

PHILIPPINE BIDDING DOCUMENTS

Procurement of INFRASTRUCTURE PROJECTS

Government of the Republic of the Philippines

**DESIGN, SUPPLY, DELIVERY,
CONSTRUCTION AND INSTALLATION OF
SOLAR-POWERED IRRIGATION SYSTEM
(SPIS) IN AURORA PROVINCE COCONUT
DEVELOPMENT CENTER (APCDC),
DIBARAYBAY, DINALUNGAN, AURORA
UNDER CFIDP- HSP CY 2024 FUNDS**

ITB No. 2024-12

**Sixth Edition
July 2020**

Preface

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

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

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

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

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

- a. All the documents listed in the Table of Contents are normally required for the procurement of Infrastructure Projects. However, they should be adapted as necessary to the circumstances of the particular Project.
- b. Specific details, such as the “*name of the Procuring Entity*” and “*address for bid submission*,” should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, BDS, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, and Bill of Quantities are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.
- d. The cover should be modified as required to identify the Bidding Documents as to the names of the Project, Contract, and Procuring Entity, in addition to date of issue.

- e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.
- f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

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

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

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

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

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

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

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

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

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

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

- a. The date of availability of the Bidding Documents, which shall be from the time the IB is first advertised/posted until the deadline for the submission and receipt of bids;
- b. The place where the Bidding Documents may be acquired or the website where it may be downloaded;
- c. The deadline for the submission and receipt of bids; and
- d. Any important bid evaluation criteria.

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



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
PHILIPPINE COCONUT AUTHORITY
REGIONS III and IV-B

2/F Guest House Bldg., PCA Compound, Elliptical Road, Diliman, Quezon City 1101

Tel. Nos.: (02) 8927-5227 (02) 8924-4761

pcaregion1.4b@gmail.com / regionivb@pca.gov.ph

REGIONAL BIDS AND AWARDS COMMITTEE

IB No. 2024-12

Invitation to Bid for the
DESIGN, SUPPLY, DELIVERY, CONSTRUCTION AND INSTALLATION
OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) IN AURORA
PROVINCE COCONUT DEVELOPMENT CENTER (APCDC),
DIBARAYBAY, DINALUNGAN, AURORA UNDER CFIDP – HSP CY 2024
FUNDS

1. The *Philippine Coconut Authority Regions III and IV-B*, through the *CFIDP – HSP CY 2024 Funds* intends to apply the sum of *Five million pesos (Php5,000,000.00)* being the Approved Budget for the Contract (ABC) to payments under the contract for the *Design, Supply, Delivery, Construction and Installation of Solar-Powered Irrigation System (SPIS) – IB No. 2024-12*. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The *Philippine Coconut Authority Regions III and IV-B* now invites bids for the above Procurement Project. Completion of the Works is required *within forty-five (45) calendar days upon receipt of Notice to Proceed*. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using non-discretionary “*pass/fail*” criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
4. Interested bidders may obtain further information from *Philippine Coconut Authority Regions III and IV-B* and inspect the Bidding Documents at the address given below from *Monday to Thursday, 7:00 AM to 6:00 PM*.
5. A complete set of Bidding Documents may be acquired by interested bidders on *October 15, 2024 to November 5, 2024* from given address and website/s below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of *Php5,000.00*. The Procuring Entity shall allow the bidder to present its proof of payment for the fees *in person or through electronic means*.

6. The *Philippine Coconut Authority Region III and IVB* will hold a Pre-Bid Conference¹ on *October 24, 2024, 9:30 AM* at *Conference Room, 2nd Floor, Guest House Building, PCA Compound, Elliptical Road, Diliman, Quezon City* and/or through videoconferencing/webcasting *via Zoom with meeting credentials in the following page*, which shall be open to prospective bidders.
7. Bids must be duly received by the BAC Secretariat through *manual submission* at the office address as indicated below on or before *November 5, 2024, 9:00 AM*. Late bids shall not be accepted.
8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 16.
9. Bid opening shall be on *November 5, 2024, 9:30 AM* at *Conference Room, 2nd Floor, Guest House Building, PCA Compound, Elliptical Road, Diliman, Quezon City* and through videoconferencing/webcasting *via Zoom with meeting credentials below*. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

Below is the procurement activity schedule:

Availability of Bidding Document	October 16, 2024 to November 5, 2024
Pre-bid Conference	October 24, 2024, 9:30 AM, Thursday Meeting ID: 820 0901 5517 Passcode: 520671 https://us06web.zoom.us/j/82009015517
Submission of Bids	November 5, 2024, 9:00AM, Tuesday
Bid Opening and Evaluation	November 5, 2024, 9:30AM, Tuesday Meeting ID: 839 1470 7634 Passcode: 750657 https://us06web.zoom.us/j/83914707634
Post-qualification	November 6-7, 2024 (tentative)
Issuance of Notice of Award	November 8, 2024 (tentative)
Contract Signing	November 9, 2024 (tentative)
Issuance of Notice to Proceed	November 9, 2024 (tentative)

10. The *Philippine Coconut Authority Regions III and IV-B* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
11. For further information, please refer to:

Ms. Michelle O. Villa

*Head, BAC Secretariat Philippine Coconut Authority Region III and IVB
2nd Floor, Guest House Building, PCA Compound, Elliptical Road,*

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

Diliman, Quezon City, (02) 8924-4761
4b.regionalbac@gmail.com

12. You may visit <http://www.philgeps.gov.ph> for downloading of Bidding Documents.

October 15, 2024
Date of Issue

(SGD.) JUDY dP. PINGCO
RBAC Chairperson

Section II. Instructions to Bidders

Notes on the Instructions to Bidders

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

1. Scope of Bid

The Procuring Entity, *Philippine Coconut Authority Regions III and IV-B* invites Bids for the *Design, Supply, Delivery, Construction and Installation of Solar-Powered Irrigation System (SPIS) in Aurora Province Coconut Development Center (APCDC), Dibaraybay, Dinalungan, Aurora under CFIDP – HSP CY 2024 Funds*, with Project Identification Number *IB No. 2024-12*.

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 *CFIDP – HSP CY 2024 Funds* in the amount of *Five million pesos (Php 5,000,000.00)*.

2.2. The source of funding is:

- a. GOCC and GFIs, the Corporate Operating Budget.

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 *Conference Room, 2nd Floor, Guest House Building, PCA Compound, Elliptical Road, Diliman, Quezon City* and/or through videoconferencing/webcasting} as indicated in paragraph 6 of the **IB**.

9. Clarification and Amendment of Bidding Documents

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

10. Documents Comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.
- 10.3. A valid special PCAB License in case of Joint Ventures, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.
- 10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.
- 10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 11.2. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Alternative Bids

Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic technical design as indicated in the drawings and

specifications. Unless there is a value engineering clause in the **BDS**, alternative Bids shall not be accepted.

13. Bid Prices

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

14. Bid and Payment Currencies

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

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

- 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 *120 days from the opening of bid*. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

Each Bidder shall submit *three (3) copies* of the first and second components of its Bid.

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

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

17. Deadline for Submission of Bids

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

18. Opening and Preliminary Examination of Bids

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

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

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

19. Detailed Evaluation and Comparison of Bids

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

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

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

20. Post Qualification

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

21. Signing of the Contract

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

Section III. Bid Data Sheet

Notes on the Bid Data Sheet (BDS)

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

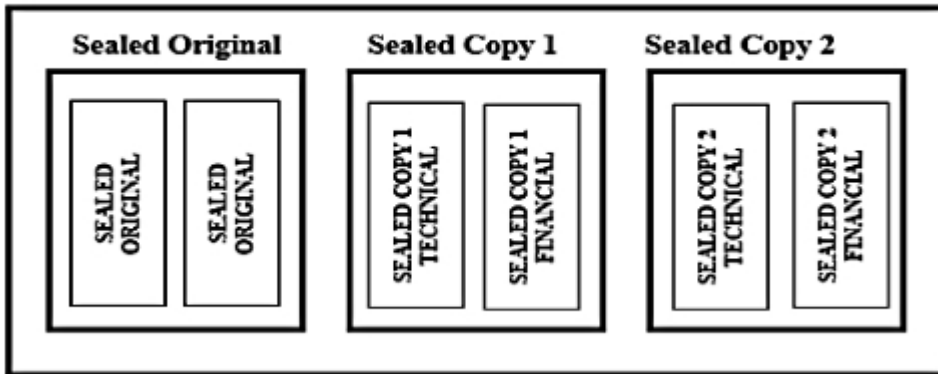
This Section is intended to assist the Procuring Entity in providing the specific information in relation to corresponding clauses in the ITB and has to be prepared for each specific procurement.

