

### REPUBLIC OF THE PHILIPPINES QUEZON CITY GOVERNMENT BIDS AND AWARDS COMMITTEE – GOODS AND SERVICES



# PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

# SUPPLY AND INSTALLATION OF AQUAPONICS AND HYDROPONICS

PROJECT NO. CMO-21-HCS-690

Government of the Republic of the Philippines

Sixth Edition July 2020

# **Preface**

These Philippine Bidding Documents (PBDs) for the procurement of Goods through Competitive Bidding have been prepared by the Government of the Philippines for use by any branch, constitutional commission or office, agency, department, bureau, office, or instrumentality of the Government of the Philippines, National Government Agencies, including Government-Owned and/or Controlled Corporations, Government Financing Institutions, State Universities and Colleges, and Local Government Unit. 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 of Republic Act No. 9184.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract or Framework Agreement, as the case may be; (ii) the eligibility requirements of Bidders; (iii) the expected contract or Framework Agreement duration, the estimated quantity in the case of procurement of goods, delivery schedule and/or time frame; 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 Goods 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 Goods. However, they should be adapted as necessary to the circumstances of the particular Procurement 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, Bid Data Sheet, General Conditions of Contract, Special Conditions of Contract, Schedule of Requirements, and Specifications 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 Procurement Project, Project Identification Number, and Procuring Entity, in addition to the 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 Acronyms, Terms, and Abbreviations

**ABC** – Approved Budget for the Contract.

**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.

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])

**CDA** - Cooperative Development Authority.

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.

**CIF** – Cost Insurance and Freight.

CIP - Carriage and Insurance Paid.

**CPI** – Consumer Price Index.

**DDP** – Refers to the quoted price of the Goods, which means "delivered duty paid."

**DTI** – Department of Trade and Industry.

**EXW** – Ex works.

**FCA** – "Free Carrier" shipping point.

**FOB** – "Free on Board" shipping point.

**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]).

**Framework Agreement** – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as "Call-Offs," are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

**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.

**GPPB** – Government Procurement Policy Board.

**INCOTERMS** – International Commercial Terms.

**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.

**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.

**Supplier** – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

**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 (*e.g.*, the application of a margin of preference in bid evaluation).

The IB should be incorporated in 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.



### QUEZON CITY GOVERNMENT BAC – GOODS AND SERVICES



October 28, 2021

### Invitation to Bid

ITEM NO.	P.R. / PROJECT NO.	OFFICE	PROJECT NAME	AMOUNT	SOURCE OF FUND	DELIVERY PERIOD
1	EPWMD-21-EHSE- 426B	ENVIRONMENTAL PROTECTION AND WASTE MANAGEMENT DEPARTMENT	SUPPLY, DELIVERY AND INSTALLATION OF AIR QUALITY MONITORING UNITS AND AUTOMATED WEATHER STATION	P 2,600,000.00	GENERAL FUND	1 MONTH
2	TFSWM-21- VEHICLES-694	TF ON SOLID WASTE COLLECTION, CLEANING AND DISPOSAL SERVICES MANAGEMENT (EPWMD)	MOTORCYCLE	P 4,659,800.00	GENERAL FUND	30 CAL. DAYS
3	HEALTH-21- SERVICES-505B	QUEZON CITY HEALTH DEPARTMENT	COLD CHAIN MANAGEMENT SERVICES FOR CORONA VIRUS DISEASE 2019 VACCINES	P 37,400,000.00	GENERAL FUND	1 MONTH
4	BPLD-21-OE-701	BUSINESS PERMITS AND LICENSING DEPARTMENT	PHOTOCOPYING MACHINE AND OTHERS	P 1,560,000.00	GENERAL FUND	30 CAL. DAYS
5	GF-21-01-00055	QUEZON CITY INFORMATION TECHNOLOGY AND DEVELOPMENT DEPARTMENT	ANTI-VIRUS WITH ANTI- RANSOMWARE - CLOUD BASED INCLUDING INSTALLATION AND CONFIGURATION	P 10,290,000.00	GENERAL FUND	1 YEAR
6	ENGINEERING-21- MV-689	DEPARTMENT OF ENGINEERING	MOTOR VEHICLE (MULTI-PURPOSE)	P 1,530,100.00	GENERAL FUND	30 CAL. DAYS
7	ENGINEERING-21- MV-576B	DEPARTMENT OF ENGINEERING	MOTOR VEHICLE (MULTI-PURPOSE)	P 6,220,500.00	GENERAL FUND	45 CALENDAR DAYS
8	ENGINEERING-21- MV-577B	DEPARTMENT OF ENGINEERING	MOTOR VEHICLE (PASSENGER VAN)	P 7,670,000.00	GENERAL FUND	45 CALENDAR DAYS
9	QCGH-21-ME-627	QUEZON CITY GENERAL HOSPITAL	CAPNOGRAPH AND OTHERS	P 1,436,760.00	GENERAL FUND	30 CAL. DAYS
10	QCGH-21-ME-628	QUEZON CITY GENERAL HOSPITAL	LASER DELIVERY SYSTEM PROBES, PERIPHERALS AND ACCESSORIES	P 4,280,954.00	GENERAL FUND	30 CAL. DAYS
11	QCGH-21-ME-629	QUEZON CITY GENERAL HOSPITAL	INCUBATOR AND OTHERS	P 18,290,942.00	GENERAL FUND	30 CAL. DAYS
12	QCGH-21-OE-309B	QUEZON CITY GENERAL HOSPITAL	VARIOUS OFFICE EQUIPMENT	P 4,273,441.06	GENERAL FUND	30 CAL. DAYS
13	HEALTH-21-MS-440B	QUEZON CITY HEALTH DEPARTMENT	VARIOUS MEDICAL SUPPLIES AND LABORATORY INSTRUMENTS (SURGICAL GLOVES AND OTHERS)	P 79,699,007.00	GENERAL FUND	30 CAL. DAYS
14	RMBGH-21-ME-625	ROSARIO MACLANG BAUTISTA GENERAL HOSPITAL	RADIANT WARMER AND OTHERS	P 1,298,480.00	GENERAL FUND	30 CD
15	RMBGH-21-EHSE-624	ROSARIO MACLANG BAUTISTA GENERAL HOSPITAL	SUPPLY AND INSTALLATION OF CEILING MOUNTED NEGATIVE PRESSURE AND OTHERS	P 8,163,000.00	GENERAL FUND	30 CD
16	RMBGH-21-ME-647	ROSARIO MACLANG BAUTISTA GENERAL HOSPITAL	AUTOMATED MICROBIAL COLORIMETRIC DETECTION SYSTEM AND OTHERS	P 5,000,000.00	GENERAL FUND	30 CD
17	RMBGH-21- FURNITURE-664	ROSARIO MACLANG BAUTISTA GENERAL HOSPITAL	SUPPLY CABINET AND OTHERS	P 2,443,800.00	GENERAL FUND	30 CD

18	RMBGH-21-OE-538B	ROSARIO MACLANG BAUTISTA GENERAL HOSPITAL	VARIOUS OFFICE EQUIPMENT	P 1,427,000.00	GENERAL FUND	30 CALENDAR DAYS
19	CMO-21-JS-686	OFFICE OF THE CITY MAYOR	ALCOHOL	P 8,499,750.00	GENERAL FUND	15 CD
20	CMO-21-MF-687	OFFICE OF THE CITY MAYOR	WHEELCHAIR	P 15,280,000.00	GENERAL FUND	15 CD
21	CMO-21-SG-671	OFFICE OF THE CITY MAYOR	BICYCLE WITH HELMET	P 1,911,680.00	GENERAL FUND	30 CD
22	CMO-21- FOODSTUFF-483B	OFFICE OF THE CITY MAYOR	RICE	P 137,500,000.00	GENERAL FUND	15CD
23	CMO-21-FF-423B	OFFICE OF THE CITY MAYOR	LINE 3: SUPPLY AND INSTALLATION OF MODULAR PARTITIONS AND ACRYLIC BARRIERS INCLUDING FURNITURE AND OTHER WORKS FOR DISTRICT IV OFFICE-MINI CITY HALL BARANGAY PALIGSAHAN	P 2,620,663.00	GENERAL FUND	45 CALENDAR DAYS
24	CMO-21-VEHICLES- 571B	OFFICE OF THE CITY MAYOR	6X6 TRUCK	P 7,500,000.00	GENERAL FUND	90 CALENDAR DAYS
25	ACCOUNTING-21- SOP-651	CITY ACCOUNTING DEPARTMENT	AIR PURIFIER	P 977,579.20	GENERAL FUND	30 CAL. DAYS
26	CGSD-21-SERVICES- 384B	CITY GENERAL SERVICES DEPARTMENT	SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF ENTERPRISE ASSET MANAGEMENT SYSTEM	P 26,676,693.80	GENERAL FUND	6 MONTHS
27	CGSD-21-FFRSE-703	CITY GENERAL SERVICES DEPARTMENT	FIRE EXTINGUISHER	P 1,293,988.50	GENERAL FUND	30 CAL. DAYS
28	SDO-21-OE-685	SCHOOLS DIVISION OFFICE	INTERACTIVE SMART LEARNING BOARD AND OTHERS	P 3,034,488.00	SPECIAL EDUCATION FUND	30 CAL. DAYS
29	SDO-21-CE-700	SCHOOLS DIVISION OFFICE	REPEATER SYSTEM AND OTHERS	P 5,194,863.33	SPECIAL EDUCATION FUND	30 CAL. DAYS
30	NDH-21-OE-610	NOVALICHES DISTRICT HOSPITAL	NETWORK INFRASTRUCTURE EQUIPMENT AND OTHERS	P 6,963,391.54	GENERAL FUND	45 CAL. DAYS
31	CMO(QCDRRMO)-21- HME-194	CMO (QUEZON CITY DISASTER RISK REDUCTION AND MANAGEMENT OFFICE)	VARIOUS MEDICAL EQUIPMENT	P 13,860,000.00	GENERAL FUND	30 CAL. DAYS
32	CONSO-21-SG-544B	VARIOUS OFFICES (QUEZON CITY UNIVERSITY/ QUEZON CITY CENTER FOR CHILDREN WITH DISABILITIES)	VARIOUS SPORTING GOODS	P 555,630.67	GENERAL FUND	30 CALENDAR DAYS
33	CMO-21-HCS-690	OFFICE OF THE CITY MAYOR	SUPPLY AND INSTALLATION OF AQUAPONICS AND HYDROPONICS	P 3,640,325.63	GENERAL FUND	30 CAL. DAYS

<sup>1.</sup> The *QUEZON CITY LOCAL GOVERNMENT*, through the *General Fund, and Special Education Fund of various years* intends to apply the sums stated above being the ABC to payments under the contract for

the above stated projects/Purchase Request numbers. Bids received in excess of the ABC shall be automatically rejected at bid opening.

