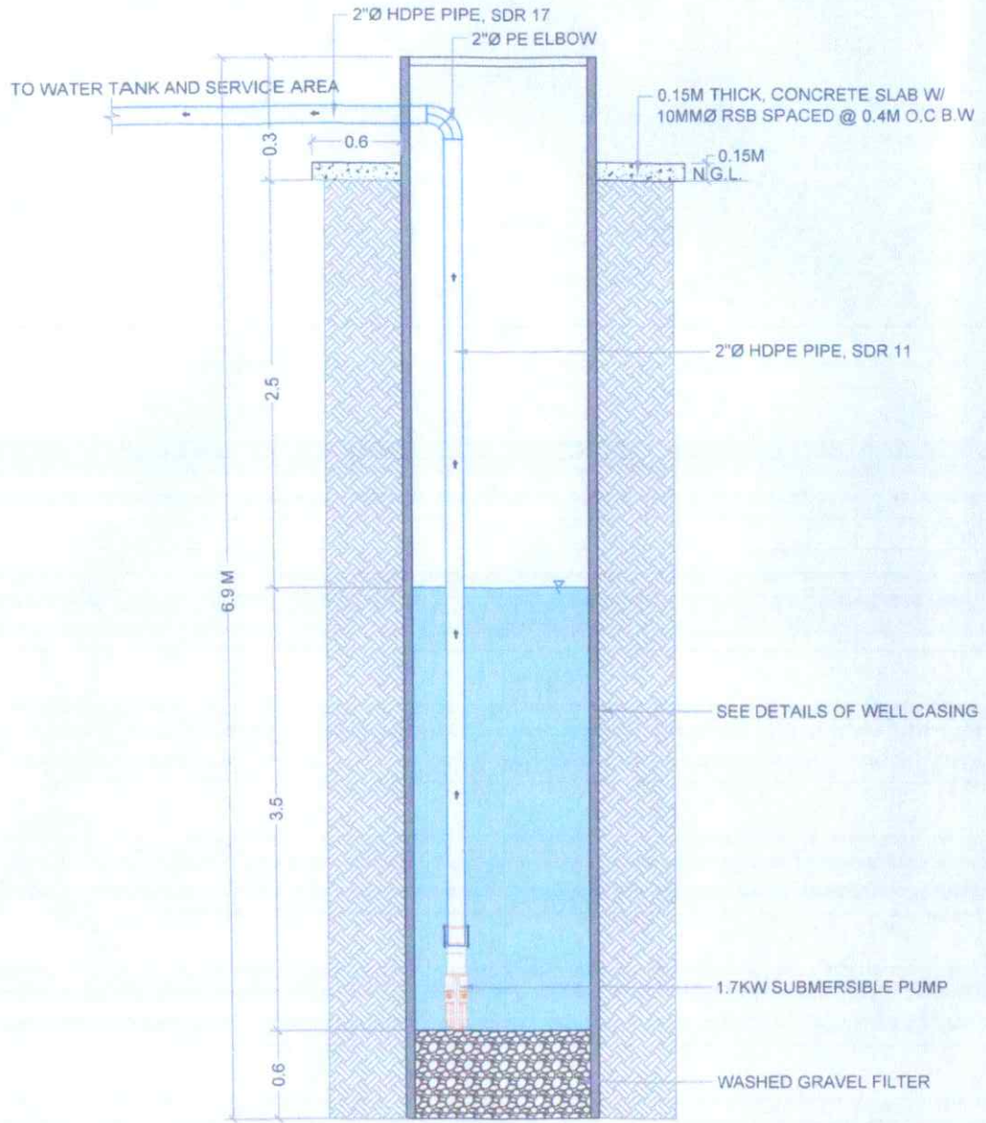
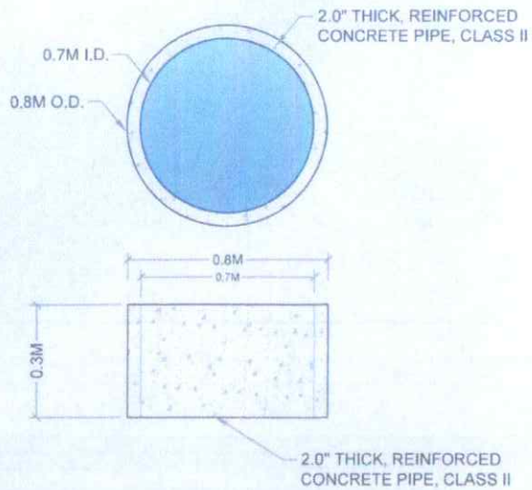
REPUBLIC OF THE PHILIPPINES **DEPARTMENT OF AGRICULTURE** REGIONAL FIELD OFFICE NO. 1 REGIONAL AGRICULTURAL ENGINEERING DIVISION	**INSTALLATION OF LABIT WEST SOLAR POWERED IRRIGATION SYSTEM (SPIS) UNDER THE ORGANIC AGRICULTURE PROGRAM (OAP)** LOCATION: BRGY. LABIT WEST, URDANETA CITY, PANGASINAN	JEMMICA RAE O. URBIZTONDO, ABE Technical Staff, RAED	MARK HARRY G. PASTOR, ABE OIC, RAED	DENNIS I. TACTAC, ABE RTD for Operations	ANNIE Q. BARES, DVM Regional Executive Director	FARM DEVELOPMENT PLAN DISTRIBUTION LINE SCHEDULE	3 10