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

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

Bid Data Sheet

ITB Clause			
5.2	For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be: a. Supply, Delivery, Construction and Installation of Solar-Powered System Or Establishment/Installation of Solar-Powered System b. Completed <i>within 5 years</i> prior to the deadline for the submission and receipt of bids. c. Submit certificate of at least satisfactory performance on the SLCC issued and signed by the Head of the Procuring Entity for government projects and owner for private projects for contractors without previous awarded project from government		
7.1	<i>The Procuring Entity has prescribed that Subcontracting is not allowed.</i>		
10.4	The key personnel must meet the required minimum years of experience set below:		
	Key Personnel	General Experience (years)	Relevant Experience (years)
	1 Project Engineer for Infrastructure Activities Licensed (Civil Engineer or Agricultural and Biosystems Engineer (ABE))	at least 3	at least 2
	1 Electrical Engineer	at least 3	at least 2
	1 Foreman	at least 3	at least 2
	1 Safety and Health Officer		
10.5	The major equipment requirements are the following:		
	Equipment	Owned or Leased or Under Purchase Agreement	
	Mini Dump Truck	1	
	Bagger Concrete Mixer	1	
	Welding Machine	1	
	Generator Set	1	
12	<i>No further instructions</i>		
15.1	The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:		

	<p>a. The amount of not less than <i>PhP 100,000.00</i>, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;</p> <p>b. The amount of not less than <i>PhP 250,000.00</i>, if bid security is in Surety Bond.</p>
16	<p>The Bidders shall submit one (1) original eligibility and technical documents in one sealed envelope marked “ORIGINAL - TECHNICAL COMPONENT”, and the original of their financial component in another sealed envelope marked “ORIGINAL - FINANCIAL COMPONENT”, sealing them all in an outer envelope marked “ORIGINAL BID”.</p> <p>Further, the bidder shall submit 2 set of copies of the first and second envelopes similarly sealed duly marking the inner envelopes as “COPY NO. ____ - TECHNICAL COMPONENT” and “COPY NO. ____ – FINANCIAL COMPONENT” and the outer envelope as “COPY NO. ____”, respectively. These envelopes containing the original and the copies shall then be enclosed in one single envelope.</p> <p>1.1. See illustration for one (1) original and two (2) copies of the first and second components of its bid.</p> <p>1.2. All envelopes shall:</p> <ul style="list-style-type: none"> (a) contain the name of the contract to be bid in capital letters; (b) bear the name and address of the Bidder in capital letters; (c) be addressed to the Procuring Entity's BAC (d) bear a warning “DO NOT OPEN BEFORE...” the date and time for the opening of bids <p style="text-align: center;">Sealed Original, Copy 1 & Copy 2 in one (1) Single Envelope</p> 
19.2	Partial bids are not allowed.
20	<ul style="list-style-type: none"> • Latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS). • All the documents submitted by the supplier with the Single/Lowest Calculated Bid (S/LCB), shall be subjected to post-qualification. The submitted DED of the SPIS will be evaluated based on the requirements set

	by the PE and the minimum specification, construction and performance in PNS/BAFS 324:2021/2022. Also, the capacity of the supplier to undertake the project shall also be evaluated and verified
21	<p>Contract documents relevant to the project to be submitted are the ff:</p> <ol style="list-style-type: none"> 1. Should be included during Bid Opening <ol style="list-style-type: none"> 1.1 Contractor must have satisfactory performance on submitted SLCC for previous projects on Government Offices and other Government Agencies to be signed by the concerned Regional Executive Director / Head of Agencies or equivalent certificate from private entities for non-government project. 1.2 Detailed Engineering Design (DED) of the Solar-Powered Irrigation System (SPIS) including the electrical layout and materials to be used taking considerations the PE's requirements; 1.3 Certification from the manufacturer/s or local distributor/s that the bidder is authorized distributor/dealer/installer of the offered solar-power modules and accessories, inverter and pump. 1.4 Certification from the manufacturer/s or local distributor/s that brand being offered has been in the Philippine market for the last three (3) years. 1.5 Certification from the manufacturer/s or local distributor/s that parts and services for the offered SPIS are available for the next five (5) years within the region of delivery. 1.6 Proof or Certification that the bidder has at least one (1) year minimum experience in the solar power business. 1.7 List of authorized service center/s for the offered SPIS 1.8 Brochures of offered brand and units for SPIS (solar panel, inverter, battery, and pump) 1.9 Duly notarized certification of availability of stocks from the manufacturer or distributor (solar panel, inverter, battery, and pump) 2. To be submitted before, during, and after contract execution <ol style="list-style-type: none"> 2.1 Submission of Geotagged Photos <ol style="list-style-type: none"> 2.1.1 Item of works or accomplishment report requirement for progress/ final billing. 2.3 Submission of shop drawing for revision or clarification in the detailed engineering design during implementation. Original copy of the DED signed and approved by the concerned engineer/s shall be submitted to the PE. 2.4 Material Test Results 2.5 Construction schedule 2.6 Manpower schedule 2.7 Construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.

Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

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

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

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

1. Scope of Contract

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

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

2. Sectional Completion of Works

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

3. Possession of Site

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

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

4. The Contractor's Obligations

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

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

5. Performance Security

- 5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.
- 5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

6. Site Investigation Reports

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

7. Warranty

- 7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, the Procuring Entity shall forfeit its performance security, subject its property(ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.
- 7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the **SCC**.

8. Liability of the Contractor

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

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

9. Termination for Other Causes

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

10. Dayworks

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

11. Program of Work

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

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

12. Instructions, Inspections and Audits

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

13. Advance Payment

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

14. Progress Payments

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

15. Operating and Maintenance Manuals

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

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

Section V. Special Conditions of Contract

Notes on the Special Conditions of Contract

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

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

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

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

Special Conditions of Contract

GCC Clause	
2	<i>Not Applicable</i>
4.1	<p>The Contractor shall employ the following Key Personnel for the project:</p> <ul style="list-style-type: none"> • 1 Project Manager for Infrastructure Activities; Licensed (Civil Engineer or Agricultural and Biosystems Engineer (ABE)) • 1 Electrical Engineer • 1 Foreman • 1 Safety and Health Officer <p>The Key personnel shall be supported by Bio-data or CV which includes personal circumstances and experience.</p>
6	The supplier is required to visit and inspect the location of the proposed SPIS for evaluation and determination of proper design. Prior to the site visit, the supplier shall first secure the approval of the PE and that visit is solely for the purpose of site evaluation.
7.2	<i>[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:]</i> Five (5) years.
10	No dayworks are applicable to the contract.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within <i>five (5)</i> calendar days from receipt of the Notice of Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is 1% of the contract price.
12	<p>Inspection during and after the construction and installation shall be conducted by the PCA authorized representative/s. Further, AMTEC testing and evaluation shall form part of the inspection and commissioning of the installed SPIS. The inspection and full acceptance of the project by the PE is done based on the minimum requirements and design of SPIS and satisfactory performance operation of SPIS.</p> <p>The AMTEC testing and evaluation for Solar Powered Irrigation System (SPIS) should be conducted after the award of contract to the winning bidder and after the complete installation of the SPIS on site. Thereafter, AMTEC Test Report shall be submitted by the winning bidder (supplier) to the PE prior to the acceptance and payment by PE.</p> <p>The supplier is required to conduct full testing and demonstration of the newly installed SPIS. Each component shall be tested based on its standard operation. All SPIS components (solar modules, inverter,</p>

	<p>battery, pumps and motor, control panel, solar street lights, etc.) are in good working condition and most importantly be able to irrigate the intended coconut areas.</p> <p>In addition, the supplier must be able to train the designated operators of SPIS on its operation and maintenance procedures. A certification from the PE that the supplier satisfactorily conducted the training must be secured by the supplier along with the training report and photos. These will be one of the bases for the final acceptance and payment to the supplier of the finished project.</p>
13	Advance payment is not allowed.
14	Progress payment is not allowed.
15.1	<p>The date by which operating and maintenance manuals are required is 10 days from Completion Date.</p> <p>During final inspection and acceptance, the supplier shall provide the Operation and Maintenance Manual of the SPIS as well as the following basic hand tools including, but not limited to, one set of each of the following:</p> <ul style="list-style-type: none"> a) Multi-testers; b) Adjustable wrench; c) Pipe wrench; d) Box and open wrenches; e) Philips; f) Flat screw-driver. <p>The date by which “as built” drawings are required is 15 days from Completion Date.</p>
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 1% of the contract price.

Section VI. Specifications

Notes on Specifications

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

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

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

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

Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted

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

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

Section VI. Specifications

DESIGN, SUPPLY, DELIVERY, CONSTRUCTION AND INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) IN AURORA PROVINCE COCONUT DEVELOPMENT CENTER (APCDC), DIBARAYBAY, DINALUNGAN, AURORA UNDER CFIDP – HSP CY 2024 FUNDS

Below are *minimum technical specifications* of SPIS components. Specifications may vary, but not below the minimum technical requirements.

Item	Design/Installation consideration	Technical Specifications
PV ARRAY (Solar panels)	Installed with a rigid alloy rail made of non-corrosive material	<ul style="list-style-type: none"> - 20 pcs, 550W or its equivalent - monocrystalline - Modules shall adhere to the applicable IEC standards including IEC-612215, IEC 61730 and IEC 60364 - Efficiency shall be no less than 22%
	Mounting frame structure should be made from galvanized iron (GI) pipes or angular bars either primed, hot dipped galvanized with minimum of 5mm or double coated with non-corrosive paint.	
	All structures materials shall be made of high-tensile steel (420 mpa and higher), pre-coated with anti-corrosion coating. All bolts that are used to fix mechanical components shall be made from steel 8.8 or 10.4 and shall be coated with iron zinc coating.	
	PV modules shall withstand minimum gustiness and uplift of 180kph	
	Special distance between each PV modules should be at least 20mm	
	Placement of the PV array shall be away from any source of shades any time of the year. PV array should be facing the south.	