The *QUEZON CITY LOCAL GOVERNMENT*, through the *General Fund and Special Education Fund of various years* intends to apply the sums stated above being the ABC to payments under the contract for *the above stated projects/Purchase Request numbers of contract for each lot/item*. Bids received in excess of the ABC shall be automatically rejected at bid opening.

- 2. The *QUEZON CITY LOCAL GOVERNMENT* now invites bids for *Various Projects*. Delivery of the Goods is required *as stated above*. Bidders should have completed, within *the last three* (3) *years* from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instructions to Bidders.
- 3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
  - a. Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.
- 4. Prospective Bidders may obtain further information from *QUEZON CITY GOVERNMENT Bids and Awards Committee (BAC) Secretariat* and inspect the Bidding Documents at the address given below during *weekdays from 8:00 a.m.* 5:00 p.m.
- 5. A complete set of Bidding Documents may be acquired by interested Bidders on *Friday, October 29, 2021* from the 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*. The Procuring Entity shall allow the bidder to present its proof of payment for the fees *in person*.

### STANDARD RATES:

Approved Budget for the Contract	Maximum Cost of Bidding Documents (in Philippine Peso)
More than 500,000 up to 1 Million	1,000.00
More than 1 Million up to 5 Million	5,000.00
More than 5 Million up to 10 Million	10,000.00
More than 10 Million up to 50 Million	25,000.00
More than 50 Million up to 500 Million	50,000.00
More than 500 Million	75,000.00

The following are the requirements for purchase of Bidding Documents;

- 1. PhilGEPS Registration Certificate (Platinum 3 pages)
- 2. Document Request List (DRL)
- 3. Authorization to Purchase Bidding Documents
  - 3.1 Corporate Secretary Certificate for corporation (specific for the project)
  - 3.2 Special Power of Attorney for single proprietorship (specific for the project)
- 4. Notarized Joint Venture Agreement (as applicable)
- 6. The *Quezon City Local Government* will hold a Pre-Bid Conference on 10:00 A.M. of **Friday**, **November 05, 2021** at 2<sup>nd</sup> **Floor, Procurement Department-Bidding Room, Finance Building, Quezon City Hall Compound**, and/or through video conferencing *via Zoom* which shall be open to prospective bidders.

Topic: BAC-GOODS Pre Bid Conference Meeting

Join Zoom Meeting <a href="https://us02web.zoom.us/j/84835002246?pwd=OVRuVE0weXZMNXYwZG5LaWd1dXk1QT09">https://us02web.zoom.us/j/84835002246?pwd=OVRuVE0weXZMNXYwZG5LaWd1dXk1QT09</a>

Meeting ID: 848 3500 2246

Passcode: 154733

- 7. Bids must be duly received by the BAC Secretariat through manual submission at the 2<sup>nd</sup> Floor, Procurement Department, Finance Building, Quezon City Hall Compound on or before 11:00 A.M. of **Thursday, November 18, 2021**. Late bids shall not be accepted.
- 8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
- 9. Bid opening shall be on 1:00 P.M. of **Thursday, November 18, 2021** at the given address below and/or via Zoom. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

Topic: BAC-GOODS & SERVICES BIDDING

Join Zoom Meeting

https://us02web.zoom.us/j/85850855933?pwd=R2dZUUp4Z3lyU29iZGV1WmdKRjZCdz09

Meeting ID: 858 5085 5933

Passcode: 118682

- 10. The *Quezon City Local Government* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
- 11. For further information, please refer to:

### ATTY. DOMINIC B. GARCIA

OIC, Procurement Department

2<sup>nd</sup> Floor, Procurement Department,

Finance Building, Quezon City Hall Compound

Elliptical Road, Barangay Central Diliman, Quezon City.

 $Email\ Add: \underline{bacgoods.procurement@quezoncity.gov.ph}$ 

Tel. No. (02)8988-4242 loc. 8506/8710 Website: **www.quezoncity.gov.ph** 

12. You may visit the following websites:

For downloading of Bidding Documents: www.quezoncity.gov.ph

By:

(**Sgd**) **ROWENA T. MACATAO** Chairperson, QC-BAC-Goods and Services

# 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, **Quezon City Local Government** *wishes* to receive Bids for the *SUPPLY AND INSTALLATION OF AQUAPONICS AND HYDROPONICS* with identification number *CMO-21-HCS-690*.

[Note: The Project Identification Number is assigned by the Procuring Entity based on its own coding scheme and is not the same as the PhilGEPS reference number, which is generated after the posting of the bid opportunity on the PhilGEPS website.]

The Procurement Project (referred to herein as "Project") is composed of Nine (9) *item/s*, the details of which are described in Section VII (Technical Specifications).

### 2. Funding Information

- 2.1. The GOP through the source of funding as indicated below for 2021 in the amount of THREE MILLION SIX HUNDRED FORTY THOUSAND THREE HUNDRED TWENTY FIVE PESOS AND 63/100 ONLY (Php 3,640,325.63).
- 2.2. The source of funding is:
  - a. LGUs, the Annual or Supplemental Budget, as approved by the Sanggunian.

### 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 Manuals 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 **IB** 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 verified and accepted the general requirements of this Project, including 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, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, 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. Foreign ownership exceeding those allowed under the rules may participate pursuant to:
  - i. When a Treaty or International or Executive Agreement as provided in Section 4 of the RA No. 9184 and its 2016 revised IRR allow foreign bidders to participate;
  - ii. Citizens, corporations, or associations of a country, included in the list issued by the GPPB, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;
  - iii. When the Goods sought to be procured are not available from local suppliers; or
  - iv. When there is a need to prevent situations that defeat competition or restrain trade.
- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to:
  - a. For the procurement of Non-expendable Supplies and Services: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

### 6. Origin of 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, subject to Domestic Preference requirements under **ITB** Clause 18.

### 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 twenty percent (20%) 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 and/or through videoconferencing 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 VIII** (Checklist of Technical and Financial **Documents**).
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within *the last three* (3) *years* prior to the deadline for the submission and receipt of bids.
- 10.3. 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. Similar to the required authentication above, 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

### 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 VIII (Checklist of Technical and Financial Documents)**.
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. 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. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
  - a. For Goods offered from within the Procuring Entity's country:
    - i. The price of the Goods quoted EXW (ex-works, ex-factory, exwarehouse, ex-showroom, or off-the-shelf, as applicable);
    - ii. The cost of all customs duties and sales and other taxes already paid or payable;
    - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and

- iv. The price of other (incidental) services, if any, listed in e.
- b. For Goods offered from abroad:
  - i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
  - ii. The price of other (incidental) services, if any, as listed in **Section VII (Technical Specifications).**

### 13. Bid and Payment Currencies

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the 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.
- 13.2. Payment of the contract price shall be made in:
  - a. Philippine Pesos.

### 14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration<sup>1</sup> 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**.
- 14.2. The Bid and bid security in no case shall exceed One Hundred Twenty (120) calendar days from the date of opening of bids, unless duly extended by the bidder upon the request of the Head of the Procuring Entity (HoPE) of the Quezon City Local Government. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

### 15. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

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

If the Procuring Entity allows the submission of bids through online submission 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.

<sup>&</sup>lt;sup>1</sup> In the case of Framework Agreement, the undertaking shall refer to entering into contract with the Procuring Entity and furnishing of the performance security or the performance securing declaration within ten (10) calendar days from receipt of Notice to Execute Framework Agreement.

### 16. Deadline for Submission of Bids

16.1. The Bidders shall submit on the specified date and time through manual submission as indicated in paragraph 7 of the **IB**.

### 17. Opening and Preliminary Examination of Bids

17.1. 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.

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

### 18. Domestic Preference

18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

### 19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring 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 the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII** (**Technical Specifications**), although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows:

One Project having several items that shall be awarded as one contract.

19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

### 20. Post-Qualification

20.1. 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

21.1. 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**

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	
5.3	For this purpose, contracts similar to the Project shall be:
	a. A single contract similar to the items to be bid and must be at least FIFTY percent (50%) of the ABC.
	b. Completed within the last three (3) years prior to the deadline for the submission and receipt of bids substantially in a FORM prescribed by the QC-BAC-GOODS AND SERVICES, must be accompanied by a copy of Certificate of Acceptance by the end-user or Official Receipt (O.R) or Sales Invoice (S.I.) issued for the Contract.
7.1	Subcontracting is not allowed.
12	The price of the Goods shall be quoted DDP within Quezon City or the applicable International Commercial Terms (INCOTERMS) for this Project.
14.1	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:  a. The amount of not less than <i>Php 72,806.51</i> or equivalent to two percent (2%) of ABC if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or
	b. The amount of not less than <i>Php 182,016.28</i> or equivalent to five percent (5%) of ABC if bid security is in Surety Bond.
19.3	[In case the Project will be awarded by lot, list the grouping of lots by specifying the group title, items, and the quantity for every identified lot, and the corresponding ABC for each lot.]
	[In case the project will be awarded by item, list each item indicating its quantity and ABC.]
20.2	List of required licenses and permits relevant to the Project and the corresponding law requiring it.  ✓ N/A
21.2	Additional required documents relevant to the Project that are required by existing laws and/or the Procuring Entity.
	✓ N/A

# 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 Supplier, 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.

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC).** 

### 2. Advance Payment and Terms of Payment

- 2.1. Advance payment of the contract amount is provided under Annex "D" of the revised 2016 IRR of RA No. 9184.
- 2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

### 3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than prior to 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 of RA No. 9184.

### 4. Inspection and Tests

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the SCC, Section IV (Technical Specifications) shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

### 5. Warranty

6.1. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.

6.2. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

# 6. Liability of the Supplier

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

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

# 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 Goods purchased. 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** 

	Special Conditions of Contract
GCC Clause	
1	[List here any additional requirements for the completion of this Contract. The following requirements and the corresponding provisions may be deleted, amended, or retained depending on its applicability to this Contract:]
	Delivery and Documents –
	For purposes of the Contract, "EXW," "FOB," "FCA," "CIF," "CIP," "DDP" and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:
	[For Goods supplied from abroad, state:] "The delivery terms applicable to the Contract are DDP delivered [indicate place of destination]. In accordance with INCOTERMS."
	[For Goods supplied from within the Philippines, state:] "The delivery terms applicable to this Contract are delivered [indicate place of destination]. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination."
	Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).
	For purposes of this Clause the Procuring Entity's Representative at the Project Site is [indicate name(s)].
	Incidental Services –
	The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements: Select appropriate requirements and delete the rest.
	<ul> <li>a. performance or supervision of on-site assembly and/or start-up of the supplied Goods;</li> <li>b. furnishing of tools required for assembly and/or maintenance of the supplied Goods;</li> <li>c. furnishing of a detailed operations and maintenance manual for each</li> </ul>
	appropriate unit of the supplied Goods; d. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
	<ul> <li>e. training of the Procuring Entity's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.</li> <li>f. [Specify additional incidental service requirements, as needed.]</li> </ul>
	The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

### Spare Parts -

The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

Select appropriate requirements and delete the rest.