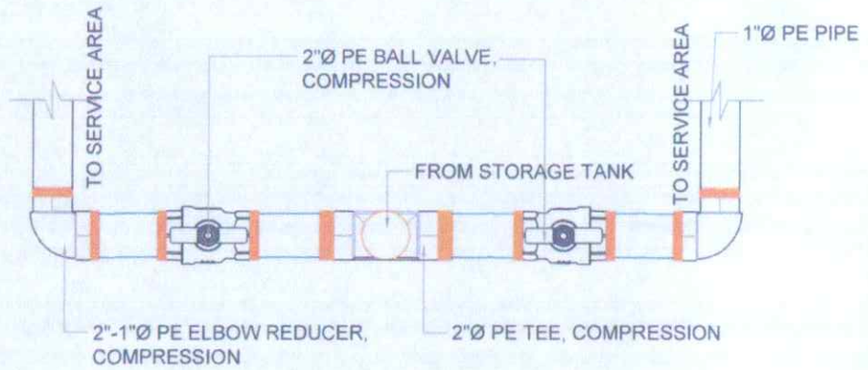
DETAILS OF DUG WELL

SCALE NTS



DETAILS OF WELL CASING

SCALE NTS



OUTLET DETAILS

SCALE NTS

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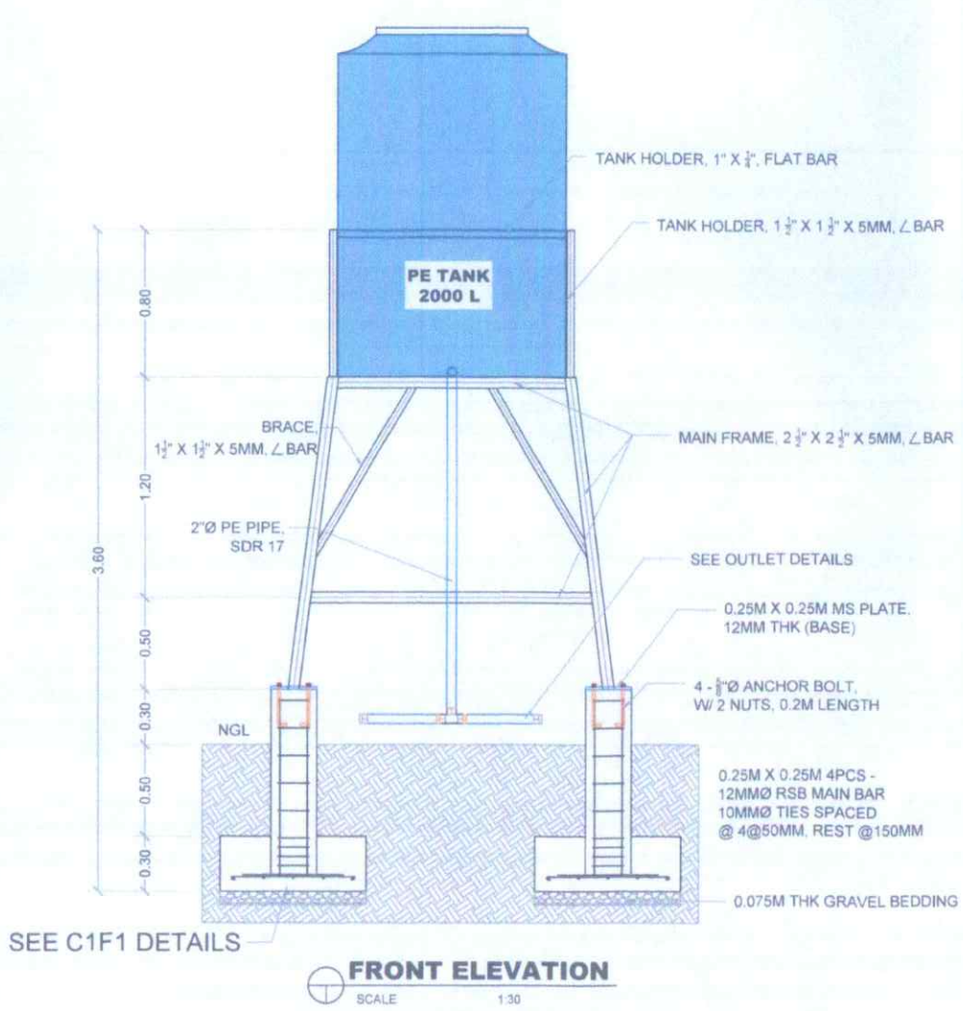
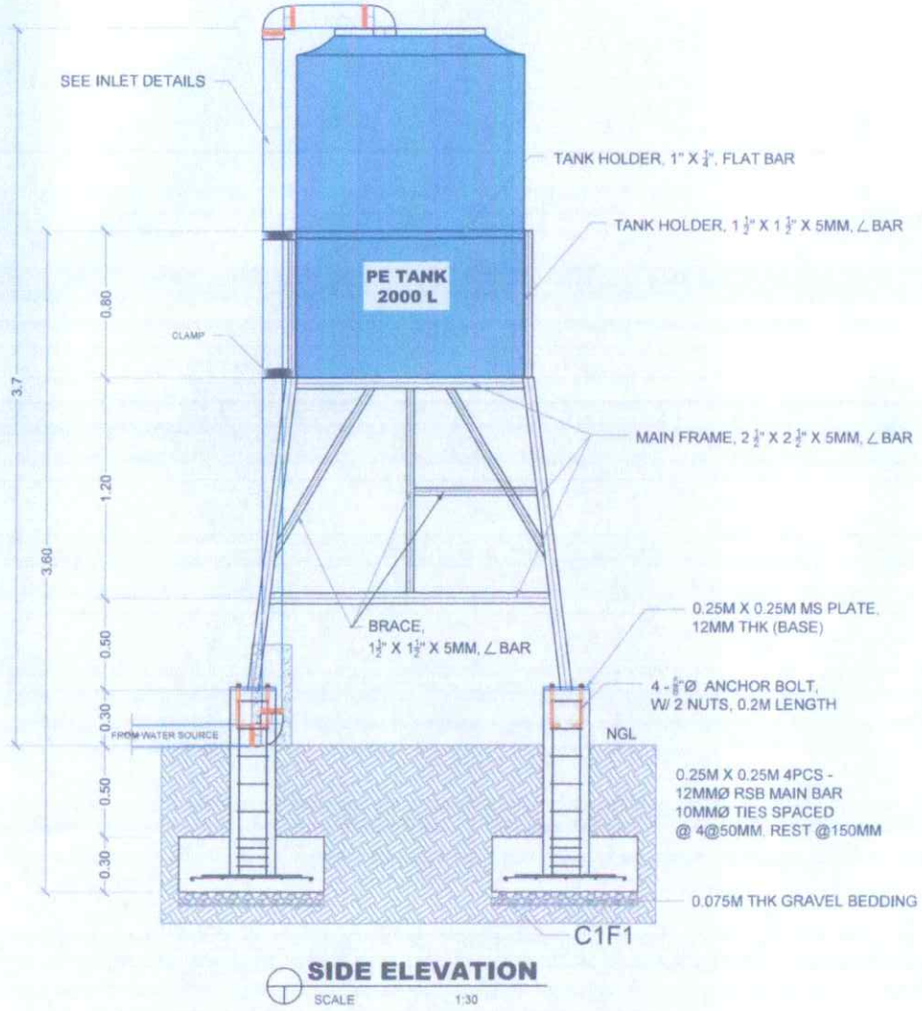
TANK STAND



FRONT ELEVATION
SCALE 1:30



SIDE ELEVATION
SCALE 1:30

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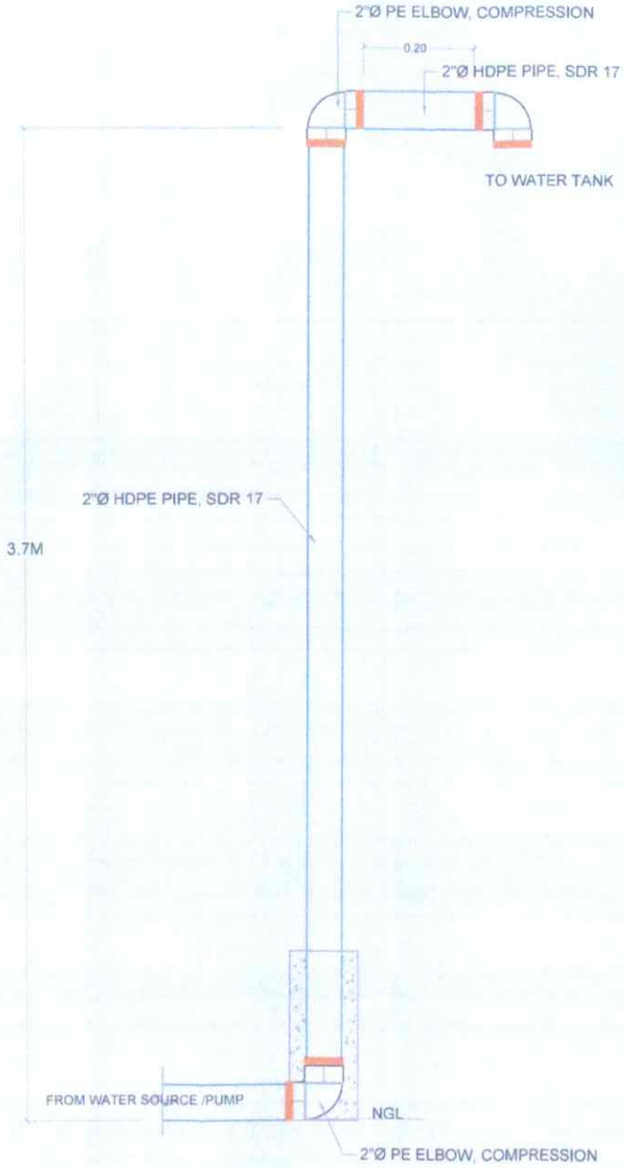
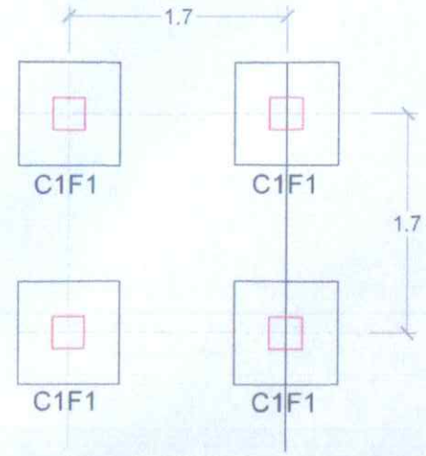
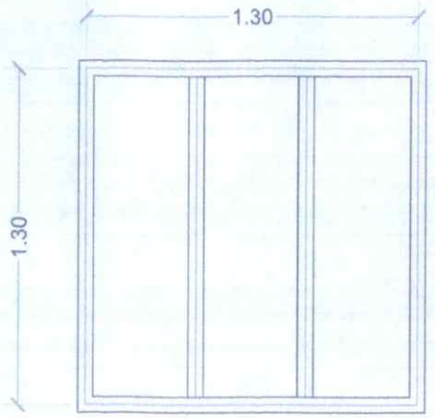