	Surge Protection Devices (SPD) shall be installed along with the PV module.	
PUMP SET (surface)	<p>A trash rack, made of non-corrosive material or painted with protective coating, shall be installed along with the pump intake.</p> <p>For protection: Dry running, overheating, overloading, voltage transient, and low/high voltage input protection shall be provided for the pump set</p>	<ul style="list-style-type: none"> - Minimum power of 6.6 KW or 9 hp - A discharge measuring device, such as flow meter or water meter, should be included with the pump set. - Pipes and fittings for the pump and accessories will be based on the design subject to verification by the PE.
INVERTER AND ACCESSORIES (SOLAR PANEL OR PV ARRAY CONTROLLER)	<p>For Protection: The pump set controller and the PV array controller shall be insect-proofed and weather-proofed by using double-proof box and sealants.</p> <p>The solar panel controller should be encased with a combiner box.</p>	<ul style="list-style-type: none"> - 125% of pump power (minimum 8.25KW or 11.25hp or its equivalent) - A minimum of IP58 (splash proof) rating shall be used as per IEC60529:1989+A1:1999+A2:2013
BATTERY	Shall be compatible to solar panel and inverter. Warranty of at least 10 years.	<ul style="list-style-type: none"> - At least one (1) unit AC or DC coupled battery - Made of lithium <i>e.g. lithium-ion, lithium iron phosphate (LFP), lithium manganese oxide, etc.</i> - Minimum of 48V - Back-up battery type.
CABLES AND WIRES FOR ELECTRICAL SYSTEM	Cables and wirings used for the SPIS shall be in accordance with the Philippine Electrical Code (PEC), using PV cables specific for PV modules. Wiring installations shall be properly protected for weather conditions and other external factors.	<ul style="list-style-type: none"> - Use applicable PVC / HDPE pipes for conduits
SOLAR STREET LIGHT WITH ACCESSORIES	Made of aluminum alloy housing.	<ul style="list-style-type: none"> - 4 pcs solar street light - Minimum of 105W Solar module

	Placed at corners of perimeter fence. Height of post from NGL – at least 2.5 m	<ul style="list-style-type: none"> - With 10W LED light - Battery type: 12 V Lithium type - 2” diameter GI pipe
OVERHEAD WATER TANK	Made of at least CHB and Class “A” concrete mixture or reinforced concrete	<ul style="list-style-type: none"> - Capacity: at least 5,000 L - Height from NGL: at least 5.0m - Water line (pump to tank and tank to beginning of distribution lines): at least Galvanized Iron Pipe/Tube or equivalent applicable HDPE pipe
	Painted with applicable paint for concrete	
	Shall have provision of stairs made of durable steel/iron bars.	
PUMP AND CONTROL PANEL HOUSE	Made of at least CHB and Class “A” concrete mixture or reinforced concrete	<ul style="list-style-type: none"> - Minimum dimension: 2.0 m x 2.0 m x 2.5 m
	Painted with applicable paint for concrete	
	With door and lock.	
	With LED light.	
PERIMETER FENCE	With steel gate and lock.	<ul style="list-style-type: none"> - Dimension: depends on the design but not lower than 80m² - Fence Height: 1.5 m (from the concrete post) made of Diamond-shape chain link or cyclone wire - made of G.I pipe: 2” diameter, S40 - with 4” thick CHB wall on smooth plastered paint finish on both sides (i.e. seagreen) - 20 x 20 cm Class “A” concrete post on smooth plastered-paint finish (i.e. seagreen)
	Welded parts between pipe and chain link fence	
LIGHTNING ARRESTERS (LA) AND ITS COMPONENTS	Lightning arrester shall be installed in accordance with Article 2.80 (Surge Arresters) of the National Electrical Code (NEC)	<ul style="list-style-type: none"> - 1 pc LA - Height: at least 6.0 m - Made of at least Galvanized Iron Pipe/Tube
DISTRIBUTION LINES/PIPES AND FITTINGS	For Block 1: Estimated Length = 299 m, width = 257 m.	<ul style="list-style-type: none"> - Water distribution lines shall be made from High Density

	No. of coconut palms = 1,025 planted at 2-3 palms/hill = 342 – 513 hills Planting distance = 6-8m	Polyethylene pipes with sizes as follows: <ul style="list-style-type: none"> - HDPE Pipe 3" Ø SDR 11 - HDPE Pipe 2 1/2" Ø SDR 11 - HDPE Pipe 2" Ø SDR 11 - HDPE Pipe 1 1/2" Ø SDR 11
	For Block 3: Estimated Length = 333 m, Width = 310 m, No. of coconut palms = 1,524 planted at 2 and 3 palms/hill = 508 to 762 hills Planting distance = 6-8m	For fittings and connections (minimum): <ul style="list-style-type: none"> - PE Saddle Clamp 2 1/2" x 1/2" - PE Saddle Clamp 2" x 1/2" - PE End Cap 2" - PE End Cap 1/2" - PE Male Connector 2 1/2" and 1/2" - Gate Valve 2 1/2" - Gate Valve 2" - PE reducer 2 1/2" x 2" - PE Tee 2 1/2" - PE Elbow Reducer 2 1/2" x 2" - Teflon Tape
PROJECT BILLBOARD	Should be sturdy made of Good lumber and Marine Plywood	<ul style="list-style-type: none"> - Project Signboard (PCA) Tarpaulin 4' x 8' - Project Signboard (COA) Tarpaulin 8' x 8'
CONSTRUCTION SAFETY AND HEALTH	Warning signs shall be installed for electrical components on-site.	Provision of PPEs (safety shoes, helmet, vest, gloves) for workers and visitors and safety signages located at necessary location. PPE shall be provided

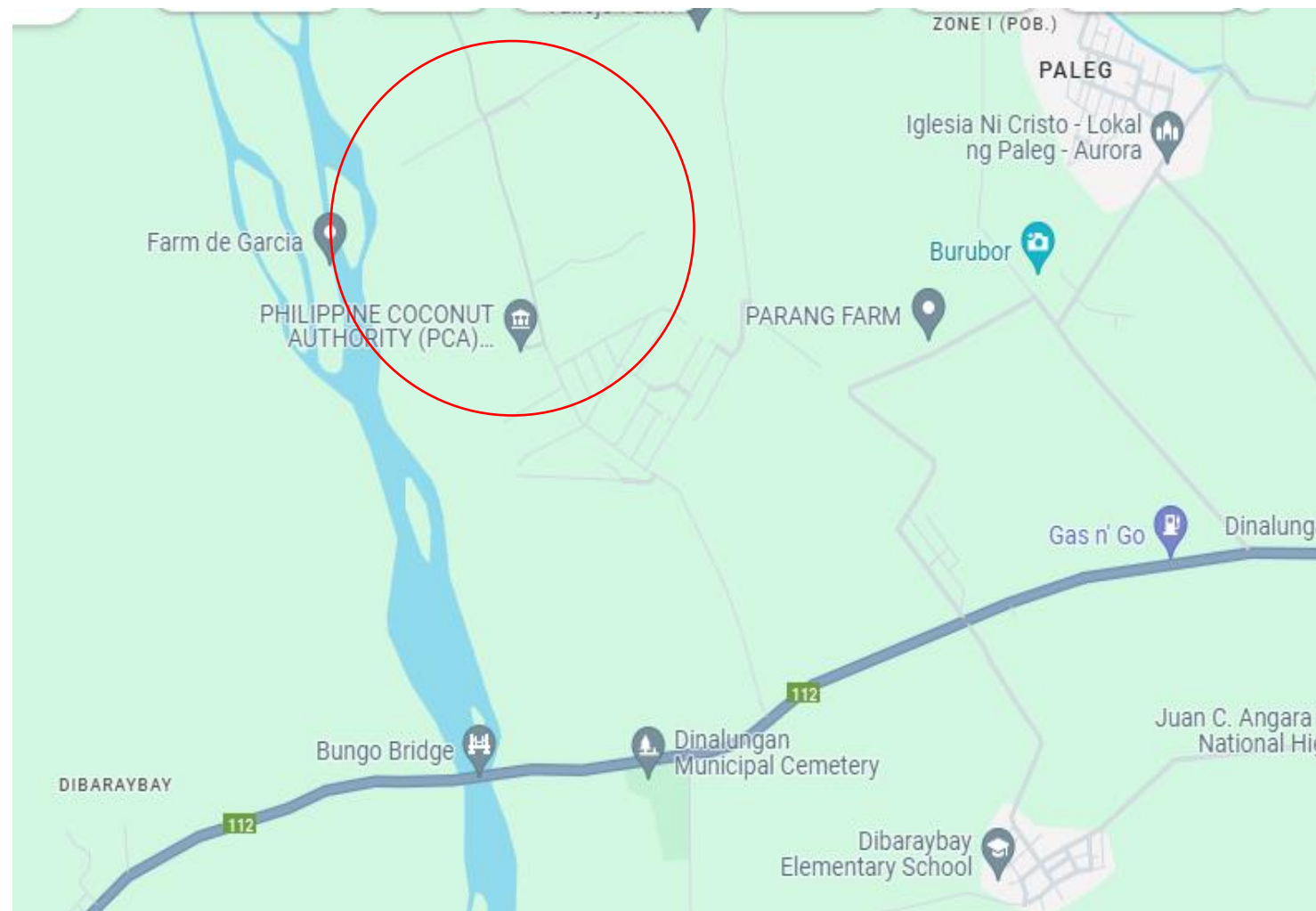
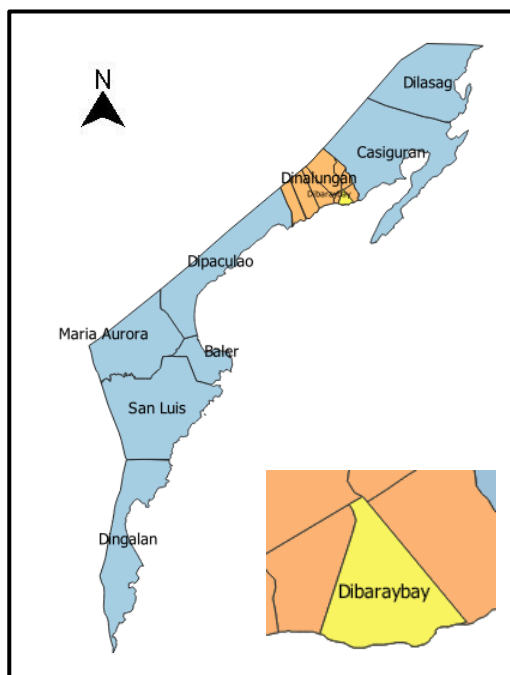
Section VII. Drawings

DESIGN, SUPPLY, DELIVERY, CONSTRUCTION AND INSTALLATION OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) IN AURORA PROVINCE COCONUT DEVELOPMENT CENTER (APCDC), DIBARAYBAY, DINALUNGAN, AURORA UNDER CFIDP – HSP CY 2024 FUNDS

The design of SPIS components may be referred to the attached model design. The source of water shall be from Talaytay CIS main canal (Please see the location map).