- a. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and
- b. in the event of termination of production of the spare parts:
  - i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and
  - ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.

The spare parts and other components required are listed in **Section VI** (**Schedule of Requirements**) and the cost thereof are included in the contract price.

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of [indicate here the time period specified. If not used indicate a time period of three times the warranty period].

Spare parts or components shall be supplied as promptly as possible, but in any case, within [insert appropriate time period] months of placing the order.

### Packaging -

The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.

The outer packaging must be clearly marked on at least four (4) sides as follows:

Name of the Procuring Entity Name of the Supplier

Contract Description Final Destination Gross weight Any special lifting instructions Any special handling instructions Any relevant HAZCHEM classifications A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging. Transportation -Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price. Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure. The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination. **Intellectual Property Rights –** The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof. 2.2 [If partial payment is allowed, state] "The terms of payment shall be as follows: 4 inspections and tests that will be conducted are: **Product** Presentation/Demonstration/Site Inspection, if applicable.

# Section VI. Schedule of Requirements

# PROJECT TITLE: SUPPLY AND INSTALLATION OF AQUAPONICS AND HYDROPONICS

### PROJECT NUMBER: CMO-21-HCS-690

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Unit of Issue	Quantity	Delivered, Weeks / Months
1	AQUACULTURE SMALL  2x2 Canvas- A 2m X 2m Type Pond For 600 Growing Fish Comprising With The Canvas, The Filtration System With Bio Sponge And Ceramic Rings And A Submersible Pump For The Circulation Of Water; (Unit And Consumables For One Year Production)  A. Structure  1 Piece – Waterproof Canvass (2m X 2m X 1m) 1 Piece – Submersible Pump (2500 Lph) 2 Piece – Water Bucket 200liter 4 Piece – Filter Foam 4 Piece – Biosponge 2 Sack – River Rocks 1 Piece – PVC Pipe 1 Inch 3 Piece – PVC Elbow 1 Inch 3 Piece – PVC Female Adapter 1 Inch 2 Piece – PVC Male Adapter 1 Inch 2 Piece – PVC Pipe Cement 100cc 2 Roll – Nylon Rope 12mm  B. Operation	Unit	1	
2	15 Kilogram – Pre-Starter Fish Feeds 600 Piece - Fingerlings  AQUAPONICS SMALL  NFT Basic Model (A-Type)- A 30cm X70cm Hydroponics Unit For 50 Growing Fish And 70 Leafy Vegetables Comprising Of An  A-Frame, A Nutrient Solution Reservoir, A Delivery-Return Pipe Network And A Submersible Pump. (Unit And Consumables For One Year Production)	Unit	1	Within Thirty (30) Calendar Days Upon issuance of the Notice to Proceed
	A. Structure  1 Piece – ½ Inch PVC Pipe (3m)  4 Piece – 2 Inches PVC Pipe  14 Piece – 2 Inches PVC Elbow  11 Piece – 3/16 Inch X 1 Inch Angele Bar (10feet)  1 Piece – ½ Inch Flexihose  1 Piece - Blue Drum 220liter  1 Piece – Pipe Cement  1 Piece – Canvass 4feet X 4feet X 3feet  1 Unit – 24 Watts Submersible Pump  3 Piece – Filter Foam  3 Piece - Biosponges  1 Sack - Pumice  B. Operation  70 Piece – Seedlings  70 Piece – Net Pots  4 Sack - Media  50 Piece – Fingerlings  2 Sack - Feeds			
3	AQUAPONICS SMALL IBC Tank Model (Airlift Pump)- A 1sqm. Vertical Aquaponics Garden For Growing 100 Leafy Vegetables And Herbs Comprising Of A 1 Inch X 1.5 Inches Frame To Accommodate Attachment Of U-Shaped 2 Inches PVC As Growing Tubes,	Unit	1	

50 Growing Fish, A Delivery-Return Pipe Network, A Pump, An Electrical Circuitry With Automatic Controller And A Protective Cover. (Unit And Consumables For One Year Production) A. Garden Structure I.Structural Frame 2 Piece - Post ¾ Inc Gi Sched 20 Phils. Standard 3 Piece – Roofing ¾ Inch G.I. Pipe Sched 40 Phils. 2 Piece – Roof ½ Inch Sched 40 Phls. Standard 2 Piece - Reinforced Steel Bar 10mm 2 Box – Welding Rod 3 Gallon – Paint, Gloss, White 5 Piece - Paint Brush 2 Inches **II.Roofing And Sidings** 0.03 Roll – Superfine Net 24mesh X 24mesh X 3.6(W) X 0.02 Roll - Aluminized Shade 40% Straw Net Taiwan 2 Piece - Aluminum Locking Channel / C-Chanel 6meters (L) 6 Piece – Zigzag Lock / Zigzag Wire 2meters (L) 30 Piece – Tex Screw ¾ Inch 1 Piece - Reinforced Steel Bar 10mm 1 Piece – Cable Tie 6 Inch 1 Unit – Zipper White (10cm) B. Hydroponics System Planting Tubes 4 Piece – PVC Pipe Orange 2 Inches 18 Piece – PVC Cleanout Orange 2 Inches 3 Roll – Teflon (Large) Within 4 Piece – PVC Pipe Blue ½ Inch **Thirty (30)** 18 Piece – PVC Elbow Blue 1/2 Inch Calendar 1 Piece – PVC Pipe Orange 3 Inches **Days** Upon 5 Piece – PVC Elbow Orange 3 Inches issuance of 2 Piece – PVC Tee Orange 3 Inches the Notice 4 Can – PVC Solvent 400cc to Proceed 18 Piece – PVC Male Adapter ½ Inch 4 Piece - Silicone Sealant 2 Piece - Caulking Gun 1 Lot - Cutting Accessories 1 Lot – Hole Saw 16mm To 64mm 6 Piece – Cutting Disc 4 Inches Supply Assembly 1 Unit - 60w Submersible Pump 2 Unit – 200Liter Drum (Blue) 0.02 Roll – Superfine Net 24mesh X 24mesh X 3.6(W) X 100m(L) 8 Piece – PVC Ball Valve 1/2 Inch 8 Piece – PVC Pipe Blue ½ Inch 15 Piece – PVC Elbow Blue 1/2 Inch 8 Piece – PVC Tee Blue 1/2 Inch 3 Piece – PVC Ball Valve 1 Inch 2 Piece – PVC Pipe Blue 1 Inch 4 Piece – PVC Elbow Blue 1 Inch 4 Piece – PVC Tee Blue 1 Inch **Aquaponics Inputs** 250 Piece - Hortifoam/Horticultural Foam 70 Piece - Tilapia Fingerlings 10 Kilogram – Feeds 1 Lot – Seeds (Leafy) 1 Lot – Mechanical Filter 1 Lot – Biological Filter 1 Lot – Growing Tray 1200 Piece - Seedlings 400 Piece – Net Pots 4 Sack - Media 100 Piece - Fingerlings 4 Sack - Feeds

4	AQUAPONICS SMALL	Unit	1	
-		Omt	1	
	2x3 Canvas- A 2m X 3m Aquaponics			
	Unit For 600 Growing Fish And 1,000 Leafy Vegetables			
	Comprising Of A Double A-Frame Made With Slotted			
	Angle Bars, Downspouts Tubes, Canvas Type Fish Tank, A			
	Delivery-Return Pipe Network And A Submersible Pumps.			
	(Unit And Consumables For One Year Production)			
	(Cinvinia consumaciós i or cinc i cur i rodución)			
	A. Garden Structure			
	1 Piece - Dormer Metal Drill Bit -1/8			
	1 Piece - Alum, Blind Rivets			
	1 Piece - Pvc Solvent Cement			
	10 Piece - Cutting Disc			
	2 Piece - Caulking Gun			
	1 Piece - Pipe Cutter			
	1 Piece - Angle Grinder			
	1 Piece - Hand Drill			
	1 Piece - Hand Riveter			
	2 Piece - Hand Saw			
	2 Piece - Adjustable Wrench			
	40 Piece - Slotted Angle Bar			
	26 Piece - Pvc Blue Pipe			
	1 Piece - Pvc Blue Pipe			
	1 Piece - Ultima Pvc Pipe			
	400 Piece - Gi Flat Washer			
	400 Piece - Bolt & Nut For Slotted Angle Bar			
	33 Piece - Lt Pvc Blue Female Adapter			
	33 Piece - Emerald Pcv Blue Male Adapter			
	48 Piece - Pvc Ball Valve			
	2 Piece - Era Pvc Blue Cap			
	2 Piece - Prosil Silicon Sealant- Clear			Within
				<b>Thirty (30)</b>
	1 Piece - 400w Solar Panel			Calendar
	1 Piece - 2000w Tbe Inverter			Days Upon
	2 Piece - Dc Breaker			issuance of
	4 Piece – Lfoot			the Notice
	1 Piece - 2.2 Rail Bar			to Proceed
	4 Piece - End Clamp			00 1 1 0 0 0 0 0
	1 Piece - Ac Breaker			
	1 Piece - 3w Disbox			
	15 Piece - Pv Wire			
	4 Piece - Term Migs			
	1 Piece - 20a Mppt			
	1 Piece - 200ah			
	30 Piece - Atlanta Downspout Tube			
	30 Piece - Atlanta Downspout Connector			
	40 Piece - Atlanta Downspout Endcap			
	34 Piece - Emerald Blue Elbow			
	10 Piece - Emerald Blue Tee			
	5 Piece - Synthetic Chemical Called			
	Polytetrafluoroethylene			
	1 Piece - Lona K1 1mx2mx3m			
	10 Set - Corner Plate			
	1 Piece - 1 Set 75867 16 Pcs Hole Saw			
	2 Piece - Pump Hose Air Bubble Stone Aquarium Fish			
	Tank Pind Pump Tube 4mm White Black Color			
	2 Piece - Hailea Waterpump Hx-6530,6510,6830			
	Amphibious Submersible Pump Mute High Lift Pump			
	Aquarium Filter			
	1 Piece - Metal Steel Square Set Degree Angle Metric Try			
	Miltre Square Ruler 15cmx 30 Cm			
	12 Piece - 4/7mm Drip Irrigation House/ Connectors			
	10 Piece - 4/7mm Drip Irrigation House/ Connectors			
	2 Piece - Aquarium 50 Gals W/ Strips			
	50 Sack - Zeolite For Aqua Culture 500g			
	8 Pack - Porms Balls 250 G			
	3 Pack - Disposable White Filters			
	1 Piece – Bioballs			
	35 Pack - Pumice Stone			
	10 Pack - Media Net Ball			
	5 Pack - Filter Sponge (Sponge Fiber)			
			-	-