INLET DETAILS
SCALE NTS

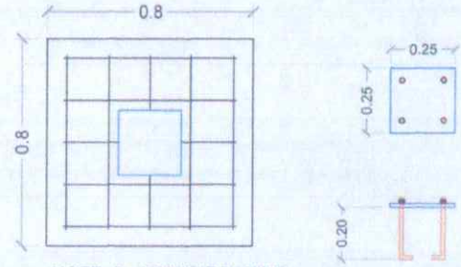


FOUNDATION PLAN
SCALE 1:50

ALL MEMBERS, 2-1/2"X2-1/2"X5MM, ∠ BAR



FLOORING DETAILS
SCALE 1:20



NOTE: 5 - 12MMØ FOOTING
RSB BOTHWAYS

C1F1 DETAIL
SCALE 1:20

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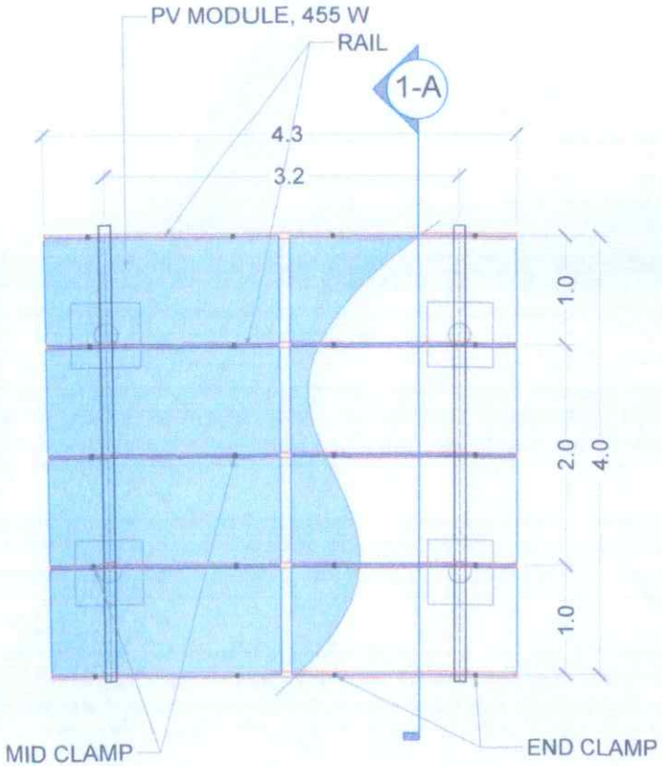
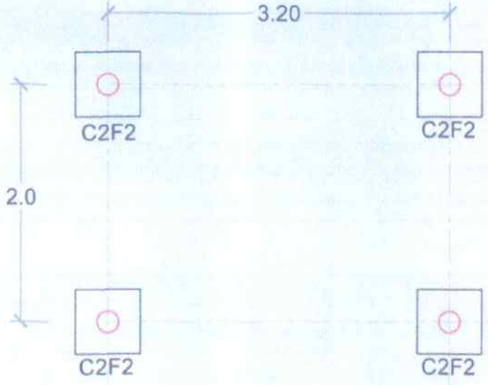


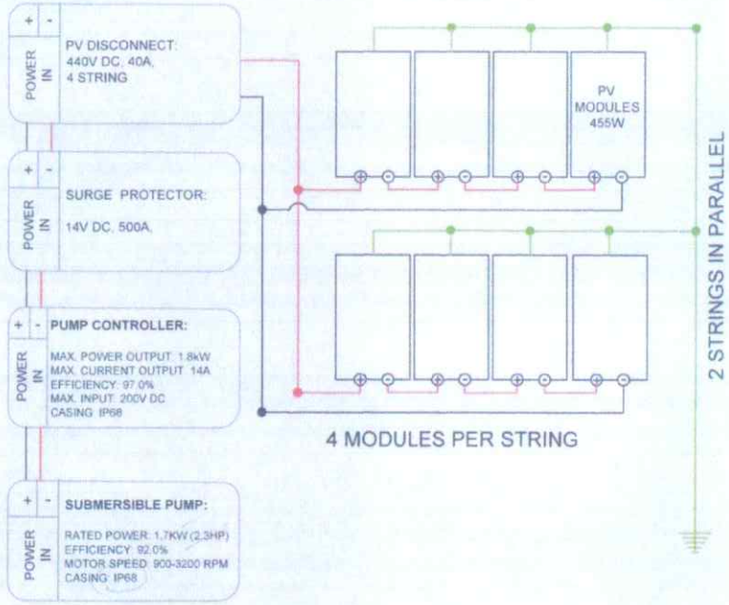
NOTE: TOTAL OF 8 PCS PV MODULE

PV ARRAY PLAN
SCALE 1:100



FOUNDATION PLAN
SCALE 1:100

PV MODULE CONNECTION



ELECTRICAL DIAGRAM
SCALE NTS

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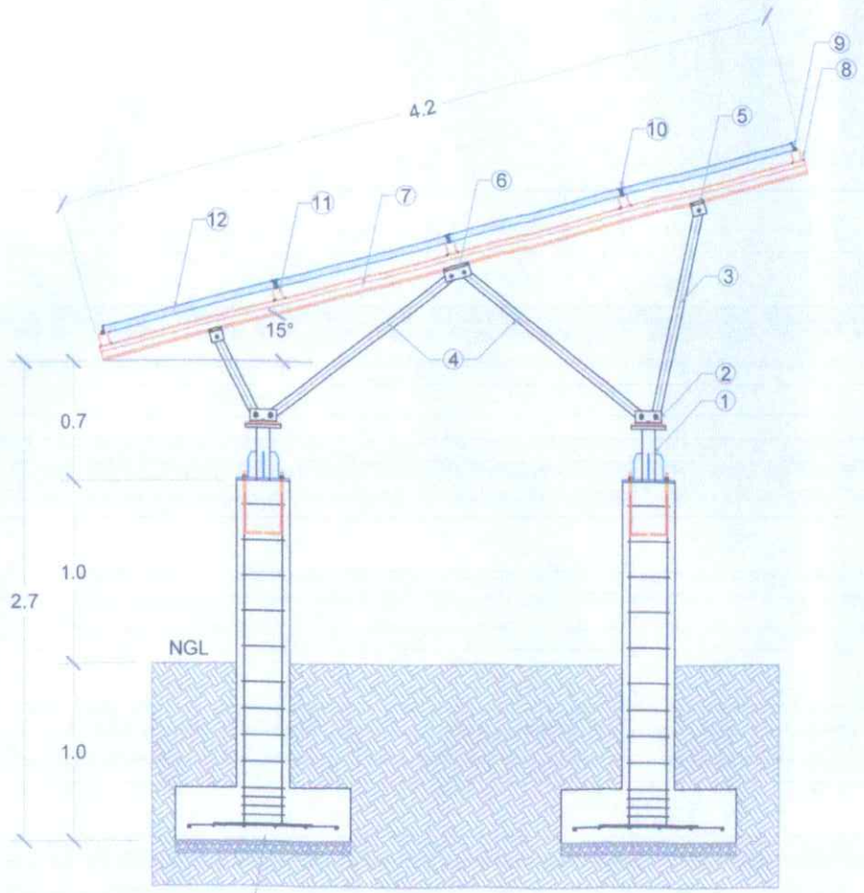