Water distribution lines from the water tank to the coconut palms (service area) should be given proper attention during the designing of SPIS taking consideration the distance of water source to the distribution area. The priority area to irrigate are Block 1 planted with 1,025 coconut palms and Block 3 with 1,524 coconut palms with planting distance of 6-8 meters (Please see attached location map). It is also considered that future expansion of the irrigation service area will arise. The supplier is required to visit and inspect the location of the proposed SPIS for evaluation and determination of proper design. Prior to the site visit, the supplier shall first secure the approval of the PE and that visit is solely for the purpose of site evaluation.

Location of SPIS components may vary depending on the design but shall be approved by the PE prior to construction and installation.








LOCATION MAP

Aurora Province Coconut Development Center (APCDC)
Brgy. Dibraraybay, Dinalungan, Aurora

APCDC Proposed Site for SPIS

Legend

-  Talaytay CIS Main Canal
-  PCA Admin Building
-  Priority area to irrigate
-  Proposed SPIS location
-  water source/lined canal



Vallejo Farm

water source

Proposed SPIS loc

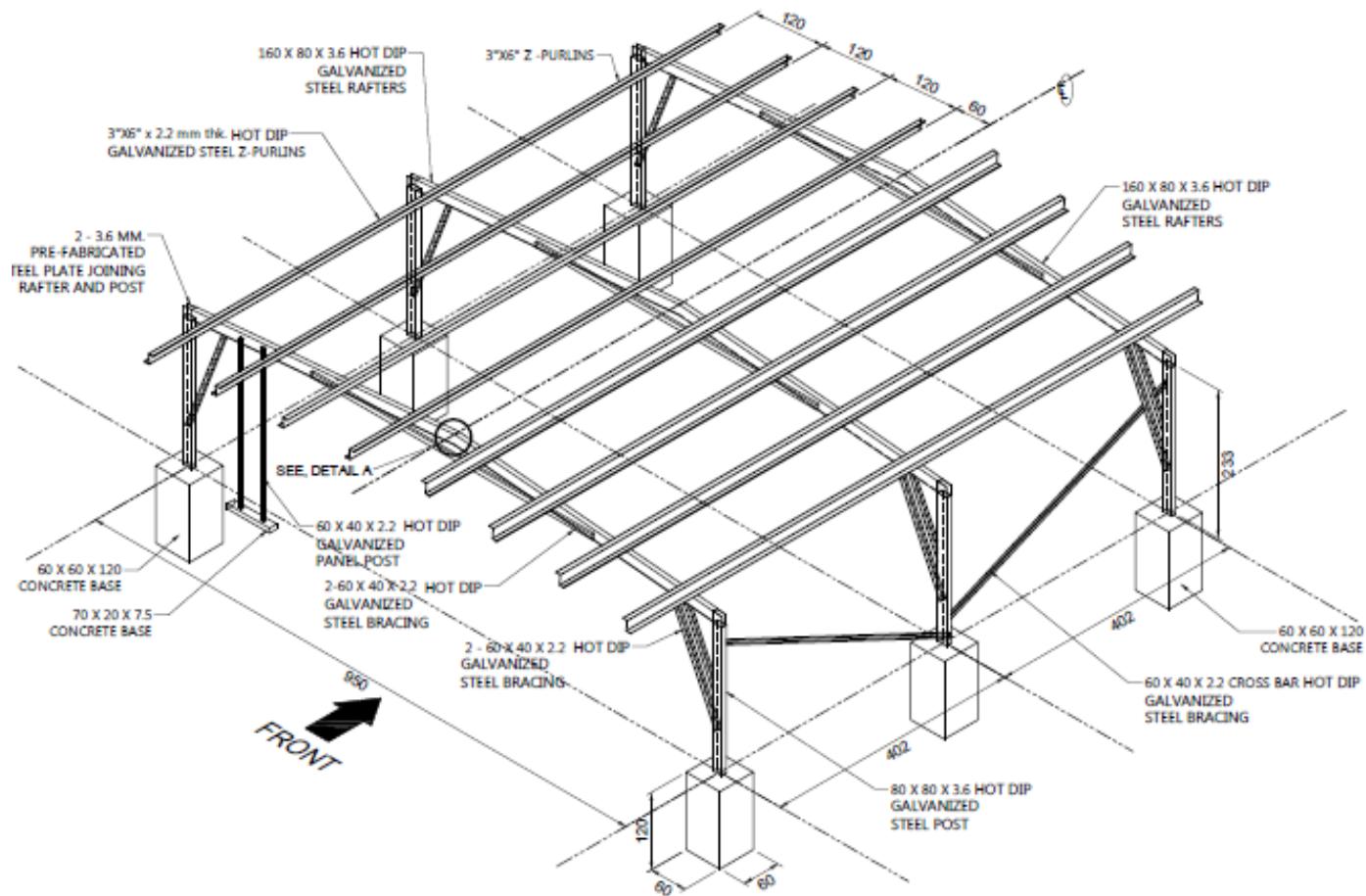
Block 3

Block 1

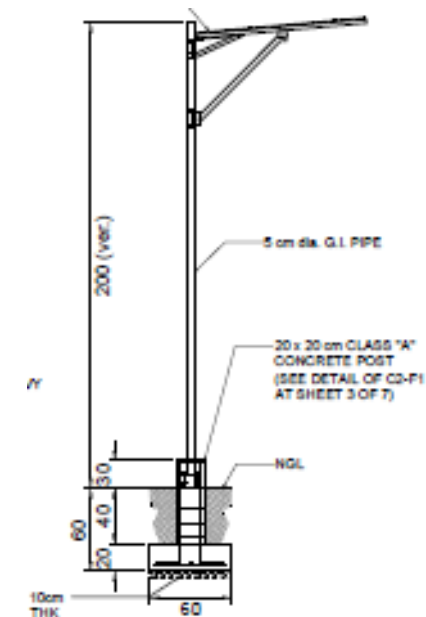
APCDC, Dibaraybay, Dinalungan

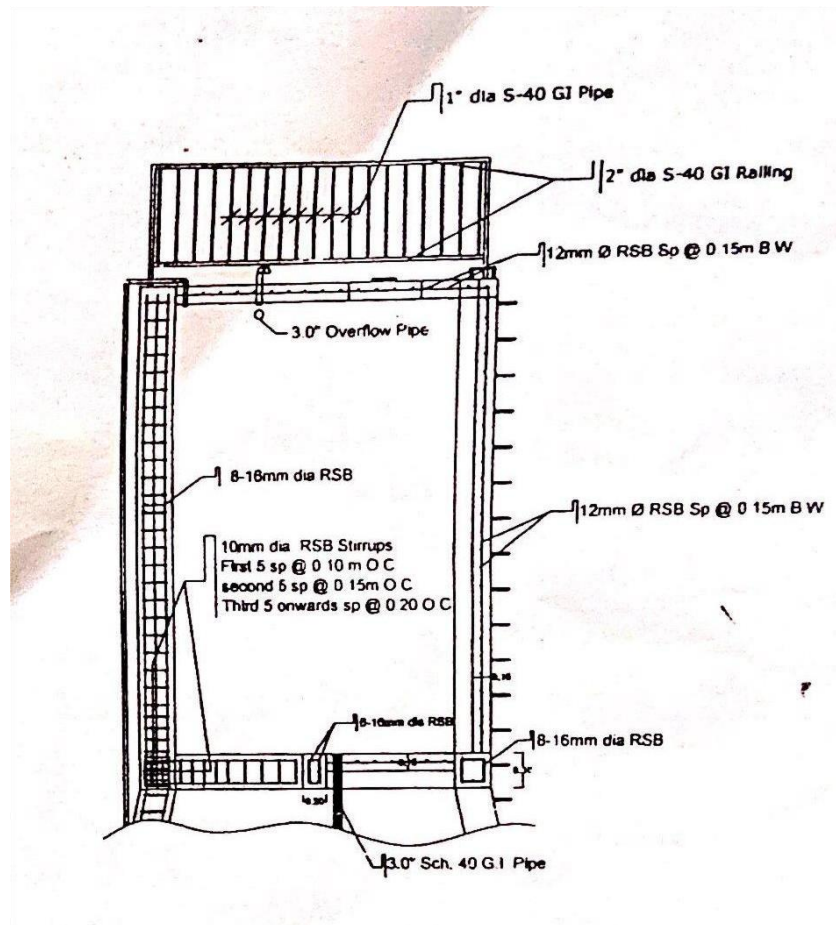
PHILIPPINE COCONUT AUTHORITY (PCA)...