	5 Pack - Filter Sponge (Super Fine) 2 Pack - Ceramic Zinc 20 Pack - Lava Rock 1 Piece - Sobo Ap -1000 1 Piece - Sobo Rechargeable Mini Ac/Dc Sb -4000 9 Pack - Small Rockwool 25 Pack - 2 Inch Netpot 6 Pack - K1 Filter 1 Piece - Epsom Salt 3 Piece - 200 Liters Drum 1 Piece - 120 Liters Drum 3 Piece - 60 Liters Drum 50 Piece - Barbed Connectors 60 Piece - 4/7 Mm Drip Hose 4 Piece - Emerald Pvc Blue Cap 4 Piece - Emerald Pvc Blue Coupling Reducer 2 Piece - Emerald Pvc Blue Coupling Reducer 4 Piece - Emerald Pvc Blue Tee 2 Piece - Omni Duplex Universal Outlet W/Ground 1 Piece - Nylon Rope 20 Piece - Omega Flat Cord 8 Piece - Imc Phenolic Board 1 Piece - Emerald Pvc Blue Pipe 2 Piece - Emerald Pvc Blue Pipe 10 Piece - Emerald Pvc Blue Elbow 2 Piece - Bi Hexagonal Bolt 50 Piece - Bi Hexagonal Bolt 50 Piece - Bi Hexagonal Bolt 50 Piece - Bi Hexagonal Nut 2 Piece - Gonni Swing Type Plug 4 Piece - Angle Bar  B. Operations 840 Piece - Seedlings 280 Piece - Net Pots 4 Sack - Media 100 Piece - Fingerlings 4 Sack - Fry Mash Feeds 4 Sack - Starter Fish Feeds 4 Sack - Grower Fish Feeds 4 Sack - Grower Fish Feeds			Within Thirty (30) Calendar Days Upon issuance of the Notice to Proceed
5	AQUAPONICS LARGE With 8 X 16m Greenhouse And Fish Tank- An 8m X 16m Commercial Model Of Vertical Aquaponics Garden For 2,000 Growing Fish, 7,000 Leafy Vegetables And Herbs, Prawn And Shellfish Comprising Of A Gothic-Roofed Greenhouse As Protective Structure For The Leafy Vegetables And Herbs, A Fish Tank And Bio-Filtration Tank Outside The Greenhouse, A Delivery-Return Pipe Network, A Pump, An Electrical Circuitry And A Protective Cover (Unit And Consumables For One Year Production)  A. Greenhouse Structure I. Structural Frame 30 Piece - Post 1 1/4 Inches Gi Sched 20 Phils. Standard 20 Piece - Horizontal Frame 1 1/4 Inches Sched 20 Phls.Standard 10 Piece - Post Base (Inserted) 1 Inch Sched 20 Phls.Standard 10 Piece - Vertical Support 3/4 Inch Sched 20 Phils. Standard	Unit	1	

15 Piece - Diagonal Support Lr 3/4 Inch Gi Pipe Sched 20		
Phils. Standard 15 Piece - Bracing/Anchoring 1 Inch Gi Pipe Sched 20  Phils. Standard		
Phils. Standard 15 Piece - Main Purlins 3/4 Inch Gi Pipe Sched 20 Phils. Standard		
10 Piece - Sub Purlins 1/2 Inch Gi Pipe Sched 20 Phils.		
Standard 10 Piece - Bottom Sidings 1/2 Inch Gi Pipe Sched 20  Phila Standard		
Phils. Standard 10 Piece - Side Reinforcement 1 1/4 Inch Gi Pipe Sched		
20 Phils. Standard 10 Piece - Anteroom 3/4 Inch Gi Pipe Sched 20 Phils.		
Standard 2 Piece - Sliding Door 3/4 Inch Gi Pipe Sched 20 Phils.		
Standard 10 Piece - Cutting Disc 14 Inches		
5 Piece - Sanding Stone 10 Kg - Tie Wire #18		
40 Length - 10mm Dia. Rsb 25 Bag - Cement		
5 Load - Screened Sand 5 Load - Washed Gravel		
3 Load - Soil Aggregate 20 Box - Wipweld Welding Rod		
7 Gallon - Epoxy Primer Paint, White 7 Gallon - Rubberized Paint/Aluminum Paint		
10 Piece - Paint Brush 2 Inches <u>II. Roofing And Sidings</u>		
1 Roll – Uv Treated Pe Film 200 Microns Israel 12m W 2 Roll - Superfine Net 24mesh X 24mesh X 3.6m(W) X		Within
100m(L) 1 Roll - Aluminized Shade 40% Straw Net		Thirty (30) Calendar
40 Piece - Aluminum Locking Channel / C-Channel 6meters (L)		Days Upon issuance of
120 Piece - Zigzag Lock / Zigzag Wire 2 Meters (L) 1000 Piece - Tex Screw 3/4 Inch		the Notice to Proceed
10 Piece - Cable Tie 6 Inches III. Gutter And Gutter Frames		
16 Meter - Galvanized Iron Gutter 8 Piece - 2 Inches X 2 Inches X 8mm Gutter Holder		
8 Piece - 1 1/4 Inches X 1 1/4 Inches Angle Bar 2 Piece - Riveter		
100 Piece - 1/8 Inch X 1/4 Inch Blind Rivets		
B. Gravel Growing Bed System Gravel Bed System		
3 Load - Gravel 14 Piece - Geomembrane Liner For Aquaponics (6mx1m)		
42 Piece - 3/4 Inch Gi Pipe Sched 20 Phils. Standard 3 Piece - Gun Tacker		
10 Box - Gun Tacker Staple Wire (600 Pieces) 3 Box - Welding Rod		
Supply Assembly 10 Piece - PVC Tee Reducer 1 Inch To 1/2 Inch		
20 Piece - PVC Elbow 1/2 Inch 10 Piece - PVC Tee 1/2 Inch		
20 Piece PVC Pipe 1 Inch 10 Piece - PVC Equal Tee 1 Inch		
10 Piece - PVC Equal Elbow 1 Inch 10 Piece - PVC Ball Valve 1 Inch		
5 Roll - Teflon 5 Piece - Silicone Sealant		
Discharge Assembly 5 Piece - PVC Cleanout 75mm		
5 Piece - PVC Pipe 75mm 10 Piece - PVC Equal Tee 75mm		
5 Piece - PVC Equal Elbow 75mm 5 Can - PVC Solvent 400cc		
3 Piece - PVC Pipe 50mm		

10 Piece - PVC Equal Elbow 50mm		
Head Control And Main Filtration Control		
4 Piece - PVC Ball Valve 25mm		
2 Piece - Screen Filter 25mm 6 Piece - PVC Equal Elbow 25mm		
3 Piece - PVC Pipe 25mm		
1 Piece – 200L Drum (Blue)		
3 Piece - PVC Equal Elbow 13mm		
3 Piece - PVC Pipe 13mm		
Electrical Assembly		
2 Piece - Safety Breaker Wall Mounted Dpst 30a 15 Meter - Royal Cord		
1 Piece - 2 Gang Outlet		
2 Piece - 1 Inch Electrical PVC Moulding		
2 Piece - Electrical Tape		
2 Piece - 24h Dial Type Mechanical Timer		
Aquaponic Inputs		
300 Piece - Net Pots 2 Inches 300 Piece - Hortifoam/Horticultural Foam		
1 Lot - Seeds (Leafy)		
1 Lot - Growing Tray		
Pump House		
1 Lot - Site Works		
1 Lot -Concrete Works		
1 Lot - Masonry Works		
1 Lot - Hardware		
C. Micro-Sprinkler Irrigation System		
Sprinkler Tank		
20 Meter - Family Drip Hose		¥¥7°41 °
1 Unit - 1hp Saer Pump		Within Thirty (30)
1 Piece – 200L Drum (Blue) 1 Unit – 1000L Ibc Tank		Calendar
D. Fish Tank		Days Upon
Head Control And Main Filtration Control		issuance of
1 Piece - Screen Filter 25mm		the Notice
Micro-Sprinkler Irrigation		to Proceed
8 Piece - PVC Pipe 25mm, 3m		
2 Piece - PVC Ball Valve 25mm Solvent Type		
4 Piece - Compression Elbow 25mm 5 Piece - Union Coupling 25mm		
7 Can - PVC Solvent 400cc		
40 Piece - Take Off Drip 6 Mm		
2 Piece - Brass Pressure Gauge Valve 25 Mm		
3 Piece - PVC Tee 25mm		
5 Piece - PVC Reducing Tee 20mmx16mm		
5 Piece - PVC Reducing Tee 25mmx20mm 7 Piece - PVC Elbow 25mm		
5 Piece - Tape End Plug 20mm		
5 Piece - Saddle Clamp 32mmx25mm		
5 Piece - PVC Pipe 3/4 Inch, 3m		
40 Piece - Misting Nozzle		
6 Piece - Poly End Stop 16mm		
5 Piece - Simple Hose Punch 2.5mm 10 Piece - Teflon Tape 1/2 Inch		
Solar Modules		
3 Unit - Solar Pv Module, 330wp		
Pv Mounting Structure		
1 Piece - Pv Structure (4 X 260/265/330wp), Ground-		
Mount		
6 Piece - Solar Panel Mounting - Middle Clamp, 35mm		
4 Piece - Solar Panel Mounting - End Clamp, 35mm 14 Piece - Nut, Stainless W/ Flat And Lock Washer M8		
2 Piece - Hose Clamp 3 1/2 Inches Size		
1 Piece - Cable Tie Stainless Steel 12 Inches, Pack of 10		
1 Piece - Terminal Lugs Ring Type 5.5-8		
42 Piece - Gi Nut And Bolt, 3/8 Inch X 1 Inch, With Flat		
Washer And Lock Washer		
16 Piece - Gi Nut And Bolt, 1/2 Inch X 1 1/2 Inch, With Flat Washer And Lock Washer		
THE WASHEL THE LUCK WASHEL	1	