SECTION 1-A

SCALE 1:30

LEGEND

NO.	ITEM / DESCRIPTION	MATERIALS
1	3"Ø, 3MM THK POST W/ BACK RING FLANGES, BASE, STIFFENER	ASTM A36 / Q235 STEEL HOT DEEPED GALVANIZED
2	BOTTOM BASE W/ 2 - BOLTS & NUTS, M12, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
3	POST W/ CONNECTOR, 2"X2"	ANODIZED ALUMINUM (AL6005-T5)
4	ADJUSTABLE INCLINED SUPPORT, 2"X2"	ANODIZED ALUMINUM (AL6005-T5)
5	H-BEAM CONNECTOR #1, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
6	H-BEAM CONNECTOR #2, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
7	SUPPORT BEAM, 2" X 4", 2MM THK	ANODIZED ALUMINUM (AL6005-T5)
8	RAIL CONNECTOR	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
9	END CLAMP, 50 MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
10	MID CLAMP, 50MM THK	ANODIZED ALUMINUM (AL6005-T5), STAINLESS STEEL (SUS 304)
11	RAIL, 50MMX70MMX2.5MM	ANODIZED ALUMINUM (AL6005-T5)
12	PV MODULES, 455 WATTS	MONOCRYSTALINE

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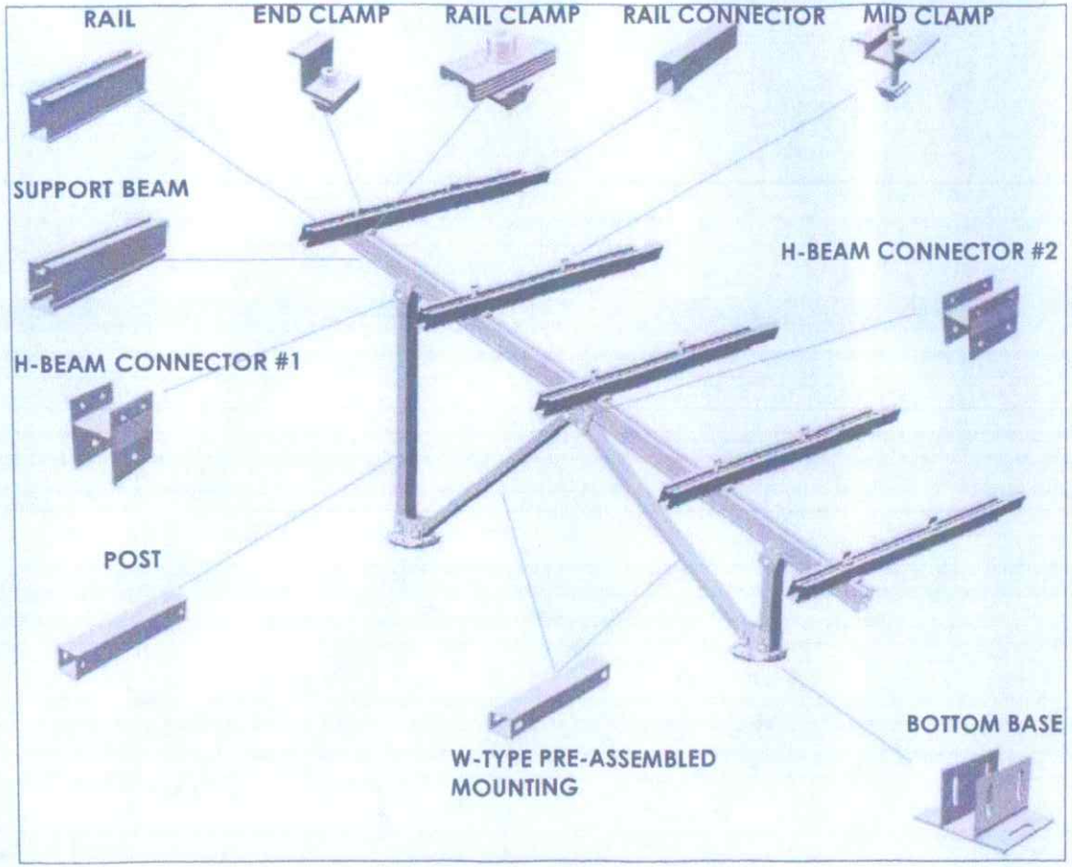
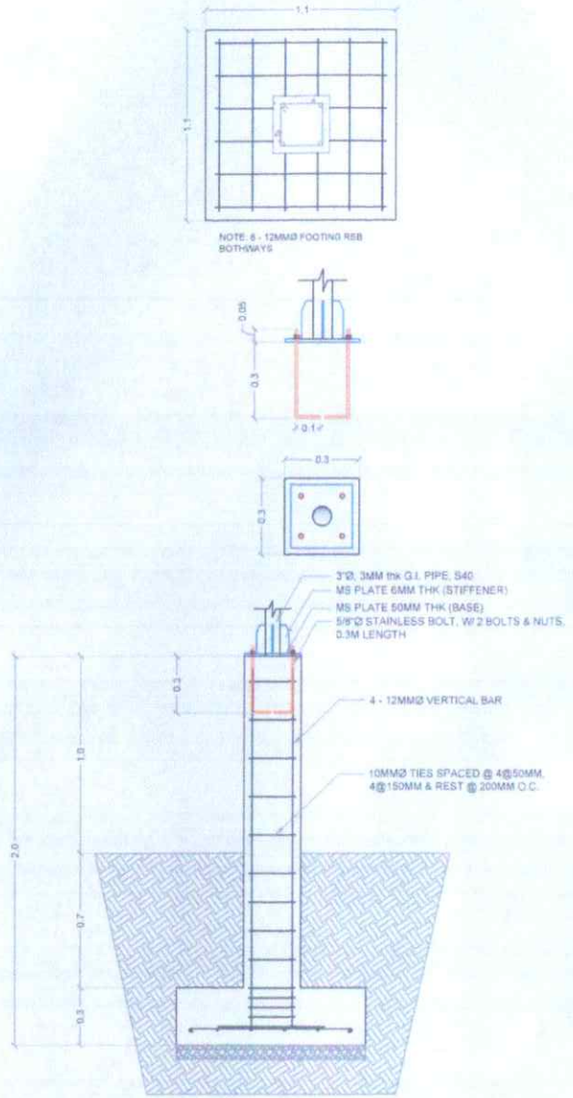


MOUNTING OVERVIEW
SCALE NTS



C2F2 DETAIL
SCALE 1:30

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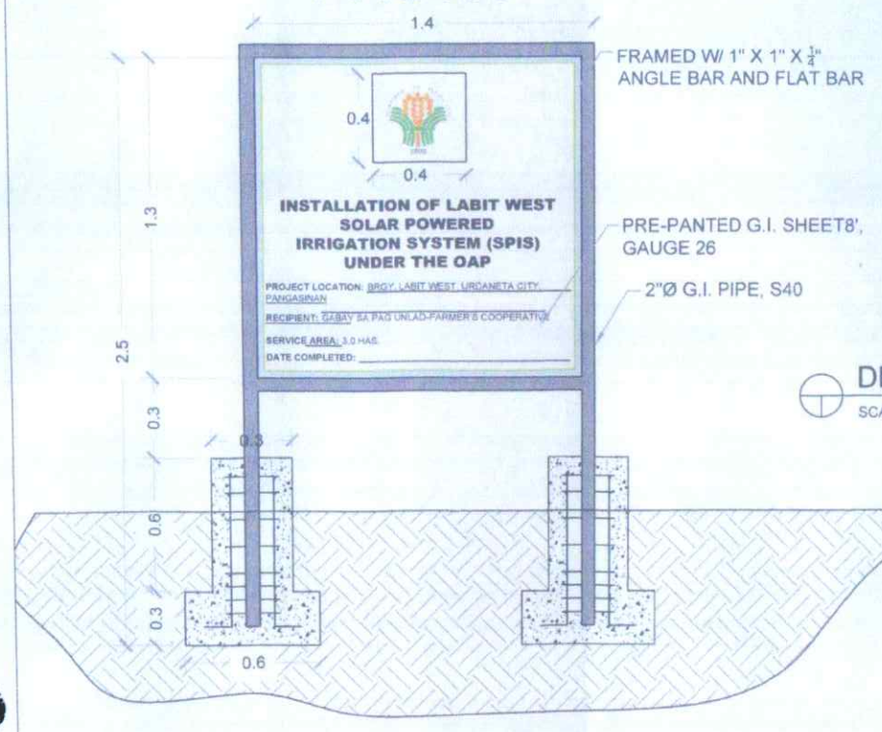
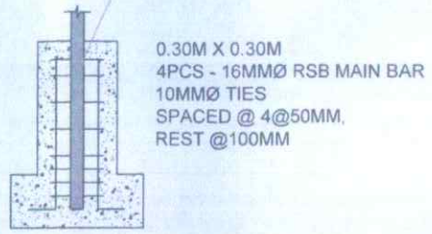
FRONT

