



Government of the Republic of the Philippines

DAVAO DEL SUR STATE COLLEGE

PHILIPPINE BIDDING DOCUMENTS

**PROCUREMENT OF INFRASTRUCTURE
PROJECTS**

For the

**ESTABLISHMENT OF CACAO SENSORY AND
ISOTOPE LABORATORY**

**Sixth Edition
July 2020**

Preface

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

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

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

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

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

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

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

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Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

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

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

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

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

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

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

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

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

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

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

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

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



Invitation to Bid for the Establishment of Cacao Sensory and Isotope Laboratory

1. The **Davao del Sur State College** through the FY 2022 General Appropriations Act **intends to apply the sum of P15, 000, 000.00 for the Establishment of Cacao Sensory and Isotope Laboratory. The amount of Nine Million Pesos (Php 9,000,000.00)** being the Approved Budget for the Contract (ABC) to payments under the contract for the **Establishment of Cacao Sensory Building and Isotope Laboratory/ DSSCPSU 2022-01-002**. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The **Davao del Sur State College** now invites bids for the above Procurement Project. Completion of the Works is required for **273 calendar days upon receipt of the NTP**. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using non-discretionary “*pass/fail*” criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
4. Interested bidders may obtain further information from **Davao del Sur State College** and inspect the Bidding Documents at the address given below from **08:00 A.M to 05:00 P.M (Monday to Friday)** except holidays.
5. A complete set of Bidding Documents may be acquired by interested bidders on **January 25 to February 15, 2022** from given address and website/s below *and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Ten Thousand Pesos (Php 10,000.00)*.

It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.

Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids in any of the following payments options:

- Over-the-counter payment at DSSC-Cashier’s office, Brgy. Matti, Digos City, Davao del Sur;
- Over-the-counter deposit at Land Bank of the Philippines (LBP) Account No. – 0332-1103-65.

Prior to payment, bidders are advised to coordinate first with the BAC Chairperson, Engr. EDUARDO F. AQUINO, through mobile phone at (+63)948 270 7001 for the issuance of the “Payment Order” and instructions.

6. The **Davao del Sur State College** will hold a Pre-Bid Conference on **February 03, 2022 (01:00 P.M.)** at **Davao del Sur State College, Brgy. Matti, Digos City, Davao del Sur**, which shall be open only to all interested parties who have purchased the Bidding Documents but limited to one (1) physically present representative per bidder only. The Pre-bid Conference is likewise accessible online via **Zoom**.
7. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below, on or before **February 15, 2022 (01:00 P.M.)**. Late bids shall not be accepted.
8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 16.
9. Bid opening shall be on **February 15, 2022 (01:00 P.M.)** at **Davao del Sur State College, Brgy. Matti, Digos City, Davao del Sur**, which shall be accessible also online via **Zoom**.

Bids will be opened in the presence of the bidders' representatives who choose to attend at the address below. **Only one (1) representative of the Bidder shall be allowed to physically attend in the opening of bids.** Late bids shall not be accepted.

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

EDUARDO F. AQUINO, MS
Chairperson, Bids and Awards Committee
Brgy. Matti, Digos City, Davao del Sur
Mobile No. (+63)948 270 7001
E-mail Address: psu@dssc.edu.ph


EDUARDO F. AQUINO, MS
Chairperson, Bids and Awards Committee

Section II. Instructions to Bidders

Notes on the Instructions to Bidders

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

1. Scope of Bid

The Procuring Entity, **Davao del Sur State College** invites Bids for the “**Establishment of Cacao Sensory and Isotope Laboratory**” with Project Identification Number **DSSCPSU 2022-01-002**.

The Procurement Project (referred to herein as “Project”) is for the construction of Works, as described in Section VI (Specifications).

2. Funding Information

2.1. The GOP through the source of funding as indicated below for **2022** in the amount of **Nine Million Pesos (Php 9,000,000.00)**

2.2. The source of funding is:

a. NGA, the General Appropriations Act or Special Appropriations.