	Inch PVC As Growing Tubes, A Nutrient Solution Reservoir, A Delivery-Return Pipe Network, A Lighting Assembly For Photosynthesis, A Pump For Water Circulation, An Electrical Circuitry With Automatic Controller And Rollers For The Mobility (Unit And Consumables For One Year Production)  A. Garden Structure  1. Structural Frame 2 Piece - Post ¾ Inch Gi Sched 20 Phils. Standard 3 Piece - Roof ing ¼ Inch G.I. Pipe Sched 40 Phils. Standard 2 Piece - Roof ½ Inch Sched 40 Phils. Standard 2 Piece - Roof ½ Inch Sched 40 Phils. Standard 2 Piece - Roof ½ Inch Sched 40 Phils. Standard 2 Piece - Roof ½ Inch Sched 40 Phils. Standard 2 Piece - Roof ½ Inch Sched 40 Phils. Standard 2 Piece - Roof ½ Inch Sched 40 Phils. Standard 2 Piece - Roof ½ Inch Sched 40 Phils. Standard 2 Piece - Roof ½ Inch Sched 40 Phils. Standard 2 Piece - Roof ½ Inch Sched 40 Phils. Standard 3 Gallon - Paint, Gloss, White 5 Piece - Paint Brush 2 Inches II. Roofing And Sidings 0.03 Roll - Superfine Net 24mesh X 24mesh X 3.6m(W) X 100m(L) 0.02 Roll - Aluminized Shade 40% Straw Net 2 Piece - Aluminum Locking Channel / C - Channel 6meters(L) 30 Piece - Tex Screw ¾ Inch 1 Piece - Reinforced Steel Bar 10mm 1 Pack - Cable Tie 6 Inches  B. Hydroponics System Planting Tubes 6 Piece - PVC Pipe Orange 2 Inches 25 Piece - PVC Cleanout Orange 2 Inches 4 Roll - Teflon (Large) 6 Piece - PVC Pipe Blue ½ Inch 22 Piece - PVC Blobw Blue ½ Inch 4 Piece - Silicone Sealant 2 Piece - PVC Blobw Blue ½ Inch 4 Piece - Caulking Gun 6 Piece - Cutting Disc 4 Inches Supply Assembly 1 Unit - 60w Submersible Pump 1 Piece - PVC Pipe Blue ½ Inch 5 Piece - PVC Pipe Blue ½ Inch 5 Piece - PVC Tee Orange 4 Inches 3 Piece - PVC Cleanout Orange 4 Inches 5 Piece - PVC Pipe Blue ½ Inch 9 Piece - PVC Pipe Blue ½ Inch 10 Piece - PVC Pipe Blue ½ Inch 10 Piece - PVC Pipe Blue ½ Inch 10 Piece - PVC Pipe Blue ½ Inch 1			Within Thirty (30) Calendar Days Upon issuance of the Notice to Proceed
7	HYDROPONICS MEDIUM  NFT With Greenhouse- A 3m X 4m Household Model Vertical Hydroponics Garden For 1,500 Leafy Vegetables And Herbs Comprising Of A Gothic-Roofed Greenhouse As Protective Structure For The Leafy Vegetables And Herbs, A Nutrient Solution Reservoir, A Delivery-Return Pipe Network, A Pump, An Electrical Circuitry And A Protective Cover (Unit And Consumables For One Year Production)	Unit	1	

Greenhouse Structure		
I. <u>Structural Frame</u>		
1 Load - Gravel & Sand S1		
1 Load - Gravel Mix		
15 Bag - Cement 40kg 150 Piece - Hollow Blocks 4 Inches		
10 Piece - Rsb 10mm		
1 Piece - G.I. Pipe 1 Inch (Schedule 40), 6m		
12 Piece - G.I. Pipe 3/4 Inch (S 20)		
II. Roofing And Sidings		
12 Unit - Aluminum Profile Aluminum W/ Zigzag Wire		
0.3 Roll - Uv Plastic (7' X 90 M)		
0.3 Roll - Net Shading 0.4		
0.3 Roll - Fine Mesh Net 25x25		
80 Piece - Teck Screw 1 Inch		
B. Hydroponics System		
Structural Frames		
16 Piece - Tubular Pipe 1 Inches (1.5 Mm)		
10 Kilogram - Welding Rod Special		
3 Set - Hole Saw Cutter 15mm To 64mm		
10 Piece - Cutting Disc 4 Inches		
3 Piece - Cut Off Disc 14 Inches		
5 Piece - Grinding Disc 4 Inches		
5 Gallon - Epoxy Primer White		
5 Gallon - Gloss Paint White 4 Piece - Paint Brush 3 Inches		
6 Piece - Round Bar 10mm (Plain)		
Nutrient Film Technique Pipes		
65 Piece - PVC Pipe 2inches (Orange)		
40 Piece - PVC Elbow 2inches (Orange)		
40 Piece - PVC Tee 2inches (Orange)		
Supply And Discharge Assembly		
1 Unit - Ibc Tank 1,000 L		
10 Piece - PVC Pipe 3/4 Inch (Blue) 10 Piece - PVC Pipe 1/2 Inch (Blue)		
5 Piece - PVC Tee 3/4 Inch (Blue)		
25 Piece - PVC Tee 1/2 Inch (Blue)		Within
20 Piece - PVC Tee Reducer 1 Inch To 1/2 Inch (Blue)		<b>Thirty (30)</b>
25 Piece - PVC Elbow 3/4 Inch (Blue)		Calendar
50 Piece - PVC Elbow 1/2 Inch (Blue)		<b>Days</b> Upon
20 Piece - PVC Male Adapter 1inch (Blue)		issuance of
20 Piece - PVC Female Adapter 1inch (Blue)		the Notice
6 Unit - PVC Ball Valve 3/4 Inch		to Proceed
30 Unit - PVC Ball Valve ½ inch 2 Unit - Check Valve 3/4inch		
5 Liter- Solvent Neltex		
1 Liter - Epoxy Pioneer Non- Sag		
Electrical Assembly		
1 Unit - Submersible Pump 400 Watts		
0.5 Roll - Electrical Wire #12		
1 Unit - Magnetic Contactor 30 Amps		
2 Unit - Circuit Breaker 30 Amps		
1 Unit - Panel Board 4 Gang 2 Unit - Switch 2 Gang		
1 Unit - Float Switch 30 Amps		
2 Unit - Outlet 3 Gang		
2 Unit - Led Light 18 Watts		
2 Unit - Junction Box Plastic		
2 Unit - Utility Box Plastic		
3 Piece - Electrical Tape Large		
Hydroponics Inputs		
2000 Piece - Hydroponic Foam 2 Inches		
1 Lot - Seeds (Leafy) Pump House		
3 Unit - Drum 200L		
1 Lot - Masonry		
1 Lot - Roofing Works		
Operation		
18000 Piece - Seedlings		

	6000 Piece - Net Pots 10 Bottle - Nutrient Solution			
	12 Sack - Media			
8	HYDROPONICS SMALL Kratcky Styrobox (10 Sets Model) A Styrobox Kratcky Hydroponics Is Made Up Of 10 Styro-Boxes With 8 Holes Occupying 8 Leafy Vegetables With A Toted Of 80 Leafy Vegetables, 80 Styrocups With Media, A Nutrient Solution, Canopy And Net Cover Made Up Of PVC Pipes And Green Nets For Protection From Direct Sunlight Insects And Pests. (Set Of 10 With Consumables For One Year Production)	Unit	5	
	C. Garden Structure  10 Unit – Styrobox Fruitbox  3 Pack – Pumice (15 Kg)  10 Piece - Sticker  160 Piece – Foam  20 Meter – PVC Pipe ½ Inch (5meter)  8 Piece – PVC Elbow 3-Way ½ Inch  4 Piece – PVC Elbow 4-Way ¼ Inch  4 Meter – Shade Net 70% (8 Feet Width)  1 Pack – Cable Tie  D. Operation  880 Piece – Seedlings  160 Piece – Net Pots  1 Set – Nutrient Solution			Within Thirty (30) Calendar Days Upon issuance of the Notice to Proceed
9	HYDROPONICS SMALL  NFT Basic Model (A-Type)  A 30cm X 100cm Area And 2m High Hydroponics Unit For 70  Growing Plants Comprising Of A 1 Inch X 1.5 Inches Frame To Accommodate 2 Inches PVC As Growing Tubes, A Nutrient Solution Reservoir At The Lowest Portion Of A Frame, A Delivery-Return Pipe Network And A Submersible Pump For The Circulation Of Water (Set Of 10 With Consumables For One Year Production)  A. Garden Structure  1 Piece – PVC Pipe ½ Inch (3meter)  4 Piece – 2 Inches PVC Pipe  14 Piece – 2 Inches PVC Elbow  8 Piece – 3/16 Inch X 1 Inch Ange Bar (10 Feet)  1 Piece – ½ Inch Flexihose 1 Piece – Blue Drum 220 Liter 1 Piece – Pipe cement 1 Unit – 24 watts submersible pump  B. Operation  840 Piece – Seedlings 10 Piece – Plastic Bottle 280 Piece – Net Pots 2 Sack - Media 1 Bottle – Nutrient Solution	Unit	1	

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of:

I hereby certify to comply and deliver all the above requirements.

# Section VII. Technical Specifications

#### **Notes for Preparing the Technical 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 their Bids. In the context of Competitive Bidding, the specifications (*e.g.* production/delivery schedule, manpower requirements, and after-sales service/parts, descriptions of the lots or items) must be prepared 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 transparency, equity, efficiency, fairness, and economy in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation and post-qualification facilitated. The specifications should require that all items, materials and accessories to be included or incorporated in the goods be new, unused, and of the most recent or current models, and that they include or incorporate all recent improvements in design and materials unless otherwise provided in the Contract.

Samples of specifications from previous similar procurements are useful in this respect. The use of metric units is encouraged. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods. Deletions or addenda should then adapt the General Technical Specifications to the particular procurement.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for equipment, materials, and workmanship, recognized Philippine and 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 equipment, materials, and workmanship that meet other authoritative standards, and which ensure at least a substantially equal quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the Special Conditions of Contract or the Technical Specifications.

#### Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest edition or revision of the relevant standards and codes 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 substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name and catalogue number should be avoided as far as possible; where unavoidable they should always be followed by the words "or at least equivalent." References to brand names cannot be used when the funding source is the GOP.

Where appropriate, drawings, including site plans as required, may be furnished by the Procuring Entity with the Bidding Documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Bid or for prior review by the Procuring Entity during contract execution.

Bidders are also required, as part of the technical specifications, to complete their statement of compliance demonstrating how the items comply with the specification.