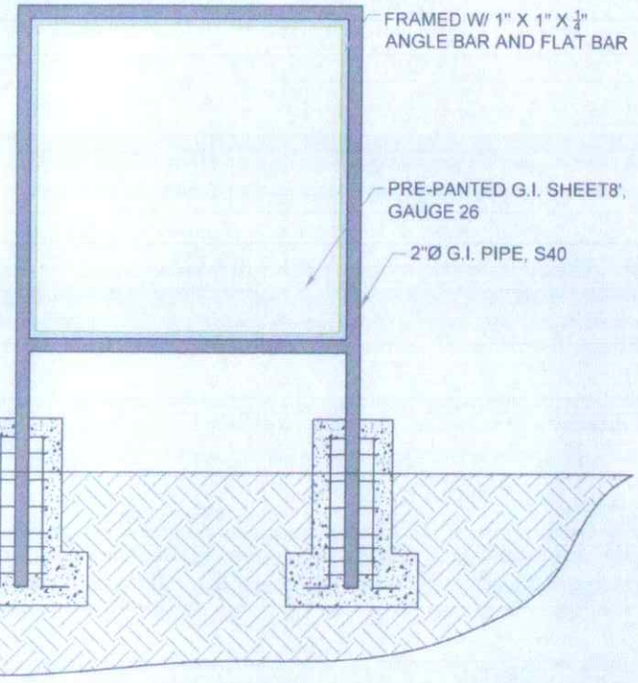




DETAIL CONCRETE POST

SCALE 1:20

BACK



MARKER PLAN

SCALE 1:20

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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:	Installation of AMLANG ROSARIO Solar-Powered Irrigation System (SPIS) under the Organic Agriculture Program (OAP)
LOCATION:	Brgy. Amlang, Rosario, La Union
PROJECT DESCRIPTION:	Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH.
AMOUNT:	Php 1,005,813.46

GENERAL PROVISIONS

The contractor/implementer of the project shall verify all dimensions and conditions of the site and shall notify the DA Project Engineer of 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, and 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 specifications, and 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 of whether or not written and such other materials shall be approved by the owner before they are set in place.

DESCRIPTION

I. Mobilization and Demobilization

- The work consists 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.
- All roads, culverts, sidewalks, structures, etc. shall be protected from damage 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 inspector before use.

II.	**Provision of Construction Safety and Health Program (PPE, Signages)**
	• The contractor shall provide PPE for its workforce. • The contractor shall provide safety devices like barricades, warning signs, fire blankets, and high-visibility caution tapes. • The Contractor shall provide a full-time safety practitioner (Safety Officer) to ensure the safety of its workforce. • 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 lifeline.
III.	**Construction of Temporary Facility**
	• The contractor shall install/construct temporary facilities 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.
IV.	**Clearing and Grubbing**
	• The site shall be leveled according to the plans and cleared of rubbish, roots, and other perishable and objectionable matters to a suitable subgrade. All such unsuitable materials shall be removed from the site, or otherwise disposed of as may be directed by the Project Engineer in charge of the construction.
V.	**Earthworks**
	• The site shall be leveled according to the plans and cleared of rubbish, roots, and other perishable and objectionable matters to a suitable subgrade. All such unsuitable materials shall be removed from the site, or otherwise disposed of as may be directed by the Project Engineer in charge of the construction. • Backfills and fills shall be placed in layers not exceeding 150mm in thickness, and each layer shall be thoroughly compacted by wetting, tamping, and rolling. • Leveling course shall consist of approved granular fill material furnished and placed as required to replace unsuitable material encountered below the foundation elevation of concrete structures and grouted/hand-laid riprap.
VI.	**RSB Works**
	• All reinforcement shall be placed by 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 by plans furnished by the Engineer. • The steel reinforcements for concrete shall be formed accurately according to the sizes of footings, inlet works, pump house and sump, etc., where they are to be used. They shall be tied together at each bar intersection with Gauge No. 16 G.I. wire or by welding. • All main reinforcing steel used in the structure shall conform to ASTM Grade 40 (Intermediate Grade) with a yield strength of 40 ksi (276 MPa). • All temperature bars shall conform to ASTM Grade 33 Structural Grade with a minimum yield strength of 33 ksi (230 MPa). • Always apply red oxide for the exposed RSB to eliminate rusting. • All hooks shall be by all standard hooks and anchorages specified in ACI 318-83 Building Code.

VII.	**Form Works**
	• Forms shall be used whenever necessary to confine the concrete during vibration and to shape it to the required lines. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete and shall be maintained rigidly in position. The strength and rigidity of the forms shall be such that formed surfaces will conform to specification requirements relating to the surface's irregularities and tolerances for concrete construction. Forms shall be tight to prevent loss of mortar from concrete.
VIII.	**Concrete Works**
	• All cement requirements of concrete works for the contract shall be contractor-furnished. The cement shall conform to the requirements of the standard specification of Portland Cement (ASTM: C150 Type 1). • Fine aggregates shall be clean, well-graded, hard, natural sand 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 be reasonably clean, potable, and free from injurious amounts of oils, acids, alkali organic materials, and other deleterious substances. • Class A mixture shall be used for inlet works, pump house, sump, foundation, and for all reinforced work not otherwise indicated or specified. ***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 the inside of the drum without reducing the cement content of the mix to be discharged. ***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).
IX.	**PV Module and Mounting**
	• Photovoltaic (PV) module shall be a high-density monocrystalline PERC module equipped with an MC4 plug for easy connection. It shall be certified according to IEC 61215 and 61730 by TÜV Rheinland/SÜV and meets the requirements for the Conformité

	Européenne (CE) mark. Built with sturdy aluminum frames that are manufactured in an ISO 9001:2000 certified factory. Maximum module efficiency shall be up to 20.0%. • Materials of the mounting system shall be made of aluminum 6005 – T5 and stainless steel 304 as specified in the detailed plans. It can resist a maximum wind speed of 220 km/hr. • Installation/construction of the PV mounting shall be installed/constructed by plans furnished by the DA Project Engineer. In case of any doubt or ambiguity in the plan, the Contractor shall consult the Engineer whose decision shall be final in such cases that comply with all applicable local or national building and fire codes. • PV array shall tilt at an angle of 15^0 facing south direction ensuring optimum utilization of the solar energy.
X.	**Water Pump**
	• The pump shall be a submersible multi-stage centrifugal pump. The motor shall be a maintenance-free brushless DC motor and no electronics in the motor. All steel components are made of stainless steel, (AISI 304) which ensures high corrosive resistance. Detailed specifications of the pump are listed below: - Rated power: 1.7 kW - Efficiency: max. 92% - Motor speed: 900-3200 rpm - Daily output: $160m^3$/day @18m TDH - Insulation class: F - Enclosure class: IP68 - Pump outlet: 50mm with non-return valve - Borehole diameter: min. 4 inches - Inputs: dry running protection
XI.	**Pump Controller / Inverter**
	The controller shall off-grid solar inverter compatible with solar pumps. Integrated Maximum Power Point Tracking (MPPT) and control inputs for dry running protection, motor control, and variable speed. Also, it shall be protected against reverse polarity, overload, and over-temperature. Detailed specifications of the inverter are listed below: - Power: max. 1.8 kW - Input voltage: max. 200V - Optimum VMP: >100 V - Motor current: max. 14 A - Efficiency: max. 97% - Enclosure class: IP 68 (NEMA 6P), outdoor housing, pressure cast aluminum and powder coated cover, pressure cast aluminum case with integrated heat sink
XII.	**Iron Works (Tank Stand)**
	• The works include the furnishing, erection, or installation of all structural steel and miscellaneous metal works by the specification unless required otherwise in the drawing. • All works shall well form to the shape and size shown and assembled as detailed. • All angle bars to be used shall have a minimum yield strength of 227.70 MPa. • All metal shall be painted with primer.
XIII.	**Cable and Electrical Works**
	• All electrical works for the solar pumping system will be done by the provisions of the latest Philippine National Code, rules and regulations the Electrical Ordinance of the Municipality, and safety standards. Ensure safe installation of all electrical aspects of the array. All electrical installation and procedures by a licensed electrician or solar contractor. All work • The builder/installer shall install all materials as indicated in the drawings and the necessary circuit protection. Install all equipment and materials neatly and professionally. • Provide an appropriate method of direct-to-earth grounding according to the latest edition of the National Electrical Code.