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manual and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or invitation to bid by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have inspected the site, determined the general characteristics of the contracted Works and the conditions for this Project, such as the location and the nature of the work; (b) climatic conditions; (c) transportation facilities; (c) nature and condition of the terrain, geological conditions at the site communication facilities, requirements, location and availability of construction aggregates and other materials, labor, water, electric power and access roads; and (d) other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices

The Procuring Entity, as well as the Bidders and Contractors, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex “I” of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

- 5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.
- 5.2. The Bidder must have an experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC adjusted, if necessary, by the Bidder to current prices using the PSA's CPI, except under conditions provided for in Section 23.4.2.4 of the 2016 revised IRR of RA No. 9184.

A contract is considered to be "similar" to the contract to be bid if it has the major categories of work stated in the **BDS**.
- 5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

There is no restriction on the origin of Goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN.

7. Subcontracts

- 7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than fifty percent (50%) of the Project.

The Procuring Entity has prescribed that:

a. Subcontracting is not allowed.

- 7.1. *[If Procuring Entity has determined that subcontracting is allowed during the bidding, state:]* The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criteria stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.
- 7.2. *[If subcontracting is allowed during the contract implementation stage, state:]* The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.

- 7.3. Subcontracting of any portion of the Project does not relieve the Contractor of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Contractor's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address and/or through videoconferencing/webcasting} as indicated in paragraph 6 of the **IB**.

9. Clarification and Amendment of Bidding Documents

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

10. Documents Comprising the Bid: Eligibility and Technical Components

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

the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

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

12. Alternative Bids

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

13. Bid Prices

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

14. Bid and Payment Currencies

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

15. Bid Security

- 15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.

- 15.2. The Bid and bid security shall be valid until *120 days* from the opening of bids. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

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

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

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

17. Deadline for Submission of Bids

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

18. Opening and Preliminary Examination of Bids

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

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

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

19. Detailed Evaluation and Comparison of Bids

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

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

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

20. Post Qualification

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

21. Signing of the Contract

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

Section III. Bid Data Sheet

Notes on the Bid Data Sheet (BDS)

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

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

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

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

Bid Data Sheet

ITB Clause	
5.2	<p>For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:</p> <p style="text-align: center;">Establishment of Cacao Sensory and Isotope Laboratory.</p>
7.1	Sub-contracting is not allowed.
10.1	<p>The following documents shall be part of the Technical Documents under Technical Component Envelope:</p> <ol style="list-style-type: none"> 1. Attachment for Ongoing Government and Private Contracts such as Notice of Award and/or Contract, Purchase Order and Delivery receipt or Sales Invoice. 2. The statement of the Bidder's SLCC shall be supported by the Notice of Award and/or Notice to Proceed, Project Owner's Certificate of Final Acceptance issued by the Owner other than the Contractor or the Constructors Performance Evaluation System (CPES) Final Rating, which must be at least satisfactory. In case of contracts with the private sector, an equivalent document shall be submitted 3. Duly Signed Manpower Utilization Schedule 4. Duly Signed Key Personnel Certificate / Contract of Employment 5. Duly Signed Key Personnel Bio-Data with PRC License/ Accreditation & Latest Professional Tax Receipt (PTR) 6. Certificate of Site Inspection
10.3	Prospective Bidder should possess a valid PCAB license minimum category requirement category for this Project is license category C & D or size range Small B
10.4	<p>The key personnel must meet the required minimum years of experience set below:</p> <p>FOR DESIGN PERSONNEL</p> <p>A. Design Architect</p> <ul style="list-style-type: none"> - The Design Architect must be duly-licensed with at least ten (5) years of experience in the design of residential, academic or institutional facilities, and shall preferably be knowledgeable in the application of Green Design Technology in school construction. <p>B. Structural Engineer</p> <ul style="list-style-type: none"> - The Structural Engineer must be a duly-licensed Civil Engineer with at least ten (5) years of experience in structural design and shall

preferably be knowledgeable in the application of Green Design Technology in school construction.

C. Electrical Engineer

- The Electrical Engineer must be a registered Professional Electrical Engineer with at least ten (5) years of experience in the design of lighting, power distribution and preferably knowledgeable in developments in emergent efficient lighting technologies and energy management.