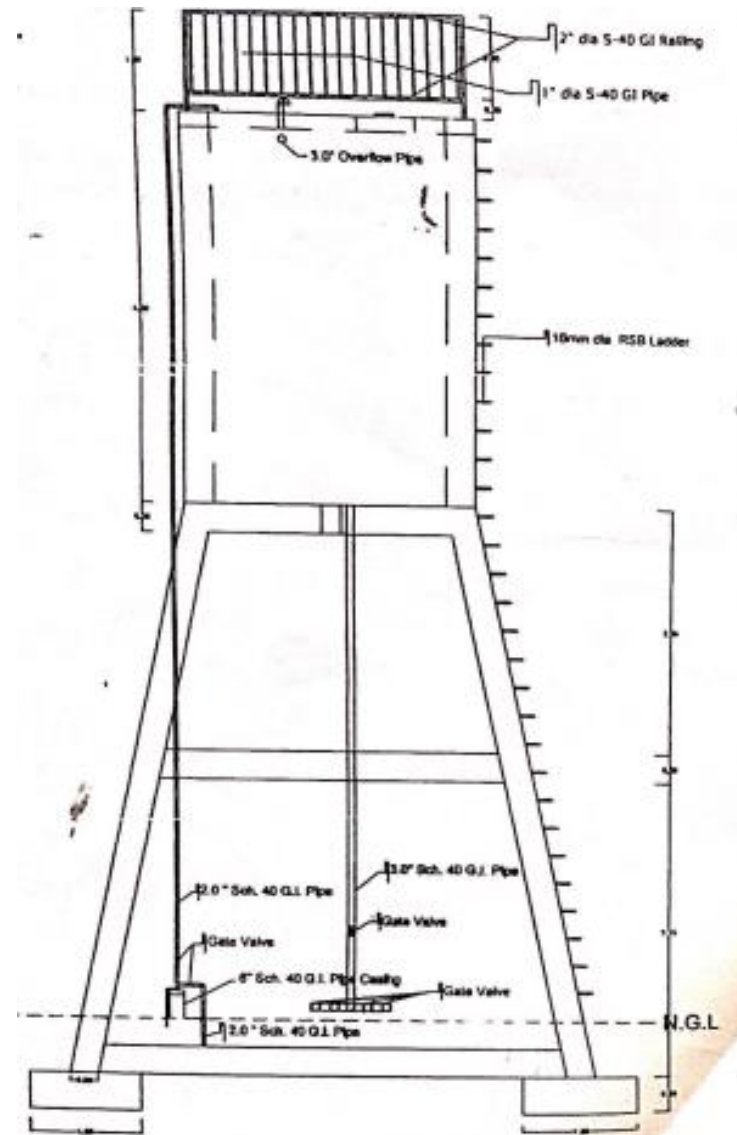


Model of the Solar Panel Frame

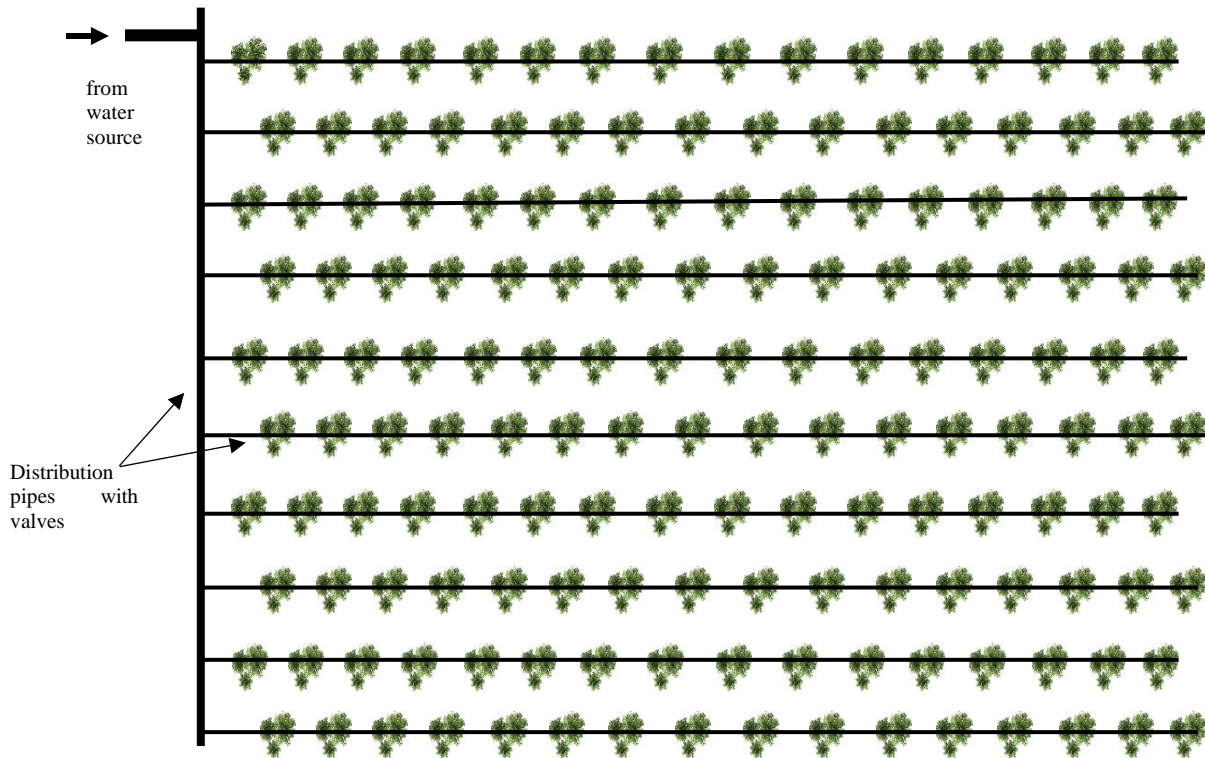




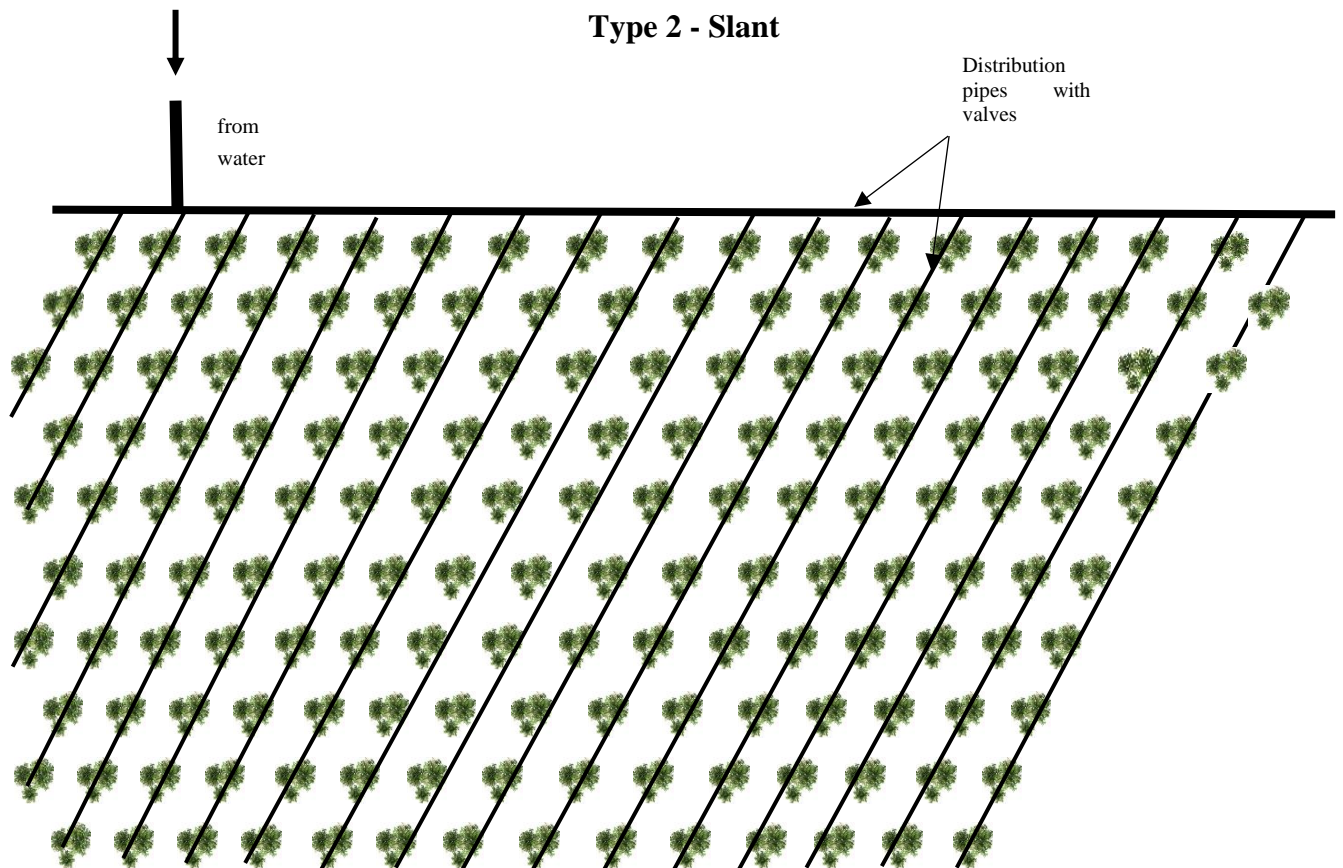
Model for the Overhead Tank



Type 1 - Straight




Type 2 - Slant



**DESIGN, SUPPLY, DELIVERY, CONSTRUCTION AND INSTALLATION OF SOLAR-POWERED
IRRIGATION SYSTEM (SPIS) IN APCDC, DIBARAYBAY, DINALUNGAN, AURORA**

CONTRACTOR:
 DATE STARTED:
 CONTRACT COMPLETION DATE:
 CONTRACT COST:
 IMPLEMENTING OFFICE: PHILIPPINE COCONUT AUTHORITY - REGION III and IVB
 SOURCE OF FUND:



PHILIPPINE COCONUT AUTHORITY
 REGION III and IVB
 Tel. Nos.: (02) 8927-5227 (02) 8924-4761
regionivb@pca.gov.ph / pcaregion1.4b@gmail.com

PCA BILLBOARD/SIGNBOARD

COMMISSION ON AUDIT
(Province and City/Municipality)

Project: _____ Cost: _____
 Location: _____ Fund Source: _____

Implementing Agency: PHILIPPINE COCONUT AUTHORITY - REGION III and IVB
 Development Partner: N/A
 Contractor/Supplier: _____
 Brief Description of the Project: _____

Project Details:

Project Date			Project Status			Remarks	
Duration	Started	Target Date of Completion	Percentage of Completion	As of (Date)	Cost Incurred to Date		Date Completed

COA BILLBOARD/SIGNBOARD

Section VIII. Bill of Quantities

Notes on the Bill of Quantities

Objectives

The objectives of the Bill of Quantities are:

- a. to provide sufficient information on the quantities of Works to be performed to enable Bids to be prepared efficiently and accurately; and
- b. when a Contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Works executed.