• Provide an appropriate method of direct-to-earth grounding according to the latest edition of the National Electrical Code.	
XIV.	**Distribution Works & Tank**
• Pipe shall be homogeneous throughout; free from dents, cracks, inclusions, and other defects. Pipe surfaces shall be free from nicks, scratches, and other blemishes. The joint surfaces of pipe spigots and integral-bell and sleeve reinforced-bell sockets shall be free from gauges and other imperfections that may cause leakage at joints. • Pressure pipe and fittings shall be made from rigid polyvinyl chloride (PVC) compound schedule 40 that is manufactured and installed by international standards (ANSI B1.20.1, ASTM D1784, ASTM D1785, ASTM D2466, ASTM D2672, ASTM F1498, NSF/ANSI 14, NSF/ANSI 61). • PVC Pipe shall be installed either by Open Trench Construction or Directional Bore Method. • Lateral line shall be made of polypropylene flexible pipe combination of blank and with integral welded connectors that are manufactured and installed by international standards (ISO 16438) • Galvanized iron (G.I.) pipe shall meet the requirements specified in one of the following specifications: ASTM A 53, AASHTO M 36, or M 218. • High-density polyethylene (HDPE) pipe and fittings shall be made from a base polymer that is manufactured by international standards. All HDPE pipes must be from class PE 100. • Installation of the distribution line shall be installed at the locations shown on the plans and to the position and spacing. • All pipe and fittings damaged or rejected because of defects shall be removed from the site at the time inspected.	
XV.	**Project Marker**
• Installation of the project marker shall be constructed as shown on the detailed plans. Synthetic enamel paint shall be used for the project details letterings and logo.	

The above specifications are intended for the ***Installation of the AMLANG ROSARIO Solar-Powered Irrigation System (SPIS) under the Organic Agriculture Program (OAP)*** located in ***Brgy. Amlang, Rosario, La Union***

Prepared by:

JEMMICA RAE O. URBIZTONDO, ABE
Technical Staff, RAED

Concurred by:

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SCOPE OF WORK AND SPECIFICATIONS

PROJECT NAME:	Installation of IMELDA SAN JACINTO Solar-Powered Irrigation System (SPIS) under the Organic Agriculture Program (OAP)
LOCATION:	Brgy. Imelda, San Jacinto, Pangasinan
PROJECT DESCRIPTION:	Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH and Development of Water Source
AMOUNT:	Php 1,005,791.62

GENERAL PROVISIONS

The contractor/implementer of the project shall verify all dimensions and conditions of the site and shall notify the DA Project Engineer of 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, and 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 specifications, and 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 of whether or not written and such other materials shall be approved by the owner before they are set in place.

DESCRIPTION

I. Mobilization and Demobilization

- The work consists 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.
- All roads, culverts, sidewalks, structures, etc. shall be protected from damage 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 inspector before use.

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II.	**Provision of Construction Safety and Health Program (PPE, Signages)**
	• The contractor shall provide PPE for its workforce. • The contractor shall provide safety devices like barricades, warning signs, fire blankets, and high-visibility caution tapes. • The Contractor shall provide a full-time safety practitioner (Safety Officer) to ensure the safety of its workforce. • 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 lifeline.
III.	**Construction of Temporary Facility**
	• The contractor shall install/construct temporary facilities 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.
IV.	**Clearing and Grubbing**
	• The site shall be leveled according to the plans and cleared of rubbish, roots, and other perishable and objectionable matters to a suitable subgrade. All such unsuitable materials shall be removed from the site, or otherwise disposed of as may be directed by the Project Engineer in charge of the construction.
V.	**Earthworks**
	• The site shall be leveled according to the plans and cleared of rubbish, roots, and other perishable and objectionable matters to a suitable subgrade. All such unsuitable materials shall be removed from the site, or otherwise disposed of as may be directed by the Project Engineer in charge of the construction. • Backfills and fills shall be placed in layers not exceeding 150mm in thickness, and each layer shall be thoroughly compacted by wetting, tamping, and rolling. • Leveling course shall consist of approved granular fill material furnished and placed as required to replace unsuitable material encountered below the foundation elevation of concrete structures and grouted/hand-laid riprap.
VI.	**RSB Works**
	• All reinforcement shall be placed by 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 by plans furnished by the Engineer. • The steel reinforcements for concrete shall be formed accurately according to the sizes of footings, inlet works, pump house and sump, etc., where they are to be used. They shall be tied together at each bar intersection with Gauge No. 16 G.I. wire or by welding. • All main reinforcing steel used in the structure shall conform to ASTM Grade 40 (Intermediate Grade) with a yield strength of 40 ksi (276 MPa). • All temperature bars shall conform to ASTM Grade 33 Structural Grade with a minimum yield strength of 33 ksi (230 MPa). • Always apply red oxide for the exposed RSB to eliminate rusting. • All hooks shall be by all standard hooks and anchorages specified in ACI 318-83 Building Code.

VII. Form Works

- Forms shall be used whenever necessary to confine the concrete during vibration and to shape it to the required lines. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete and shall be maintained rigidly in position. The strength and rigidity of the forms shall be such that formed surfaces will conform to specification requirements relating to the surface's irregularities and tolerances for concrete construction. Forms shall be tight to prevent loss of mortar from concrete.

VIII. Concrete Works

- All cement requirements of concrete works for the contract shall be contractor-furnished. The cement shall conform to the requirements of the standard specification of Portland Cement (ASTM: C150 Type 1).
- Fine aggregates shall be clean, well-graded, hard, natural sand 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 be reasonably clean, potable, and free from injurious amounts of oils, acids, alkali organic materials, and other deleterious substances.
- Class A mixture shall be used for inlet works, pump house, sump, foundation, and for all reinforced work not otherwise indicated or specified.

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 the inside of the drum without reducing the cement content of the mix to be discharged.

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).

IX.	**Construction of Well**
	• This scope of work requires Improvement of the existing dug well. This work includes drilling of borewell, well development, and insertion of well casings. The Contractor shall provide and install the well casing as specified in the Approved Engineering Drawing. The borehole casing to be used as part of the permanent borehole structure shall have a nominal diameter of 0.8m. The gravel pack material will consist of durable, naturally rounded quarzitic/silica particles properly washed and cleaned before insertion in the borehole. There shall be 90% siliceous materials and must contain no clay, organics, shale, silt, fines, excessive amounts of calcareous materials, or crushed rock. The cost of supply, installation, and removal of existing casing shall be borne entirely by the contractor.
X.	**PV Module and Mounting**
	• Photovoltaic (PV) module shall be a high-density monocrystalline PERC module equipped with an MC4 plug for easy connection. It shall be certified according to IEC 61215 and 61730 by TÜV Rheinland/SÜV and meets the requirements for the Conformité Européenne (CE) mark. Built with sturdy aluminum frames that are manufactured in an ISO 9001:2000 certified factory. Maximum module efficiency shall be up to 20.0%. • Materials of the mounting system shall be made of aluminum 6005 – T5 and stainless steel 304 as specified in the detailed plans. It can resist a maximum wind speed of 220 km/hr. • Installation/construction of the PV mounting shall be installed/constructed by plans furnished by the DA Project Engineer. In case of any doubt or ambiguity in the plan, the Contractor shall consult the Engineer whose decision shall be final in such cases that comply with all applicable local or national building and fire codes. • PV array shall tilt at an angle of 15^0 facing south direction ensuring optimum utilization of the solar energy.
XI.	**Water Pump**
	• The pump shall be a submersible multi-stage centrifugal pump. The motor shall be a maintenance-free brushless DC motor and no electronics in the motor. All steel components are made of stainless steel, (AISI 304) which ensures high corrosive resistance. Detailed specifications of the pump are listed below: - Rated power: 1.7 kW - Efficiency: max. 92% - Motor speed: 900-3200 rpm - Daily output: 160m^3/day - Insulation class: F - Enclosure class: IP68 - Pump outlet: 50mm with non-return valve - Borehole diameter: min. 4 inches - Inputs: dry running protection
XII.	**Pump Controller / Inverter**
	The controller shall off-grid solar inverter compatible with solar pumps. Integrated Maximum Power Point Tracking (MPPT) and control inputs for dry running protection, motor control, and variable speed. Also, it shall be protected against reverse polarity, overload, and over-temperature. Detailed specifications of the inverter are listed below: - Power: max. 1.8 kW - Input voltage: max. 200V - Optimum VMP: >100 V - Motor current: max. 14 A - Efficiency: max. 97% - Enclosure class: IP 68 (NEMA 6P), outdoor housing, pressure cast aluminum and powder coated cover, pressure cast aluminum case with integrated heat sink