D. Sanitary Engineer

- The Sanitary Engineer must be duly-licensed with at least ten (5) years of experience in the design of building water supply and distribution, plumbing, and preferably knowledgeable in waste water management/treatment, and emergent, alternative effluent collection and treatment systems, and DENR AO 08 s. 2016 (DAO 92-29 “Hazardous Waste Management).

CONSTRUCTION PERSONNEL

1. Project Engineer/ Architect

- The Project Engineer/Architect shall be a licensed architect or engineer with at least ten (5) years of experience in similar and comparable projects and shall preferably be knowledgeable in the application of rapid construction technologies.

2. Electrical Engineer

- The Electrical Engineer must be a registered Professional Electrical Engineer with at least ten (5) years of experience in the design of lighting, power distribution and preferably knowledgeable in developments in emergent efficient lighting technologies and energy management.

3. Sanitary Engineer

- The Sanitary Engineer must be duly-licensed with at least ten (5) years of experience in similar and comparable projects in the installation of building water supply and distribution, plumbing.

4. Safety Officer

- The safety officer must be an accredited safety practitioner by the Department of Labor and Employment (DOLE) and has undergone the prescribed 40-hour Construction Safety and Health Training (COSH).

10.5	The minimum major equipment requirements are the following:	
	<u>Equipment</u>	<u>Number of Units</u> (of at least)
	Excavator equipment	<u>1</u>

	1 bagger Cement Mixer	<u>1</u>
	Cut-off Machine	<u>1</u>
	Drill Machine	<u>1</u>
	Grinder Machine	<u>1</u>
	Vibrator Machine	<u>1</u>
	Welding Machine	<u>1</u>
	Compactor Machine (Roller)	<u>1</u>
15.1	<p>The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:</p> <p>a. The amount of not less than One Hundred Eighty Thousand Pesos [<i>two percent (2%) of ABC</i>], if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;</p> <p>b. The amount of not less than Four Hundred Fifty Thousand Pesos [<i>five percent (5%) of ABC</i>] if bid security is in Surety Bond.</p>	
20	<p>a. Latest and updated Tax Clearance b. Latest and updated PhilGEPS Platinum Membership Certificate c. Bidders must submit latest and updated tax returns filed through the Electronic Filing and Payments System (EFPS).</p>	
21	<p>Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.</p>	

Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

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

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

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

1. Scope of Contract

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

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

2. Sectional Completion of Works

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

3. Possession of Site

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

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

4. The Contractor's Obligations

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

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

5. Performance Security

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

6. Site Investigation Reports

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

7. Warranty

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

8. Liability of the Contractor

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

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

9. Termination for Other Causes

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

10. Dayworks

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

11. Program of Work

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

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

12. Instructions, Inspections and Audits

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

13. Advance Payment

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

14. Progress Payments

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

15. Operating and Maintenance Manuals

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

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

Section V. Special Conditions of Contract

Notes on the Special Conditions of Contract

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

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

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

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

Special Conditions of Contract

GCC Clause	
2	<i>Not Applicable</i>
4.1	The Procuring Entity shall give possession of all parts of the Site to the Contractor Upon receipt of Notice to Proceed.
6	The site investigation reports are: <i>NONE</i>
7.2	In case of permanent structures, such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures: Five (5) years.
10	a. Dayworks are applicable at the rate shown in the Contractor's original Bid.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within 5 calendar days of delivery of the Notice of Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is P 5,000.00.
13	The amount of the advance payment is fifteen (15%) percent of the Contract Price upon approval of the Notice to Proceed.
14	Materials and equipment delivered on the site but completely put in place shall be included for payment.

Section VI. Performance Specifications and Parameters

Notes on Specifications

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

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

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

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

Sample Clause: Equivalency of Standards and Codes

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

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

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

**PARAMETERS ON THE
ESTABLISHMENT OF
CACAO SENSORY AND
ISOTOPE
LABORATORY**

Section VI. Performance Specifications and Parameters

In 2017, two separate house bills were passed, the reason why this two-year old college was given birth. The creation of this college coupled with the experience of calamity brought about by a series of tremors as well as the COVID 19 pandemic has sat the need for the institution to adapt to the new normal. While the Davao del Sur State College (DSSC) is in its infancy stage, it poses a huge challenge of realizing its vision amidst the tests of time.