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

Daywork Schedule

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

- a. A list of the various classes of labor, materials, and Constructional Plant for which basic daywork rates or prices are to be inserted by the Bidder, together with a statement of the conditions under which the Contractor will be paid for work executed on a daywork basis.
- b. Nominal quantities for each item of Daywork, to be priced by each Bidder at Daywork rates as Bid. The rate to be entered by the Bidder against each basic Daywork item should include the Contractor's profit, overheads, supervision, and other charges.

Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates

budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the SCC should state the manner in which they will be used, and under whose authority (usually the Procuring Entity's Representative's).

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

Signature Box

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

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

Section VIII. Bill of Quantities

ITEM NO.	DESCRIPTION OF ITEM/S TO BE SUPPLIED (INCLUDE BRAND NAME IF APPLICABLE)	QTY.	UNIT of MEASURE	UNIT PRICE (Php)	TOTAL OFFERED PRICE (Php)
I	DESIGN AND LAYOUT OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS)	1	ls		
II	PREPARATORY WORKS				
	Initial site survey, clearing, excavation and backfilling	1	ls		
	Mobilization	1	ls		
III	MASONRY, STEEL, FINISHING AND OTHER CIVIL WORKS	1	ls		
	A. Overhead Tank	1	unit		
	Masonry and RSB Works and Materials	1	ls		
	Carpentry and joinery works and Materials	1	ls		
	Cement Plaster Finishing and Materials	1	ls		
	Painting works and Materials (Masonry Painting)	1	ls		
	GI/HDPE Pipes	1	unit		
	B. Pump and Control Panel House	1	unit		
	Masonry and RSB Works and Materials	1	ls		
	Carpentry and joinery works and Materials	1	ls		
	Cement Plaster Finishing and Materials	1	ls		
	Painting works and Materials	1	ls		
	C. Perimeter Fence	1	ls		
	Masonry and RSB Works and Materials	1	ls		
	Carpentry and joinery works and Materials	1	ls		
	Cement Plaster Finishing and Materials	1	ls		
	Painting works and Materials	1	ls		
	D. Solar Module Frames	1	ls		
	Masonry, RSB Steel framing Works and Materials	1	ls		
IV	ELECTRICAL WORKS (Electrical Power Lines and Devices Installation)	1	ls		
	Cables/Wires and Wiring and Protection Devices and Accessories	1	ls		
V	INSTALLATION OF SPIS COMPONENT	1	ls		
	Pump and pump set-up/installation including gauge (flow meter or water meter) and accessories	1	ls		

	PV Array/Solar Panels	20	pcs		
	Inverter and its Accessories and Contral Panel including Protection Devices	1	ls		
	Battery	1	pcs		
	Solar Street Lights and its Components	4	pcs / ls		
	Lightning Arrester and Components	1	pcs / ls		
VI	INSTALLATION OF DISTRIBUTION LINES/PIPES, PIPES, VALVES AND FITTINGS	1	ls		
	HDPE pipes	1	ls		
	Saddle clamps	1	ls		
	Gate valves	1	ls		
	PE Reducers and elbow reducers	1	ls		
	PE Tee	1	ls		
	Teflon tape	1	ls		
	Male and female connectors	1	ls		
VII	INCIDENTALS				
	A. Project Signboard (for PCA and COA) and Materials	1	set		
	B. Construction Safety and Health				
	First Aide Kits	6	sets		
	Personal Protective Equipment for all workers	1	ls		
	Safety Helmet				
	Safety shoes				
	Safety Gloves				
	Vest				
	Signages and Barricades				
	PPE Signage (4' x 8')	1	pcs		
	Safety First Signage (4' x 4')	1	pcs		
	Warning Signs (2' x 3')	2	pcs		
	Caution Tape, 100 ft	2	roll		

OTHER COSTS

Labor

Consumables (3-5% of material cost)

Equipment Rental

Overhead, Contingencies and Miscellaneous

Value Added Tax (VAT)

TOTAL QUOTATION/BID PRICE (PhP)

Section IX. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

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

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

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

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class “A” Documents

Legal Documents

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

Technical Documents

- ☐ (b) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- ☐ (c) Statement of the bidder’s Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules; **and**
- ☐ (d) Special PCAB License in case of Joint Ventures **and** registration for the type and cost of the contract to be bid; **and**
- ☐ (e) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission **or** original copy of Notarized Bid Securing Declaration; **and**
- ☐ (f) Project Requirements, which shall include the following:
 - ☐ a. Organizational chart for the contract to be bid;
 - ☐ b. List of contractor’s key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;
 - ☐ c. List of contractor’s major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**
- ☐ (g) Detailed Engineering Design (DED) of the Solar-Powered Irrigation System (SPIS) including the electrical layout and materials to be used taking considerations the PE’s requirements;
- ☐ (h) Certification from the manufacturer/s or local distributor/s that the bidder is authorized distributor/dealer or legitimate installer of the offered solar-power modules and accessories, inverter and pump;
- ☐ (i) Certification from the manufacturer/s or local distributor/s that brand being offered has been in the Philippine market for the last five (3) years;
- ☐ (j) Certification from the manufacturer/s or local distributor/s that parts and services for the offered SPIS are available for the next five (5) years within the region of delivery;
- ☐ (k) Proof or Certification that the bidder has at least one (1) year minimum experience in the solar power business;
- ☐ (l) List of authorized service center/s for the offered SPIS;

- ☐ (m) Brochures of offered brand and units for SPIS (solar panel, inverter, battery, and pump);
- ☐ (n) Duly notarized certification of availability of stocks from the manufacturer or distributor (solar panel, inverter, battery, and pump)
- ☐ (o) 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

- ☐ (p) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).

Class "B" Documents

- ☐ (q) 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

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

Other documentary requirements under RA No. 9184

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



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE
PHILIPPINE COCONUT AUTHORITY
REGIONS III and IV-B

2/F Guest House Bldg., PCA Compound, Elliptical Road, Diliman, Quezon City 1101
Tel. Nos.: (02) 8927-5227 (02) 8924-4761
pcaregion1.4b@gmail.com / regionivb@pca.gov.ph

**DESIGN, SUPPLY, DELIVERY, CONSTRUCTION AND INSTALLATION
OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS) IN APCDC,
DIBARAYBAY, DINALUNGAN, AURORA**

TERMS OF REFERENCE

I. BRIEF DESCRIPTION

The PCA Regions III and IV-B, known here as the Procuring Entity (PE), needs the services of a contractor/supplier that will conduct the design, supply and delivery of materials, and construction and installation of solar-powered irrigation system (SPIS) for coconut hybrid seednuts production at Aurora Province Coconut Development Center (APCDC) in Dibaraybay, Dinalungan, Aurora known here as the “Project”. The source of fund for this project is the CFIDP CY 2024.

The services required for the project under this Terms of Reference (TOR) are the design and layout of SPIS including the supply and delivery of equipment and materials, provision of labor services for the construction and installation of SPIS component, testing of SPIS components and training of operators.

II. SCOPE OF WORKS / DELIVERABLES

The Supplier/Contractor shall provide the design and layout of SPIS including the supply and deliver the equipment and materials, construct, install and test the SPIS components, and conduct of training of operators at APCDC in Dibaraybay, Dinalungan, Aurora. The scope of works is detailed as follows:

- a) **DESIGN AND LAYOUT OF SOLAR-POWERED IRRIGATION SYSTEM (SPIS)**
 - This includes preparation of the detailed engineering design (DED) of the solar-powered irrigation system (SPIS) components approved and signed by the licensed and experienced civil and/or agricultural and biosystems engineer/s. The design shall be based on the PE’s technical requirement and the design considerations as stated in the PNS/BAFS 324:2022 (Solar Powered Irrigation System – Specifications). The design and layout include the PV array/solar modules and frames, pump set-up, pump and control panel house, perimeter fence, solar street lights, overhead water tank, lightning arrester, and water distribution pipe lines. In addition, electrical design and layout shall also be provided by the supplier.
- b) **SUPPLY AND DELIVERY OF MATERIALS**
 - This pertains to the supply and delivery of all materials and equipment needed in the construction and installation of SPIS including testing and training.
- c) **PREPARATORY WORKS**
 - Initial site survey, clearing, excavation and backfilling

- d) **FINISHING AND CIVIL WORKS**
 - Composed of carpentry and joinery works, finishing works, masonry and painting works for the construction of PV array/solar module frames, elevated water tank, pump and control panel house, perimeter fence and solar street lights.
- e) **INSTALLATION OF SOLAR MODULES, INVERTER, BATTERY, SOLAR STREET LIGHTS, LIGHTNING ARRESTER, AND ELECTRICAL POWER LINES**
 - Installation of solar panel, inverter, battery, cables/wires and wiring devices/accessories, solar street lights, and lightning arresters.
- f) **INSTALLATION OF PIPES, VALVES AND FITTINGS**
 - Involves installation pipes, valves and fittings from water source to the service area (coconut palms)
- g) **INCIDENTAL SERVICES**
 - Provision of a project signboard and the occupational safety and health of the workforce.
- h) **SYSTEM TESTING AND PROVISION OF TRAINING**
 - This includes conduct of testing of SPIS components and proper operation and maintenance procedure prior to turn-over and acceptance by the PE.

The Contractor/Supplier shall provide the necessary machines and equipment, tools and required materials for the completion of the said project.

III. APPROVED BUDGET FOR THE CONTRACT

The Approved Budget for the Contract (ABC) is Five Million pesos (Php5,000,000.00) under the CFIDP CY 2024.