XIII.	**Iron Works (Tank Stand)**
	• The works include the furnishing, erection, or installation of all structural steel and miscellaneous metal works by the specification unless required otherwise in the drawing. • All works shall well form to the shape and size shown and assembled as detailed. • All angle bars to be used shall have a minimum yield strength of 227.70 MPa. • All metal shall be painted with primer.
XIV.	**Cable and Electrical Works**
	• All electrical works for the solar pumping system will be done by the provisions of the latest Philippine National Code, rules and regulations the Electrical Ordinance of the Municipality, and safety standards. Ensure safe installation of all electrical aspects of the array. All electrical installation and procedures by a licensed electrician or solar contractor. All work • The builder/installer shall install all materials as indicated in the drawings and the necessary circuit protection. Install all equipment and materials neatly and professionally. • Provide an appropriate method of direct-to-earth grounding according to the latest edition of the National Electrical Code.
XV.	**Distribution Works & Tank**
	• Pipe shall be homogeneous throughout; free from dents, cracks, inclusions, and other defects. Pipe surfaces shall be free from nicks, scratches, and other blemishes. The joint surfaces of pipe spigots and integral-bell and sleeve reinforced-bell sockets shall be free from gauges and other imperfections that may cause leakage at joints. • Pressure pipe and fittings shall be made from rigid polyvinyl chloride (PVC) compound schedule 40 that is manufactured and installed by international standards (ANSI B1.20.1, ASTM D1784, ASTM D1785, ASTM D2466, ASTM D2672, ASTM F1498, NSF/ANSI 14, NSF/ANSI 61). • PVC Pipe shall be installed either by Open Trench Construction or Directional Bore Method. • Lateral line shall be made of polypropylene flexible pipe combination of blank and with integral welded connectors that are manufactured and installed by international standards (ISO 16438) • Galvanized iron (G.I.) pipe shall meet the requirements specified in one of the following specifications: ASTM A 53, AASHTO M 36, or M 218. • High-density polyethylene (HDPE) pipe and fittings shall be made from a base polymer that is manufactured by international standards. All HDPE pipes must be from class PE 100. • Installation of the distribution line shall be installed at the locations shown on the plans and to the position and spacing. • All pipe and fittings damaged or rejected because of defects shall be removed from the site at the time inspected.
XVI.	**Project Marker**
	• Installation of the project marker shall be constructed as shown on the detailed plans. Synthetic enamel paint shall be used for the project details letterings and logo.

The above specifications are intended for the ***Installation of the IMELDA SAN JACINTO Solar-Powered Irrigation System (SPIS) under the Organic Agriculture Program (OAP)*** located in ***Brgy. Imelda, San Jacinto, Pangasinan***

Prepared by:

JEMMICA RAE O. URBIZTONDO, ABE
Technical Staff, RAED

Concurred by:

MARK HARRY G. PASTOR, ABE
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SCOPE OF WORK AND SPECIFICATIONS

PROJECT NAME:	Installation of LABIT WEST Solar-Powered Irrigation System (SPIS) under the Organic Agriculture Program (OAP)
LOCATION:	Brgy. Labit West, Urdaneta City, Pangasinan
PROJECT DESCRIPTION:	Installation of SPIS for Organic Agriculture Program with a pump discharge of 160 cu.m/day at 18m TDH and Development of Water Source
AMOUNT:	Php 1,005,812.62

GENERAL PROVISIONS

The contractor/implementer of the project shall verify all dimensions and conditions of the site and shall notify the DA Project Engineer of 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, and 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 specifications, and 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 of whether or not written and such other materials shall be approved by the owner before they are set in place.

DESCRIPTION

I. Mobilization and Demobilization

- The work consists 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.
- All roads, culverts, sidewalks, structures, etc. shall be protected from damage 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 inspector before use.

II.	**Provision of Construction Safety and Health Program (PPE, Signages)**
	• The contractor shall provide PPE for its workforce. • The contractor shall provide safety devices like barricades, warning signs, fire blankets, and high-visibility caution tapes. • The Contractor shall provide a full-time safety practitioner (Safety Officer) to ensure the safety of its workforce. • 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 lifeline.
III.	**Construction of Temporary Facility**
	• The contractor shall install/construct temporary facilities 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.
IV.	**Clearing and Grubbing**
	• The site shall be leveled according to the plans and cleared of rubbish, roots, and other perishable and objectionable matters to a suitable subgrade. All such unsuitable materials shall be removed from the site, or otherwise disposed of as may be directed by the Project Engineer in charge of the construction.
V.	**Earthworks**
	• The site shall be leveled according to the plans and cleared of rubbish, roots, and other perishable and objectionable matters to a suitable subgrade. All such unsuitable materials shall be removed from the site, or otherwise disposed of as may be directed by the Project Engineer in charge of the construction. • Backfills and fills shall be placed in layers not exceeding 150mm in thickness, and each layer shall be thoroughly compacted by wetting, tamping, and rolling. • Leveling course shall consist of approved granular fill material furnished and placed as required to replace unsuitable material encountered below the foundation elevation of concrete structures and grouted/hand-laid riprap.
VI.	**RSB Works**
	• All reinforcement shall be placed by 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 by plans furnished by the Engineer. • The steel reinforcements for concrete shall be formed accurately according to the sizes of footings, inlet works, pump house and sump, etc., where they are to be used. They shall be tied together at each bar intersection with Gauge No. 16 G.I. wire or by welding. • All main reinforcing steel used in the structure shall conform to ASTM Grade 40 (Intermediate Grade) with a yield strength of 40 ksi (276 MPa). • All temperature bars shall conform to ASTM Grade 33 Structural Grade with a minimum yield strength of 33 ksi (230 MPa). • Always apply red oxide for the exposed RSB to eliminate rusting. • All hooks shall be by all standard hooks and anchorages specified in ACI 318-83 Building Code.

VII. Form Works

- Forms shall be used whenever necessary to confine the concrete during vibration and to shape it to the required lines. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete and shall be maintained rigidly in position. The strength and rigidity of the forms shall be such that formed surfaces will conform to specification requirements relating to the surface's irregularities and tolerances for concrete construction. Forms shall be tight to prevent loss of mortar from concrete.

VIII. Concrete Works

- All cement requirements of concrete works for the contract shall be contractor-furnished. The cement shall conform to the requirements of the standard specification of Portland Cement (ASTM: C150 Type 1).
- Fine aggregates shall be clean, well-graded, hard, natural sand 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 be reasonably clean, potable, and free from injurious amounts of oils, acids, alkali organic materials, and other deleterious substances.
- Class A mixture shall be used for inlet works, pump house, sump, foundation, and for all reinforced work not otherwise indicated or specified.

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 the inside of the drum without reducing the cement content of the mix to be discharged.

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).