The College per Republic Act 11220 is mandated to primarily provide advance instruction and professional training in education, agriculture, engineering and technology, agribusiness, information technology and other related fields of study. It shall also undertake research, extension services, and production activities in support to the socioeconomic development of Davao del Sur and provide progressive leadership in its areas of specialization.

In 1989, SPAMAST as the mother college of Davao del Sur State College, through the initiative of the second president - Dr. Francisco C. Ladaga, Sr has acquired a total of 17.5 hectares for laboratory and instruction in different locations through acquisition and donations from private and the Provincial Local Government Unit (PLGU) of Davao del Sur. This started the addition of the new campus which is the Digos Campus.

Six (6) years later, in 1995, an additional 28-hectare land in Matanao, Davao del Sur was possessed intended for production, research and extension services to create a significant niche in the agricultural development of the province.

As the academic offerings grew, SPAMAST in 2000, repositioned itself by reorganizing the campuses into colleges which renamed Digos Campus became the College of Agricultural Sciences (CAS) with laboratory and production site in Matanao.

In 2006, three (3) programs such as the Bachelor in Agri-Business, Bachelor in Agricultural Technology and secondary teacher education received first level accreditation status in Digos Campus. Emerged during this time the offering of new programs like the Bachelor of Science in Information Technology and short-term courses with TESDA.

In 2017, a bill was filed by Congresswoman Lorna B. Bandigan for the removal of SPAMAST-Digos Campus from the SPAMAST-Malita, and to have a better set-up for Digos Campus in the possible removal, a separate bill was filed by Congresswoman Mercedes C. Cagas of Davao del Sur, converting SPAMAST- Digos Campus to Davao del Sur State College. Finally, on February 21, 2019, by virtue of the President of the Philippines, Rodrigo Roa Duterte, the law entitled “An Act Separating the Southern Philippines Agri-Business and Marine and Aquatic School of Technology (SPAMAST)

– Digos Campus in the City of Digos, Davao del Sur from the SPAMAST in the Municipality of Malita, Davao Occidental, and Converting it into a State College to be Known as the Davao del Sur State College and Appropriating Funds Therefor” was signed as Republic Act 11220.

Having complied with all the requirements, the conversion of the college was approved by the Commission on Higher Education (CHED) en banc through Resolution No. 494-2019, on August 13, 2019.

Dr. Maricar Casquejo, the Regional Director of the CHED Region XI was designated as the officer In-charge of DSSC from December 12, 2019 to September 27, 2020.

On September 28, 2020, after an extensive search process, the DSSC Board of Trustees approved the appointment of Dr. Augie E. Fuentes as the first president of the institution.

Offering of Programs

Davao del Sur State College (DSSC) which envisions to become an “internationally-recognized quality driven state institution of higher learning”, will pursue excellence in all its actions providing a safe place for its learners to hone their potentials to innovate and create meaningful learning experiences. Part of this is putting up of facilities which could enhance the avenue for a conducive learning environment.

The College has initially started to widen its competitive advantage over its rival neighbouring colleges in terms of program compliance, accreditation and ISO certification. Besides, having the geographical advantage of extension campuses in Sulop and Matanao which captures the markets from South General Santos City and from the West-North Cotabato.

There are 16 programs offered (Table 1) by the college and several consortium programs in graduate level in highly recognized state colleges and university in Mindanao. The table includes new programs.

At present, there are six (6) or 46% of academic programs are program complaint by the Commission on Higher Education Region XI.