IV. ELIGIBILITY REQUIREMENTS AND EVALUATION OF BID

Aside from the legal, technical and financial requirements, the prospective bidder/supplier shall also submit the following requirements along with its financial bid on or before the scheduled submission of bid, to wit:

- a) Detailed Engineering Design (DED) of the Solar-Powered Irrigation System (SPIS) including the electrical layout and materials to be used taking considerations the PE's requirements;
- b) Certification from the manufacturer/s or local distributor/dealer that the bidder is authorized distributor/dealer or legitimate installer of the offered solar-power modules and accessories, inverter and pump.
- c) Certification from the manufacturer/s or local distributor/s that brand being offered has been in the Philippine market for the last three (3) years.
- d) Certification from the manufacturer/s or local distributor/s that parts and services for the offered SPIS are available for the next five (5) years within the region of delivery.
- e) Proof or Certification that the bidder has at least one (1) year minimum experience in the solar power business.
- f) List of authorized service center/s for the offered SPIS
- g) Brochures of offered brand and units for SPIS (solar panel, inverter, battery, and pump)
- h) Duly notarized certification of availability of stocks from the manufacturer or Distributor (solar panel, inverter, battery, and pump)

V. WARRANTIES FOR CONSTRUCTION AND INSTALLATION OF SPIS

The supplier shall provide the Certificate of Warranty for parts and services except for normal wear and tear of the following components:

- a) ¹ Solar module: at least 10 years material warranty and 25 years performance warranty
- b) ¹ Inverter with Maximum Power Point Tracking (MPPT): at least one (1) year
- c) ¹ Pump: at least a one (1) year
- d) ¹ Workmanship: at least one (1) year
- e) ¹ After-sales service: at least one (1) year

The Certificate of Warranty shall be issued to the PE during the inspection and acceptance of the installed SPIS.

¹ Warranty is based on PNS/BAFS 324:2022

VI. DESIGN CONSIDERATIONS AND MINIMUM TECHNICAL SPECIFICATIONS OF SPIS

Below are the design considerations and minimum technical specifications of SPIS components. Specifications may vary, but not below the minimum technical requirements.

Item	Design/Installation consideration	Technical Specifications
PV ARRAY (Solar panels)	Installed with a rigid alloy rail made of non-corrosive material	<ul style="list-style-type: none">- 20 pcs, 550W or its equivalent- monocrystalline- Modules shall adhere to the applicable IEC standards including IEC-612215, IEC 61730 and IEC 60364- Efficiency shall be no less than 22%
	Mounting frame structure should be made from galvanized iron (GI) pipes or angular bars either primed, hot dipped galvanized with minimum of 5mm or double coated with non-corrosive paint.	
	All structures materials shall be made of high-tensile steel (420 mpa and higher), pre-coated with anti-corrosion coating. All bolts that are used to fix mechanical components shall be made from steel 8.8 or 10.4 and shall be coated with iron zinc coating.	
	PV modules shall withstand minimum gustiness and uplift of 180kph	

	Special distance between each PV modules should be at least 20mm	
	Placement of the PV array shall be away from any source of shades any time of the year. PV array should be facing the south.	
	Surge Protection Devices (SPD) shall be installed along with the PV module.	
PUMP SET (surface)	<p>A trash rack, made of non-corrosive material or painted with protective coating, shall be installed along with the pump intake.</p> <p>For protection: Dry running, overheating, overloading, voltage transient, and low/high voltage input protection shall be provided for the pump set</p>	<ul style="list-style-type: none"> - Minimum power of 6.6 KW or 9.0 hp - A discharge measuring device, such as flow meter or water meter, should be included with the pump set. - Pipes and fittings for the pump and accessories will be based on the design subject to verification by the PE.
INVERTER AND ACCESSORIES (SOLAR PANEL OR PV ARRAY CONTROLLER)	<p>For Protection: The pump set controller and the PV array controller shall be insect-proofed and weather-proofed by using double-proof box and sealants.</p> <p>The solar panel controller should be encased with a combiner box.</p>	<ul style="list-style-type: none"> - 125% of pump power (minimum 8.25 KW or 11.25hp or its equivalent) - A minimum of IP58 (splash proof) rating shall be used as per IEC60529:1989+A1:1999+A2:2013
BATTERY	Shall be compatible to solar panel and inverter. Warranty of at least 10 years.	<ul style="list-style-type: none"> - At least one (1) unit AC or DC coupled battery - Made of lithium <i>e.g. lithium-ion, lithium iron phosphate (LFP), lithium manganese oxide, etc.</i> - Minimum of 48V - Back-up battery type.
CABLES AND WIRES FOR ELECTRICAL SYSTEM	Cables and wirings used for the SPIS shall be in accordance with the Philippine Electrical Code (PEC), using PV cables specific for PV modules. Wiring installations	<ul style="list-style-type: none"> - Use applicable PVC / HDPE pipes for conduits

	shall be properly protected for weather conditions and other external factors.	
SOLAR STREET LIGHT WITH ACCESSORIES	Made of aluminum alloy housing.	<ul style="list-style-type: none"> - 4 pcs solar street light - Minimum of 105W Solar module - With 10W LED light - Battery type: 12 V Lithium type - 2" diameter GI pipe
	Placed at corners of perimeter fence. Height of post from NGL – at least 2.5 m	
OVERHEAD WATER TANK	Made of at least CHB and Class “A” concrete mixture or reinforced concrete	<ul style="list-style-type: none"> - Capacity: at least 5,000 L - Height from NGL: at least 5.0m - Water line (pump to tank and tank to distribution lines): at least Galvanized Iron Pipe/Tube or equivalent applicable HDPE pipe
	Painted with applicable paint for concrete	
	With applicable Galvanized Iron Tube for	
	Shall have provision of stairs made of durable steel/iron bars.	
PUMP AND CONTROL PANEL HOUSE	Made of at least CHB and Class “A” concrete mixture or reinforced concrete	<ul style="list-style-type: none"> - Minimum dimension: 2.0 m x 2.0 m x 2.5 m
	Painted with applicable paint for concrete	
	With door and lock.	
	With LED light.	
PERIMETER FENCE	With steel gate and lock.	<ul style="list-style-type: none"> - Dimension: depends on the design but not lower than 80m² - Fence Height: 1.5 m (from the concrete post) made of Diamond-shape chain link or cyclone wire - made of G.I pipe: 2" diameter, S40 - with 4" thick CHB wall on smooth plastered paint finish on both sides (i.e. seagreen) - 20 x 20 cm Class “A” concrete post on smooth plastered-paint finish (i.e. seagreen)
	Welded parts between pipe and chain link fence	
LIGHTNING ARRESTERS (LA) AND ITS COMPONENTS	Lightning arrester shall be installed in accordance with Article 2.80 (Surge Arresters) of the National Electrical Code (NEC)	<ul style="list-style-type: none"> 1 pc LA Height: at least 6.0 m Made of at least Galvanized Iron Pipe/Tube
DISTRIBUTION LINES/PIPES AND FITTINGS	For Block 1: Estimated Length = 299 m, width = 257 m.	<ul style="list-style-type: none"> - Water distribution lines shall be made from High Density

	No. of coconut palms = 1,025 planted at 2-3 palms/hill = 342 – 513 hills Planting distance = 6-8m	Polyethylene pipes with sizes as follows: - HDPE Pipe 3" Ø SDR 11 - HDPE Pipe 2 1/2" Ø SDR 11 - HDPE Pipe 2" Ø SDR 11 - HDPE Pipe 1 1/2" Ø SDR 11
	For Block 3: Estimated Length = 333 m, Width = 310 m, No. of coconut palms = 1,524 planted at 2 and 3 palms/hill = 508 to 762 hills Planting distance = 6-8m	For fittings and connections (minimum): - PE Saddle Clamp 2 1/2" x 1/2" - PE Saddle Clamp 2" x 1/2" - PE End Cap 2" - PE End Cap 1/2" - PE Male Connector 2 1/2" and 1/2" - Gate Valve 2 1/2" - Gate Valve 2" - PE reducer 2 1/2" x 2" - PE Tee 2 1/2" - PE Elbow Reducer 2 1/2" x 2" - Teflon Tape
PROJECT BILLBOARD	Should be sturdy made of Good lumber and Marine Plywood	1. Project Signboard (PCA) Tarpaulin 4' x 8' 2. Project Signboard (COA) Tarpaulin 8' x 8'
CONSTRUCTION SAFETY AND HEALTH	Warning signs shall be installed for electrical components on-site.	Provision of PPEs (safety shoes, helmet, vest, gloves) for workers and visitors and safety signages located at necessary location. PPE shall be provided

The design of SPIS components may be referred to the attached model design. The source of water shall be from Talaytay CIS main canal (Please see the location map).

Water distribution lines from the water tank to the coconut palms (service area) should be given proper attention during the designing of SPIS taking consideration the distance of water source to the distribution area. The priority area to irrigate are Block 1 planted with 1,025 coconut palms and Block 3 with 1,524 coconut palms with planting distance of 6-8 meters (Please see attached location map). It is also considered that future expansion of the irrigation service area will arise. The supplier is required to visit and inspect the location of the proposed SPIS for evaluation and determination of proper design. Prior to the site visit, the supplier shall first secure the approval of the PE and that visit is solely for the purpose of site evaluation.

Location of SPIS components may vary depending on the design but shall be approved by the PE prior to construction and installation.

VII. POST-QUALIFICATION

All the documents submitted by the supplier with the Single/Lowest Calculated Bid (S/LCB), shall be subjected to post-qualification. The submitted DED of the SPIS will

be evaluated based on the requirements set by the PE and the minimum specification, construction and performance in PNS/BAFS 324:2021/2022. Also, the capacity of the supplier to undertake the project shall also be evaluated and verified.

VIII. MAINTENANCE TOOLS

During final inspection and acceptance, the supplier shall provide the Operation and Maintenance Manual of the SPIS as well as the following basic hand tools including, but not limited to, **one set of each** of the following:

- g) Multi-testers;
- h) Adjustable wrench;
- i) Pipe wrench;
- j) Box and open wrenches;
- k) Philips;
- l) Flat screw-driver.