IX.	**Construction of Well**
	• This scope of work requires Improvement of the existing dug well. This work includes drilling of borewell, well development, and insertion of well casings. The Contractor shall provide and install the well casing as specified in the Approved Engineering Drawing. The borehole casing to be used as part of the permanent borehole structure shall have a nominal diameter of 0.8m. The gravel pack material will consist of durable, naturally rounded quarzitic/silica particles properly washed and cleaned before insertion in the borehole. There shall be 90% siliceous materials and must contain no clay, organics, shale, silt, fines, excessive amounts of calcareous materials, or crushed rock. The cost of supply, installation, and removal of existing casing shall be borne entirely by the contractor.
X.	**PV Module and Mounting**
	• Photovoltaic (PV) module shall be a high-density monocrystalline PERC module equipped with an MC4 plug for easy connection. It shall be certified according to IEC 61215 and 61730 by TÜV Rheinland/SÜV and meets the requirements for the Conformité Européenne (CE) mark. Built with sturdy aluminum frames that are manufactured in an ISO 9001:2000 certified factory. Maximum module efficiency shall be up to 20.0%. • Materials of the mounting system shall be made of aluminum 6005 – T5 and stainless steel 304 as specified in the detailed plans. It can resist a maximum wind speed of 220 km/hr. • Installation/construction of the PV mounting shall be installed/constructed by plans furnished by the DA Project Engineer. In case of any doubt or ambiguity in the plan, the Contractor shall consult the Engineer whose decision shall be final in such cases that comply with all applicable local or national building and fire codes. • PV array shall tilt at an angle of 15^0 facing south direction ensuring optimum utilization of the solar energy.
XI.	**Water Pump**
	• The pump shall be a submersible multi-stage centrifugal pump. The motor shall be a maintenance-free brushless DC motor and no electronics in the motor. All steel components are made of stainless steel, (AISI 304) which ensures high corrosive resistance. Detailed specifications of the pump are listed below: - Rated power: 1.7 kW - Efficiency: max. 92% - Motor speed: 900-3200 rpm - Daily output: 160m^3/day @ 18m TDH - Insulation class: F - Enclosure class: IP68 - Pump outlet: 50mm with non-return valve - Borehole diameter: min. 4 inches - Inputs: dry running protection
XII.	**Pump Controller / Inverter**
	The controller shall off-grid solar inverter compatible with solar pumps. Integrated Maximum Power Point Tracking (MPPT) and control inputs for dry running protection, motor control, and variable speed. Also, it shall be protected against reverse polarity, overload, and over-temperature. Detailed specifications of the inverter are listed below: - Power: max. 1.8 kW - Input voltage: max. 200V - Optimum VMP: >100 V - Motor current: max. 14 A - Efficiency: max. 97% - Enclosure class: IP 68 (NEMA 6P), outdoor housing, pressure cast aluminum and powder coated cover, pressure cast aluminum case with integrated heat sink

XIII.	**Iron Works (Tank Stand)**
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XIV.	**Cable and Electrical Works**
	• All electrical works for the solar pumping system will be done by the provisions of the latest Philippine National Code, rules and regulations the Electrical Ordinance of the Municipality, and safety standards. Ensure safe installation of all electrical aspects of the array. All electrical installation and procedures by a licensed electrician or solar contractor. All work • The builder/installer shall install all materials as indicated in the drawings and the necessary circuit protection. Install all equipment and materials neatly and professionally. • Provide an appropriate method of direct-to-earth grounding according to the latest edition of the National Electrical Code.
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	• Pipe shall be homogeneous throughout; free from dents, cracks, inclusions, and other defects. Pipe surfaces shall be free from nicks, scratches, and other blemishes. The joint surfaces of pipe spigots and integral-bell and sleeve reinforced-bell sockets shall be free from gauges and other imperfections that may cause leakage at joints. • Pressure pipe and fittings shall be made from rigid polyvinyl chloride (PVC) compound schedule 40 that is manufactured and installed by international standards (ANSI B1.20.1, ASTM D1784, ASTM D1785, ASTM D2466, ASTM D2672, ASTM F1498, NSF/ANSI 14, NSF/ANSI 61). • PVC Pipe shall be installed either by Open Trench Construction or Directional Bore Method. • Lateral line shall be made of polypropylene flexible pipe combination of blank and with integral welded connectors that are manufactured and installed by international standards (ISO 16438) • Galvanized iron (G.I.) pipe shall meet the requirements specified in one of the following specifications: ASTM A 53, AASHTO M 36, or M 218. • High-density polyethylene (HDPE) pipe and fittings shall be made from a base polymer that is manufactured by international standards. All HDPE pipes must be from class PE 100. • Installation of the distribution line shall be installed at the locations shown on the plans and to the position and spacing. • All pipe and fittings damaged or rejected because of defects shall be removed from the site at the time inspected.
XVI.	**Project Marker**
	• Installation of the project marker shall be constructed as shown on the detailed plans. Synthetic enamel paint shall be used for the project details letterings and logo.

The above specifications are intended for the ***Installation of the LABIT WEST Solar-Powered Irrigation System (SPIS) under the Organic Agriculture Program (OAP)*** located in ***Brgy. Labit West, Urdaneta City, Pangasinan***

Prepared by:

JEMMICA RAE O. URBIZTONDO, ABE
Technical Staff, RAED

Concurred by:

MARK HARRY G. PASTOR, ABE
OIC, RAED

Technical Specifications

Instructions:

[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment/goods offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. *Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate.*

The Technical Specification must be supported with the following:

- **Colored, clear and readable original copies of brochures (in English language) of the offered goods (pump, inverter/controller and solar module/panel).**
- **Other technical specification requirements:**
  - **With minimum warranty of 1 year on pump and controller/inverter, accessories, and services**
  - **With minimum warranty of 15 years on PV Module**

A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. *A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.*

Item	Specification	Statement of Compliance
X	**PV MODULE AND MOUNTING**	
	Photovoltaic (PV) module shall be a high-density monocrystalline PERC module equipped with an MC4 plug for easy connection. It shall be certified according to IEC 61215 and 61730 by TÜV Rheinland/SÜV and meets the requirements for the ConformitéEuropéenne (CE) mark. Built with sturdy aluminum frames that are manufactured in an ISO 9001:2000 certified factory. Maximum module efficiency shall be up to 20.0%.	
	Materials of the mounting system shall be made of aluminum 6005 – T5 and stainless steel 304 as specified in the detailed plans. It can resist a maximum wind speed of 220 km/hr.	
	Installation/construction of the PV mounting shall be installed/constructed by plans furnished by the DA Project Engineer. In case of any doubt or ambiguity in the plan, the Contractor shall consult the Engineer whose decision shall be final in such cases that comply with all applicable local or national building and fire codes.	
	PV array shall tilt at an angle of 150 facing south direction ensuring optimum utilization of the solar energy.	
XI	**WATER PUMP**	
	The pump shall be a submersible multi-stage centrifugal pump. The motor shall be a maintenance-free brushless DC motor and no electronics in the motor. All steel components are made of stainless steel, (AISI 304) which ensures high corrosive resistance. Detailed specifications of the pump are listed below:	
	- Rated power: 1.7kW	
	- Efficiency: max. 92%	
	- Motor speed: 900-3200 rpm	
	- Daily output: 160m3/day @18m TDH	
	- Insulation class: F	
	- Enclosure class: IP68	

	- Pump outlet: 50mm with non-return valve	
	- Borehole diameter: min. 4 inches	
	- Inputs: dry running protection	
XII	**PUMP CONTROLLER / INVERTER**	
	The controller shall off-grid solar inverter compatible with solar pumps. Integrated Maximum Power Point Tracking (MPPT) and control inputs for dry running protection, motor control, and variable speed. Also, it shall be protected against reverse polarity, overload, and over-temperature. Detailed specifications of the inverter are listed below:	
	- Power: max. 1.8kW	
	- Input voltage: max. 200V	
	- Optimum VMP: >100 V	
	- Motor current: max. 14 A	
	- Efficiency: max. 97%	
	- Enclosure class: IP 68 (NEMA 6P), outdoor housing, pressure cast aluminum and powder coated cover, pressure cast aluminum case with integrated heat sink	

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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: _____