# Technical Specifications PROJECT TITLE: SUPPLY AND INSTALLATION OF AQUAPONIC AND **HYDROPONICS**

PROJECT NUMBER: CMO-21-HCS-690

Item	Specification	Statement of Compliance
A 1.	AQUACULTURE SMALL 2x2 Canvas- A 2m X 2m Type Pond For 600 Growing Fish Comprising With The Canvas, The Filtration System With Bio Sponge And Ceramic Rings And A Submersible Pump For The Circulation Of Water; (Unit And Consumables For One Year Production)  A. Structure 1 Piece – Waterproof Canvass (2m X 2m X 1m) 1 Piece – Submersible Pump (2500 Lph) 2 Piece – Water Bucket 200liter 4 Piece – Filter Foam 4 Piece – Biosponge 2 Sack – River Rocks 1 Piece – PVC Pipe 1 Inch 3 Piece – PVC Elbow 1 Inch 3 Piece – PVC Female Adapter 1 Inch 2 Piece – PVC Female Adapter 1 Inch 2 Piece – PVC Pipe Cement 100cc 2 Roll – Nylon Rope 12mm B. Operation 15 Kilogram – Pre-Starter Fish Feeds 600 Piece - Fingerlings	[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]
2.	AQUAPONICS SMALL NFT Basic Model (A-Type)- A 30cm X70cm Hydroponics Unit For 50 Growing Fish And 70 Leafy Vegetables Comprising Of An A-Frame, A Nutrient Solution Reservoir, A Delivery-Return Pipe Network And A Submersible Pump. (Unit And Consumables For One Year Production)	
	A. Structure	

1 Piece − ½ Inch PVC Pipe (3m) 4 Piece – 2 Inches PVC Pipe 14 Piece – 2 Inches PVC Elbow 11 Piece – 3/16 Inch X 1 Inch Angele Bar (10feet) 1 Piece – ½ Inch Flexihose 1 Piece - Blue Drum 220liter 1 Piece – Pipe Cement 1 Piece – Canvass 4feet X 4feet X 3feet  $1\ Unit-24\ Watts\ Submersible\ Pump$ 3 Piece – Filter Foam 3 Piece - Biosponges 1 Sack - Pumice Operation 70 Piece – Seedlings 70 Piece – Net Pots 4 Sack - Media 50 Piece – Fingerlings 2 Sack - Feeds AQUAPONICS SMALL 3. IBC Tank Model (Airlift Pump)- A 1sqm. Vertical Aquaponics Garden For Growing 100 Leafy Vegetables And Herbs Comprising Of A 1 Inch X 1.5 Inches Frame To Accommodate Attachment Of U-Shaped 2 Inches PVC As Growing Tubes, 50 Growing Fish, A Delivery-Return Pipe Network, A Pump, An Electrical Circuitry With Automatic Controller And A Protective (Unit And Consumables For One Year Production) A. Garden Structure I.Structural Frame 2 Piece – Post ¾ Inc Gi Sched 20 Phils. Standard 3 Piece – Roofing ¾ Inch G.I. Pipe Sched 40 Phils. 2 Piece - Roof 1/2 Inch Sched 40 Phls. Standard 2 Piece - Reinforced Steel Bar 10mm 2 Box – Welding Rod 3 Gallon - Paint, Gloss, White 5 Piece – Paint Brush 2 Inches **II.Roofing And Sidings** 0.03 Roll - Superfine Net 24mesh X 24mesh X 3.6(W) X 0.02 Roll - Aluminized Shade 40% Straw Net Taiwan 2 Piece – Aluminum Locking Channel / C-Chanel 6meters (L) 6 Piece – Zigzag Lock / Zigzag Wire 2meters (L) 30 Piece – Tex Screw ¾ Inch 1 Piece - Reinforced Steel Bar 10mm 1 Piece - Cable Tie 6 Inch Unit – Zipper White (10cm) B. Hydroponics System **Planting Tubes** 4 Piece – PVC Pipe Orange 2 Inches 18 Piece – PVC Cleanout Orange 2 Inches 3 Roll – Teflon (Large) 4 Piece – PVC Pipe Blue ½ Inch 18 Piece – PVC Elbow Blue ½ Inch 1 Piece – PVC Pipe Orange 3 Inches 5 Piece – PVC Elbow Orange 3 Inches 2 Piece - PVC Tee Orange 3 Inches 4 Can – PVC Solvent 400cc 18 Piece – PVC Male Adapter ½ Inch 4 Piece - Silicone Sealant 2 Piece - Caulking Gun 1 Lot - Cutting Accessories

1 Lot – Hole Saw 16mm To 64mm 6 Piece – Cutting Disc 4 Inches

1 Unit - 60w Submersible Pump 2 Unit - 200Liter Drum (Blue)

Supply Assembly

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100m(L)
               8 Piece – PVC Ball Valve ½ Inch
               8 Piece – PVC Pipe Blue ½ Inch
               15 Piece – PVC Elbow Blue ½ Inch
               8 Piece – PVC Tee Blue ½ Inch
               3 Piece – PVC Ball Valve 1 Inch
               2 Piece – PVC Pipe Blue 1 Inch
               4 Piece – PVC Elbow Blue 1 Inch
               4 Piece – PVC Tee Blue 1 Inch
               Aquaponics Inputs
               250 Piece - Hortifoam/Horticultural Foam
               70 Piece - Tilapia Fingerlings
               10 Kilogram - Feeds
               1 Lot – Seeds (Leafy)
               1 Lot – Mechanical Filter
               1 Lot – Biological Filter
               1 Lot – Growing Tray
               1200 Piece - Seedlings
               400 Piece - Net Pots
               4 Sack - Media
               100 Piece – Fingerlings
               4 Sack - Feeds
       AQUAPONICS SMALL
4.
       2x3 Canvas- A 2m X 3m Aquaponics
       Unit For 600 Growing Fish And 1,000 Leafy Vegetables
       Comprising Of A Double A-Frame Made With Slotted
       Angle Bars, Downspouts Tubes, Canvas Type Fish Tank, A
       Delivery-Return Pipe Network And A Submersible Pumps.
       (Unit And Consumables For One Year Production)
               A. Garden Structure
                1 Piece - Dormer Metal Drill Bit -1/8
                1 Piece - Alum. Blind Rivets
                1 Piece - Pvc Solvent Cement
                10 Piece - Cutting Disc
               2 Piece - Caulking Gun
                1 Piece - Pipe Cutter
                1 Piece - Angle Grinder
                1 Piece - Hand Drill
                1 Piece - Hand Riveter
               2 Piece - Hand Saw
               2 Piece - Adjustable Wrench
               40 Piece - Slotted Angle Bar
               26 Piece - Pvc Blue Pipe
               1 Piece - Pvc Blue Pipe
                1 Piece - Ultima Pvc Pipe
               400 Piece - Gi Flat Washer
               400 Piece - Bolt & Nut For Slotted Angle Bar
               33 Piece - Lt Pvc Blue Female Adapter
               33 Piece - Emerald Pcv Blue Male Adapter
               48 Piece - Pvc Ball Valve
               2 Piece - Era Pvc Blue Cap
                2 Piece - Prosil Silicon Sealant- Clear
                1 Piece - 400w Solar Panel
                1 Piece - 2000w Tbe Inverter
               2 Piece - Dc Breaker
               4 Piece - Lfoot
               1 Piece - 2.2 Rail Bar
               4 Piece - End Clamp
                1 Piece - Ac Breaker
                1 Piece - 3w Disbox
                15 Piece - Pv Wire
                4 Piece - Term Migs
                1 Piece - 20a Mppt
                1 Piece - 200ah
                30 Piece - Atlanta Downspout Tube
               30 Piece - Atlanta Downspout Connector
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0.02 Roll - Superfine Net 24mesh X 24mesh X 3.6(W) X