IX. TESTING AND TRAINING OF OPERATORS

The AMTEC testing and evaluation for Solar Powered Irrigation System (SPIS) should be conducted after the award of contract to the winning bidder and after the complete installation of the SPIS on site. Thereafter, AMTEC Test Report shall be submitted by the winning bidder (supplier) to the PE prior to the acceptance and payment by PE.

The supplier is required to conduct full testing and demonstration of the newly installed SPIS. Each component shall be tested based on its standard operation. All SPIS components (solar modules, inverter, battery, pumps and motor, control panel, solar street lights, etc.) are in good working condition and most importantly be able to irrigate the intended coconut areas.

In addition, the supplier must be able to train the designated operators of SPIS on its operation and maintenance procedures. A certification from the PE that the supplier satisfactorily conducted the training must be secured by the supplier along with the training report and photos. These will be one of the bases for the final acceptance and payment to the supplier of the finished project.

X. TIMELINES

- a) The Contractor/Supplier shall commence the construction and installation immediately upon receipt of the Notice to Proceed from the PE.
- b) The Contractor/Supplier shall finish the construction and installation works within forty-five (45) calendar days upon receipt of the Notice to Proceed from the PE.
- c) In case the Contractor/Supplier will request for time extension due to meritorious ground/s, the Contractor/Supplier shall inform the PE thru writing within seven (7) calendar days before the lapse of contract duration.

XI. INSPECTION AND ACCEPTANCE OF PROJECT

Inspection during and after the construction and installation shall be conducted by the PCA authorized representative/s. Further, AMTEC testing and evaluation shall form part of the inspection and commissioning of the installed system. The inspection and

full acceptance of the project by the PE is done based on the minimum requirements and design of SPIS and satisfactory performance operation of SPIS.

XII. LIQUIDATED DAMAGES AND LIABILITY OF THE SUPPLIER

Where the contractor refuses or fails to satisfactorily complete the work within the specified contract time, plus any time of extension duly granted and is hereby in default under the contract, the contractor shall pay the PE for liquidated damages, and not by way of penalty, an amount equal to at least one tenth (1/10) of one percent (1%) of the cost of the undelivered/unperformed portion of the items/works for every day of delay. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, the procuring entity may rescind or terminate the contract, without prejudice to other courses of action and remedies open to it (Section 68 of the Revised IRR of RA 9184).

If after signing and accepting the Contract of Agreement, the contractor fails to deliver the required services, appropriate sanctions will be imposed as prescribed under Republic Act (RA) 9184 and its Revised Implementing Rules and Regulations (IRR) and other applicable laws.

XIII. TERMS OF PAYMENT

Payment of the contract price shall be made in Philippine Peso. Full payment of the Contract Price shall be made upon submission of the supplier of the billing statement together with the official sales/charge invoice, training report and photos, AMTEC Test Report, and inspection and acceptance report (IAR), Certificate of Acceptance by the PE that the construction, installation and testing of the solar-powered irrigation system including the training of operators are already completed.

Prepared by:

(SGD.) CATHERINE MAY A. MANONGSONG
CS-PDOIII

Reviewed by

(SGD.) PRINCESS CLAIRE S. ABING
PDO III

Approved by:

(SGD.) DENNIS D. ANDRES
Regional Manager III

Bid Form for the Procurement of Infrastructure Projects

[shall be submitted with the Bid]

BID FORM

Date : _____

Project Identification No. : _____

To: *[name and address of Procuring Entity]*

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 a 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 the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines² 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.

² currently based on GPPB Resolution No. 09-2020

Name: _____

Legal Capacity: _____

Signature: _____

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

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: *[Insert name and address of the Procuring Entity]*

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 ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]

Affiant

[Jurat]

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

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, Procurement Agent if engaged, 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;

[If a partnership or cooperative:] None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, Procurement Agent if engaged, 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;

[If a corporation or joint venture:] None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, Procurement Agent if engaged, 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]

Statement Of Single Largest Completed Contract (SLCC)

[Date] _____

BAC Chairperson
Philippine Coconut Authority Region III and IVB

Dear BAC Chairperson _____,

In compliance with the eligibility requirements for the bidding of the _____ this is to certify that [name and complete address of Bidder] has the following completed government and private contracts:

Tab No.	Name of Contract	Date of Contract	Contract Duration	Owner's Name and Address	Nature of Work	Contractor's Role (whether sole contractor, subcontractor or partner in a JV)	Total Contract Value at Award (in PhP)	Date of Completion	Total Contract Value at Completion, if applicable (in PhP)

Note: This statement is to be supported by Contracts OR purchase Order, certificate of completion OR owner's final acceptance and CPES rating sheets, Official Receipt OR Sales Invoice, Program of Work, if applicable. These supporting documents are to be numbered and tabbed in the same sequence as the list of contracts appears in this statement.

Yours sincerely,

[Signature over printed name of Authorized Representative]
[Title]
[Name of Firm]

Statement of All On-Going Government and Private Contracts, Including Contracts Awarded but Not Yet Started, If Any

[Date] _____

BAC Chairperson _____
 Philippine Coconut Authority Region III and IVB

Dear BAC Chairperson _____

In compliance with the eligibility requirements for the bidding of the _____ at _____, this is to certify that

[Name and complete address of Bidder] has the following on-going government and private contracts. [Including contracts awarded but not yet started]:

Tab No.	Name of Contract	Date of Contract	Contract Duration	Owner's Name and Address	Nature of Work	Contractor's Role (whether sole contractor, subcontractor or partner in a JV)	Total Contract Value at Award (in Php)	Estimated Date of Completion	Total Contract Value at Completion, if applicable (in Php)	Percentages of Planned & Actual Accomplishments, if applicable	Value of Outstanding Works, if applicable (in Php)

Note: This statement shall be supported by Notice of Award or Notice to Proceed or Contract. These supporting documents are to be numbered and tabbed in the same sequence as the list of contracts appears in this statement.

Yours sincerely,

[Signature over printed name of Authorized Representative]

[Title]

[Name of Firm]

NET FINANCIAL CONTRACTING CAPACITY

- A. Summary of the Applicant Firm's Contractor'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 and a certified copy of the Schedule or Fixed Assets particular the list of construction equipment

Year 202__

- | | |
|---|--|
| 1 | Total Assets |
| 2 | Current Assets |
| 3 | Total Liabilities |
| 4 | Current Liabilities |
| 5 | Total Net Worth (1-3) |
| 6 | Current Net Worth or Net Working Capital (2-4) |

- B. The Net Financial Contracting Capacity (NFCC) based on the above data is computed as follows:

NFCC = K (current asset – current liabilities) minus value of all outstanding works under ongoing contracts including awarded contracts yet to be started.

K = 15;

- C. Computation:

Net Working Capital	=	P _____
Multiply by K	=	_____
	=	P _____
Minus: Value of Outstanding Works	=	P _____
Net Financial Contracting Capacity	=	P _____

Submitted by:

Name of Firm/Contractor

Name & Signature of Authorized Representative

Date

List of Construction Key Personnel Proposed to be Assigned to the Contract

Business Name : _____

Business Address : _____

		Personnel-in-Charge				
		Project Manager	Project Engineer	Electrical Engineer	Health and Safety	Foreman
Name						
Address						
Date of Birth						
Employed Since (Current Co.)						
Previous Employment						
Education						
PRC License/Accreditation from DOLE-OHSC (for the Health and Safety Officer)						
Years of Experience in Proposed Position						

Note: This List must be supported by the following documents:

1. Individual resumes to show proof of the following:
 - a. That the proposed personnel meet the required relative experience
 - b. List of projects handled with the corresponding position and its inclusive years of experience (e.g., Building Construction, Project Manager, 2015-2020)
2. Photocopy of PRC Licenses/DOLE-OHSC/DPWH Accreditation.

Submitted by:

(Printed Name & Signature of Authorized Representative)

Designation : _____

Certificate of Employment for Key Personnel

(Issuance Date) _____

Chairperson
Bids and Awards Committee
Department of Agriculture-RFO III
City of San Fernando, Pampanga

Dear Sir/Ma'am:

I am (Name of Nominee) a Licensed _____ 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), my services were engaged for the following completed projects similar to the contract under bidding):

<u>NAME OF PROJECT</u>	<u>OWNER</u>	<u>COST</u>	<u>DATE COMPLETED</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

At present, I am employed on the following projects:

<u>NAME OF PROJECT</u>	<u>OWNER</u>	<u>COST</u>	<u>EXPECTED DATE OF COMPLETION</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

In case of my separation for any reason whatsoever from the above-mentioned Contractor, I shall notify the _____ 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 (full time/part time) to supervise and manage the Contract works to the best of my ability.

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) therefore, 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 bidding or employment with any Contractor doing business with the _____.

(Signature of key personnel)

SUBSCRIBED AND SWORN TO before me this _____ day of _____ 20____ affiant exhibiting to me his Residence Certificate No. _____ issued on _____ at _____.

Notary Public
Until December 31, 20____

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

Key Personnel (Bio-data)

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

- Authorized Managing Officer / Representative
- Sustained Technical Employee

1. Name: _____
2. Date of Birth: _____
3. Nationality: _____
4. Education and Degrees: _____
5. Length of Service with the Firm : _____ Years

Inclusive Date: From _____ (month) , _____ (year) to _____ (month) , _____ (year) .

6. Skills:

_____	_____
_____	_____
_____	_____

7. Work History:

If Item 5 is less than three (3) years, give name and length of service with previous employers for a three (3)-year period:

<u>Inclusive Date</u>	<u>Position</u>	<u>Name and address of Employer</u>	<u>Nature of Job Performed</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(Signature over printed name of employee)

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

(The Authorized Representative)

(Place and Date)