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40 Piece - Atlanta Downspout Endcap
        34 Piece - Emerald Blue Elbow
        10 Piece - Emerald Blue Tee
        5 Piece - Synthetic Chemical Called Polytetrafluoroethylene
        1 Piece - Lona K1 1mx2mx3m
        10 Set - Corner Plate
        1 Piece - 1 Set 75867 16 Pcs Hole Saw
        2 Piece - Pump Hose Air Bubble Stone Aquarium Fish Tank Pind
        Pump Tube 4mm White Black Color
        2 Piece - Hailea Waterpump Hx-6530,6510,6830 Amphibious
        Submersible Pump Mute High Lift Pump Aquarium Filter
        1 Piece - Metal Steel Square Set Degree Angle Metric Try Miltre
        Square Ruler 15cmx 30 Cm
        12 Piece - 4/7mm Drip Irrigation House/ Connectors
        10 Piece - 4/7mm Drip Irrigation House/ Connectors
        2 Piece - Aquarium 50 Gals W/ Strips
        50 Sack - Zeolite For Aqua Culture 500g
        8 Pack - Porms Balls 250 G
        3 Pack - Disposable White Filters
        1 Piece – Bioballs
        35 Pack - Pumice Stone
        10 Pack - Media Net Ball
        5 Pack - Filter Sponge (Sponge Fiber)
        5 Pack - Filter Sponge (Super Fine)
        2 Pack - Ceramic Zinc
        20 Pack - Lava Rock
        1 Piece - Sobo Ap -1000
        1 Piece - Sobo Rechargeable Mini Ac/Dc Sb -4000
        9 Pack - Small Rockwool
        25 Pack - 2 Inch Netpot
        6 Pack - K1 Filter
        1 Piece - Epsom Salt
        3 Piece - 200 Liters Drum
        1 Piece -120 Liters Drum
        3 Piece - 60 Liters Drum
        50 Piece - Barbed Connectors
        60 Piece - 4/7 Mm Drip Hose
        4 Piece - Emerald Pvc Blue Cap
        4 Piece - Emerald Pvc Blue Coupling Reducer
        2 Piece - Emerald Pvc Blue Coupling Reducer
        4 Piece - Emerald Pvc Blue Tee
        2 Piece - Omni Duplex Universal Outlet W/Ground
        1 Piece - Nylon Rope
        20 Piece - Omega Flat Cord
        8 Piece - Imc Phenolic Board
        1 Piece - Emerald Pvc Blue Pipe
        2 Piece - Emerald Pvc Blue Pipe
        10 Piece - Emerald Pvc Blue Elbow
        2 Piece - Dormer Metal Drill Bit
        1 Piece - Nicholson Vise Grip
        1 Piece - Sonipro Magnetic Torpedo Level Bar
        50 Piece - Bl Hexagonal Bolt
        50 Piece - Bi Hexagonal Nut
        2 Piece - Era Pvc Blue Union Patente
        2 Piece - Omni Swing Type Plug
        4 Piece - Angle Bar
        B. Operations
        840 Piece - Seedlings
        280 Piece - Net Pots
        4 Sack - Media
        100 Piece - Fingerlings
        4 Sack - Fry Mash Feeds
        4 Sack - Pre -Starter Fish Feeds
        4 Sack - Starter Fish Feeds
        4 Sack - Grower Fish Feeds
        1000 Piece - Hito Fingerlings
AQUAPONICS LARGE
With 8 X 16m Greenhouse And Fish
```

Tank- An 8m X 16m Commercial Model Of Vertical

Aquaponics Garden For 2,000 Growing Fish,

7,000 Leafy Vegetables And Herbs,

Prawn And Shellfish Comprising Of A Gothic-Roofed Greenhouse As

Protective Structure For The Leafy Vegetables And Herbs,

A Fish Tank And Bio-Filtration Tank Outside The Greenhouse,

A Delivery-Return Pipe Network, A Pump, An Electrical Circuitry

And A Protective Cover

(Unit And Consumables For One Year Production)

#### A. Greenhouse Structure

#### I. Structural Frame

30 Piece - Post 1 1/4 Inches Gi Sched 20 Phils. Standard

20 Piece - Arc 1 Inch G.I. Pipe Sched 40 Phils. Standard

20 Piece - Horizontal Frame 1 1/4 Inches Sched 20 Phls.Standard

10 Piece - Post Base (Inserted) 1 Inch Sched 20 Phls.Standard

10 Piece - Vertical Support 3/4 Inch Sched 20 Phils. Standard

15 Piece - Diagonal Support Lr 3/4 Inch Gi Pipe Sched 20 Phils. Standard

15 Piece - Bracing/Anchoring 1 Inch Gi Pipe Sched 20 Phils. Standard

15 Piece - Main Purlins 3/4 Inch Gi Pipe Sched 20 Phils. Standard

10 Piece - Sub Purlins 1/2 Inch Gi Pipe Sched 20 Phils. Standard

10 Piece - Bottom Sidings 1/2 Inch Gi Pipe Sched 20 Phils. Standard

 $10\ \mathrm{Piece}$  - Side Reinforcement 1 1/4 Inch Gi Pipe Sched 20 Phils. Standard

10 Piece - Anteroom 3/4 Inch Gi Pipe Sched 20 Phils. Standard

2 Piece - Sliding Door 3/4 Inch Gi Pipe Sched 20 Phils. Standard

10 Piece - Cutting Disc 14 Inches

5 Piece - Sanding Stone

10 Kg - Tie Wire #18

40 Length - 10mm Dia. Rsb

25 Bag - Cement

5 Load - Screened Sand

5 Load - Washed Gravel

3 Load - Soil Aggregate

20 Box - Wipweld Welding Rod

7 Gallon - Epoxy Primer Paint, White

7 Gallon - Rubberized Paint/Aluminum Paint

10 Piece - Paint Brush 2 Inches

#### II. Roofing And Sidings

1 Roll – Uv Treated Pe Film 200 Microns Israel 12m W

2 Roll - Superfine Net 24mesh X 24mesh X 3.6m(W) X 100m(L)

1 Roll - Aluminized Shade 40% Straw Net

40 Piece - Aluminum Locking Channel / C-Channel 6meters (L)

120 Piece - Zigzag Lock / Zigzag Wire 2 Meters (L)

1000 Piece - Tex Screw 3/4 Inch

10 Piece - Cable Tie 6 Inches

III. Gutter And Gutter Frames

16 Meter - Galvanized Iron Gutter

8 Piece - 2 Inches X 2 Inches X 8mm Gutter Holder

8 Piece - 1 1/4 Inches X 1 1/4 Inches Angle Bar

2 Piece - Riveter

100 Piece - 1/8 Inch X 1/4 Inch Blind Rivets

#### B. Gravel Growing Bed System

Gravel Bed System

3 Load - Gravel

14 Piece - Geomembrane Liner For Aquaponics (6mx1m)

42 Piece - 3/4 Inch Gi Pipe Sched 20 Phils. Standard

3 Piece - Gun Tacker

10 Box - Gun Tacker Staple Wire (600 Pieces)

3 Box - Welding Rod

Supply Assembly

10 Piece - PVC Tee Reducer 1 Inch To 1/2 Inch

20 Piece - PVC Elbow 1/2 Inch

10 Piece - PVC Tee 1/2 Inch

20 Piece PVC Pipe 1 Inch

10 Piece - PVC Equal Tee 1 Inch

10 Piece - PVC Equal Elbow 1 Inch 10 Piece - PVC Ball Valve 1 Inch 5 Roll - Teflon 5 Piece - Silicone Sealant Discharge Assembly 5 Piece - PVC Cleanout 75mm 5 Piece - PVC Pipe 75mm 10 Piece - PVC Equal Tee 75mm 5 Piece - PVC Equal Elbow 75mm 5 Can - PVC Solvent 400cc 3 Piece - PVC Pipe 50mm 10 Piece - PVC Equal Elbow 50mm Head Control And Main Filtration Control 4 Piece - PVC Ball Valve 25mm 2 Piece - Screen Filter 25mm 6 Piece - PVC Equal Elbow 25mm 3 Piece - PVC Pipe 25mm 1 Piece – 200L Drum (Blue) 3 Piece - PVC Equal Elbow 13mm 3 Piece - PVC Pipe 13mm Electrical Assembly 2 Piece - Safety Breaker Wall Mounted Dpst 30a 15 Meter - Royal Cord 1 Piece - 2 Gang Outlet 2 Piece - 1 Inch Electrical PVC Moulding 2 Piece - Electrical Tape 2 Piece - 24h Dial Type Mechanical Timer Aquaponic Inputs 300 Piece - Net Pots 2 Inches 300 Piece - Hortifoam/Horticultural Foam 1 Lot - Seeds (Leafy) 1 Lot - Growing Tray Pump House 1 Lot - Site Works 1 Lot -Concrete Works 1 Lot - Masonry Works 1 Lot - Hardware C. Micro-Sprinkler Irrigation System Sprinkler Tank 20 Meter - Family Drip Hose 1 Unit - 1hp Saer Pump 1 Piece – 200L Drum (Blue) 1 Unit – 1000L Ibc Tank D. Fish Tank Head Control And Main Filtration Control 1 Piece - Screen Filter 25mm Micro-Sprinkler Irrigation 8 Piece - PVC Pipe 25mm, 3m 2 Piece - PVC Ball Valve 25mm Solvent Type 4 Piece - Compression Elbow 25mm 5 Piece - Union Coupling 25mm 7 Can - PVC Solvent 400cc 40 Piece - Take Off Drip 6 Mm 2 Piece - Brass Pressure Gauge Valve 25 Mm 3 Piece - PVC Tee 25mm 5 Piece - PVC Reducing Tee 20mmx16mm 5 Piece - PVC Reducing Tee 25mmx20mm 7 Piece - PVC Elbow 25mm 5 Piece - Tape End Plug 20mm 5 Piece - Saddle Clamp 32mmx25mm 5 Piece - PVC Pipe 3/4 Inch, 3m 40 Piece - Misting Nozzle 6 Piece - Poly End Stop 16mm 5 Piece - Simple Hose Punch 2.5mm 10 Piece - Teflon Tape 1/2 Inch Solar Modules 3 Unit - Solar Pv Module, 330wp Pv Mounting Structure 1 Piece - Pv Structure (4 X 260/265/330wp), Ground-Mount

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6 Piece - Solar Panel Mounting - Middle Clamp,35mm
4 Piece - Solar Panel Mounting - End Clamp, 35mm
14 Piece - Nut, Stainless W/ Flat And Lock Washer M8
2 Piece - Hose Clamp 3 1/2 Inches Size
1 Piece - Cable Tie Stainless Steel 12 Inches, Pack of 10
1 Piece - Terminal Lugs Ring Type 5.5-8
42 Piece - Gi Nut And Bolt, 3/8 Inch X 1 Inch, With Flat Washer
And Lock Washer
16 Piece - Gi Nut And Bolt, 1/2 Inch X 1 1/2 Inch, With Flat
Washer And Lock Washer
Pv Structure Concrete Footing
4 1/2 Piece - Cement
12 Piece - Sand(Per Bag)
16 Piece - Gravel (Per Bag)
3 Piece - Reinforced Steel Bar (Rsb), 12mm
6 Piece - Reinforced Steel Bar (Rsb), 9mm
2 Piece - Gi Plain Sheet Gauge 32
2 Piece - Gi Wire Gauge 16
12 Piece - Anchor Bolt 12mm/12 Inches
1 Piece - Crate, Plywood
8 Piece - Bi Nut, 12mm
Pumps, Pump Controllers/Inverters & Level Switches
1 Piece - 1hp Saer Pump Or Equivalent
1 Piece - Cu200
Cables & Accessories
1 Piece - Metal Enclosure 400 X 300 X 150mm
1 Piece - Dc Mcb, 2p, 15a, 500vdc
1 Piece - Dc Spd, 2p
1/2 Piece - Plastic Cable Ties 12 Inches, Pack Of 100
1 Piece - Plastic Cable Ties 8 Inches, Pack Of 100
30 Piece - Thhn, 3.5 Sq.Mm. (Green)
1 Piece - Mc4 Connector, 4-6 Sq.Mm.
5 Piece - Pv Cable 4 Sq Mm - Black
5 Piece - Pv Cable 4 Sq Mm - Red
1 Piece - Tf Wire, 20awg
1 Piece - Cat5 Cable 2x2x22awg
1 Piece - PVC Blue Pipe, 3/4 Inches
1 Piece - PVC Male Adaptor W/ Locknut, 3/4 Inch
1 Piece - PVC Blue Threaded Coupling, 3/4 Inch
1 Piece - PVC Blue Coupling 3/4 Inch
1 Piece - PVC Elbow, Blue, 3/4 Inch
1 Piece - Electrical Tape
2 Piece - Elastomeric Sealant
1 Piece - Thhn, 14 Sq.Mm., White
50 Piece - Thhn, 3.5sqmm
1 Piece - PVC Cement, 100cc
Grounding Materials
1 Piece - Ground Rod 5/8 Inch, 10ft
1 Piece -Ground Clamp 5/8 Inch
1 Piece- Thhn, 3.5 Sq.Mm. (Green)
For (Level Switches) Sqf
1 Piece - Vertical Buoyancy Level Switch Sensor
1 Piece - Dry Running Protection Sensor For Surface Pump
(Product No, 97911215)
1 Piece - Pullbox 100x100mm, Outdoor
10 Piece - PVC Conduit, 1/2 Inch
6 Piece - PVC Elbow (Electrical) 1/2 Inch
2 Piece - PVC Male Adaptor, 1/2 Inch
1 Piece - 50mm Thhn Wire
1 Piece - Entrance Cap 1/2 Inch
1 Piece - Electrical Consumables
Pipes And Fittings
For Riser Pipe (Submersible Pump)/ Suction Line (For Surface
Pump)
4 Piece - Teflon Tape (Big)
1 Piece - Gate Valve, 1 1/2 Inches
1 Piece - Piping Materials And Consumables
E. Operation
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84000 Piece - Seedlings 28000 Piece - Net Pots

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	80 Sack - Media	
	4000 Piece - Fingerlings	
	36 Sack - Feeds	
6.	HYDROPONICS SMALL	
0.	Miniature Vertical (Cabinet Type)	
	A 70m X 120m Miniature Model Of Vertical Hydroponics Garden For	
	100 Growing Leafy Vegetables And Herbs Comprising Of A 1 Inch X	
	1.5 Inch Frame To Accommodate 2 Inch PVC As Growing Tubes, A	
	Nutrient Solution Reservoir, A Delivery-Return Pipe Network, A	
	Lighting Assembly For Photosynthesis,	
	A Pump For Water Circulation, An Electrical Circuitry With Automatic	
	Controller And Rollers For The Mobility	
	(Unit And Consumables For One Year Production)	
	A. Garden Structure	
	III. Structural Frame	
	2 Piece - Post ¾ Inch Gi Sched 20 Phils. Standard	
	3 Piece - Roofing 3/4 Inch G.I. Pipe Sched 40 Phils. Standard	
	2 Piece – Roof ½ Inch Sched 40 Phls. Standard	
	2 Piece - Reinforced Steel Bar 10mm	
	2 Box – Welding Rod	
	3 Gallon – Paint, Gloss, White	
	5 Piece – Paint Brush 2 Inches	
	IV. Roofing And Sidings	
	0.03 Roll – Superfine Net 24mesh X 24mesh X 3.6m(W) X	
	100m(L)	
	0.02 Roll – Aluminized Shade 40% Straw Net	
	2 Piece – Aluminum Locking Channel / C – Channel 6meters(L)	
	6 Piece - Zigzag Lock / Zigzag Wire 2meters(L)	
	30 Piece - Tex Screw ¾ Inch	
	1 Piece – Reinforced Steel Bar 10mm	
	1 Pack – Cable Tie 6 Inches	
	B. Hydroponics System	
	<u>Planting Tubes</u>	
	6 Piece – PVC Pipe Orange 2 Inches	
	25 Piece – PVC Cleanout Orange 2 Inches	
	4 Roll – Teflon (Large)	
	6 Piece – PVC Pipe Blue ½ Inch	
	22 Piece – PVC Elbow Blue ½ Inch	
	4 Can – PVC Solvent 400cc	
	22 Piece – PVC Male Adapter ½ Inch	
	4 Piece – Silicone Sealant	
	2 Piece – Caulking Gun	
	6 Piece – Cutting Disc 4 Inches	
	Supply Assembly	
	1 Unit – 60w Submersible Pump	
	1 Piece – PVC Pipe Orange 4 Inches	
	5 Piece – PVC Flipe Orange 4 Inches	
	2 Piece – PVC Tee Orange 4 Inches	
	3 Piece – PVC Cleanout Orange 4 Inches	
	4 Piece – PVC Ball Valve ½ Inch	
	5 Piece – PVC Pipe Blue ½ Inch	
	8 Piece – PVC Elbow Blue 1/2 Inch	
	5 Piece – PVC Tee Blue ½ Inch	
	Hydroponics Inputs	
	300 Piece - Hortifoam/Horticultural Foam	
	5 Liter – Hydroponics Solution (A+B, Ph Buffer Solution)	
	1 lot - Seeds (Leafy)	
	1 lot - Growing Tray	
	1200 piece- Seedlings	
	400 Piece - Net Pots	
	4 sack - Media	
	15 bottle - Nutrient Solution	
7	HVDDODONICS MEDIUM	
7.	HYDROPONICS MEDIUM	

NFT With Greenhouse- A 3m X 4m Household Model Vertical Hydroponics Garden For 1,500 Leafy Vegetables And Herbs Comprising Of A Gothic-Roofed Greenhouse As Protective Structure For The Leafy Vegetables And Herbs, A Nutrient Solution Reservoir, A Delivery-Return Pipe Network, A Pump, An Electrical Circuitry And A Protective Cover

(Unit And Consumables For One Year Production)

#### Greenhouse Structure

- I. Structural Frame
- 1 Load Gravel & Sand S1
- 1 Load Gravel Mix
- 15 Bag Cement 40kg
- 150 Piece Hollow Blocks 4 Inches
- 10 Piece Rsb 10mm
- 1 Piece G.I. Pipe 1 Inch (Schedule 40), 6m
- 12 Piece G.I. Pipe 3/4 Inch (S 20)
- II. Roofing And Sidings
- 12 Unit Aluminum Profile Aluminum W/ Zigzag Wire
- 0.3 Roll Uv Plastic (7' X 90 M)
- 0.3 Roll Net Shading 0.4
- 0.3 Roll Fine Mesh Net 25x25
- 80 Piece Teck Screw 1 Inch

#### B. Hydroponics System

#### **Structural Frames**

- 16 Piece Tubular Pipe 1 Inches (1.5 Mm)
- 10 Kilogram Welding Rod Special
- 3 Set Hole Saw Cutter 15mm To 64mm
- 10 Piece Cutting Disc 4 Inches
- 3 Piece Cut Off Disc 14 Inches
- 5 Piece Grinding Disc 4 Inches
- 5 Gallon Epoxy Primer White
- 5 Gallon Gloss Paint White
- 4 Piece Paint Brush 3 Inches
- 6 Piece Round Bar 10mm (Plain)

#### Nutrient Film Technique Pipes

- 65 Piece PVC Pipe 2inches (Orange)
- 40 Piece PVC Elbow 2inches (Orange)
- 40 Piece PVC Tee 2inches (Orange)

#### Supply And Discharge Assembly

- 1 Unit Ibc Tank 1,000 L
- 10 Piece PVC Pipe 3/4 Inch (Blue)
- 10 Piece PVC Pipe 1/2 Inch (Blue)
- 5 Piece PVC Tee 3/4 Inch (Blue)
- 25 Piece PVC Tee 1/2 Inch (Blue)
- 20 Piece PVC Tee Reducer 1 Inch To 1/2 Inch (Blue)
- 25 Piece PVC Elbow 3/4 Inch (Blue)
- 50 Piece PVC Elbow 1/2 Inch (Blue)
- 20 Piece PVC Male Adapter 1inch (Blue)
- 20 Piece PVC Female Adapter 1inch (Blue)
- 6 Unit PVC Ball Valve 3/4 Inch
- 30 Unit PVC Ball Valve 1/2 inch
- 2 Unit Check Valve 3/4inch
- 5 Liter- Solvent Neltex
- 1 Liter Epoxy Pioneer Non- Sag

#### Electrical Assembly

- 1 Unit Submersible Pump 400 Watts
- 0.5 Roll Electrical Wire #12
- 1 Unit Magnetic Contactor 30 Amps
- 2 Unit Circuit Breaker 30 Amps
- 1 Unit Panel Board 4 Gang
- 2 Unit Switch 2 Gang
- 1 Unit Float Switch 30 Amps
- 2 Unit Outlet 3 Gang
- 2 Unit Led Light 18 Watts
- 2 Unit Junction Box Plastic
- 2 Unit Utility Box Plastic
- 3 Piece Electrical Tape Large
- Hydroponics Inputs

	2000 Piece - Hydroponic Foam 2 Inches 1 Lot - Seeds (Leafy) Pump House 3 Unit - Drum 200L 1 Lot - Masonry 1 Lot - Roofing Works Operation 18000 Piece - Seedlings 6000 Piece - Net Pots 10 Bottle - Nutrient Solution 12 Sack - Media	
8.	HYDROPONICS SMALL Kratcky Styrobox (10 Sets Model) A Styrobox Kratcky Hydroponics Is Made Up Of 10 Styro-Boxes With 8 Holes Occupying 8 Leafy Vegetables With A Toted Of 80 Leafy Vegetables, 80 Styrocups With Media, A Nutrient Solution, Canopy And Net Cover Made Up Of PVC Pipes And Green Nets For Protection From	
	Direct Sunlight Insects And Pests.  (Set Of 10 With Consumables For One Year Production)  2 Garden Structure  10 Unit – Styrobox Fruitbox	
	3 Pack – Pumice (15 Kg) 10 Piece - Sticker 160 Piece – Foam 20 Meter – PVC Pipe ½ Inch (5meter)	
	8 Piece – PVC Elbow 3-Way ½ Inch 4 Piece – PVC Elbow 4-Way ¼ Inch 4 Meter – Shade Net 70% (8 Feet Width) 1 Pack – Cable Tie	
	3 Operation 880 Piece – Seedlings 160 Piece – Net Pots 1 Set – Nutrient Solution	
9.	HYDROPONICS SMALL NFT Basic Model (A-Type) A 30cm X 100cm Area And 2m High Hydroponics Unit For 70 Growing Plants Comprising Of A 1 Inch X 1.5 Inches Frame To Accommodate 2 Inches PVC As Growing Tubes, A Nutrient Solution Reservoir At The Lowest Portion Of A Frame, A Delivery-Return Pipe Network And A Submersible Pump For The Circulation Of Water (Set Of 10 With Consumables For One Year Production) A. Garden Structure 1 Piece – PVC Pipe ½ Inch (3meter) 4 Piece – 2 Inches PVC Pipe 14 Piece – 2 Inches PVC Elbow 8 Piece – 3/16 Inch X 1 Inch Ange Bar (10 Feet) 1 Piece – ½ Inch Flexihose 1 Piece – Blue Drum 220 Liter 1 Piece – Pipe cement 1 Unit – 24 watts submersible pump B. Operation 840 Piece – Seedlings 10 Piece – Plastic Bottle 280 Piece – Net Pots 2 Sack - Media 1 Bottle – Nutrient Solution	
В.	Compliance to the Schedule of Requirements (Section VI)	
	I hereby certify to comply and deliver all the above require  Name:	
	Legal Capacity:	
	Signature:  Duly authorized to sign the Bid for and behalf of:	

# Section VIII. 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

<u>Legal Documents</u>					
	(a)	Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages); or			
	(b)	Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document, and			
	(c)	Mayor's or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas; and			
	(d)	Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).			
	chnica	<u>l Documents</u>			
	(f)	Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid (in a FORM prescribed by the QC-BAC-GOODS AND SERVICES); and			
	(g)	Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the 2016 revised IRR of RA No. 9184, within the relevant period as provided in the Bidding Documents (in a <b>FORM</b>			
	(h)	prescribed by the QC-BAC-GOODS AND SERVICES); <u>and</u> Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission; or			
	(i)	Original copy of Notarized Bid Securing Declaration; <u>and</u> Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or aftersales/parts, if applicable; <b>and</b>			
	(j)	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.			
Fin	ancial	Documents .			
	(k)	The Supplier's audited financial statements, showing, among others, the Supplier's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; <b>and</b>			
	(1)	The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) (in a <b>FORM prescribed by the QC-BAC-GOODS AND SERVICES)</b> ;			
		or A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.			

		Class "B" Documents
	(m)	If applicable, a duly signed joint venture agreement (JVA) 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.
<u>Oth</u>	ier do	cumentary requirements under RA No. 9184 (as applicable)
	(n)	[For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos] Certification from the relevant government office of their country stating that Filipinos are allowed to participate in government procurement activities for the same item or product.
	(o)	Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.
		II. FINANCIAL COMPONENT ENVELOPE
	(a)	Original of duly signed and accomplished Financial Bid Form; and
	(b)	Original of duly signed and accomplished Price Schedule(s).
	(A)	III. REQUIRED DOCUMENTS IN BDS SECTION 20.2 AND 21.2 N/A

#### Note:

1. Please refer to

[https://drive.google.com/file/d/1uiYurh5WrpBL5B\_pqpzAb62yucAblR1p/view?usp=sharing] for the following requirements:

- a. Computation of NFCC;
- b. List of All Ongoing Contracts/List of Contracts already awarded but not yet started;
- c. Statement of Single Largest Completed Contract
- 2. Please refer to GPPB Resolution No. 16-2020 for the following requirements:
  - a. Bid Form;
  - b. Price Schedule (for Goods Offered from Abroad/ Within the Philippines)
  - c. Bid Securing Declaration; and
  - d. Omnibus Sworn Statement