Table 1. Programs Offered

<i>Undergraduate Programs Offered in DSSC</i>	
<ul style="list-style-type: none"> • Bachelor of Science in Agroforestry 	<ul style="list-style-type: none"> • Bachelor of Secondary Education Major in English
<ul style="list-style-type: none"> • Bachelor of Science in Agriculture Engineering 	<ul style="list-style-type: none"> • Bachelor of Secondary Education Major in Biological Science
<ul style="list-style-type: none"> • Bachelor of Science in Information Technology 	<ul style="list-style-type: none"> • Bachelor of Secondary Education Major in Technology and Livelihood Education
<ul style="list-style-type: none"> • Bachelor of Science in Agriculture 	<ul style="list-style-type: none"> • Bachelor of Technology and Livelihood Education Major in Home Economics
<ul style="list-style-type: none"> • Bachelor of Science in Agri-Business (BSAB): major in Enterprise Management 	<ul style="list-style-type: none"> • Bachelor in Public Administration
<ul style="list-style-type: none"> • Bachelor of Science in Agricultural and Biosystem Engineering 	<ul style="list-style-type: none"> • *Bachelor of Science in Development Communication
<ul style="list-style-type: none"> • Bachelor of Elementary Education 	<ul style="list-style-type: none"> • *Bachelor of Science in Accounting Technology
<ul style="list-style-type: none"> • Bachelor of Secondary Education Major in Mathematics • Major in General Science • Major in Agri-Fishery Education 	<ul style="list-style-type: none"> • *Bachelor of Science in Accounting Information Systems
<i>Graduate Programs</i>	
<ul style="list-style-type: none"> • Master of Arts in Education (MAEd) Major in Educational Management • Major in Language Teaching • Major in Mathematics Teaching • Major in Science Teaching 	<ul style="list-style-type: none"> • Master in Business Administration (MBA) Major in Agri-business Management • Teacher Certificate Program

Enrolment Trends

It was 2nd semester of SY 2019-2020 that Davao del Sur State College begun operating separately from the mother institution (SPAMAST). The enrollees then counts to 3,497. The next school year (SY 2020-2021), there was an increase of 1,580 (45%), though there was a decrease of 465 (9%) during the 2nd semester as anticipated. However, the next semester, SY 2021-2022 given the new programs offered, the college foresee more or less than 5,000 as projected. The figure on comparative enrollment includes 1st semester SY 2016-2017 to 1st semester 2019-2020 which is the enrollment trends in SPAMAST Digos Campus.



The main campus library has the following current amenities and features with the limited floor area in spite of fast growing population:

General Circulation	20 seaters
Carrels	5 seaters
Learning Commons	20 seaters
Reading Area	80 seaters

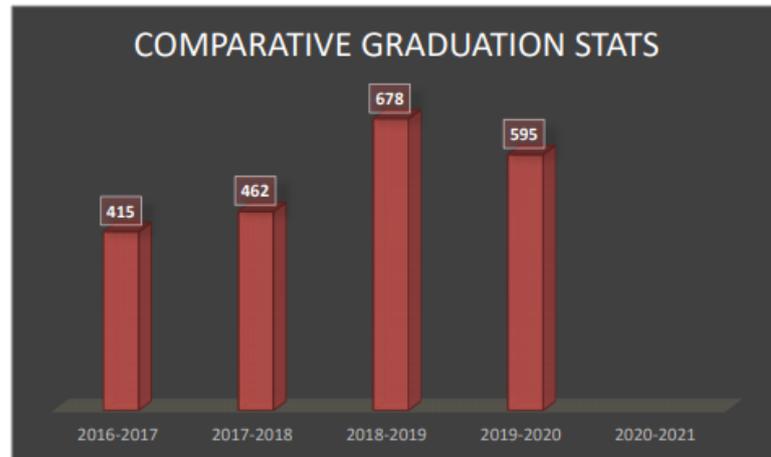
The minimum space requirement of AACCUP accreditation is 10% of the entire population that is supposedly 460 seating capacity the library should provide. Given the current condition, the actual capacity of the DSSC main library could only cater 125 seaters. In addition, the Regional Quality Assurance Team (RQuAT) from CHED has required the minimum of 15% seating capacity for reading areas of the college library.

Graduation Trend

For the past four years, DSSC (formerly SPAMAST- Digos Campus) has an increasing number of graduates. However, due to pandemic, graduates decreased in SY 2019-2020. However, looking at the statistic, library facility could still not suffice the required space to offer conducive learning for the students.

Comparative Report on Graduation
SY 2016-2017 TO SY 2020-2021

School Year	No. of Graduates
2016-2017	415
2017-2018	462
2018-2019	678
2019-2020	595
2020-2021	



The Davao del Sur State College (DSSC) functions dynamically in a fast-changing environment. Given the Universal Access to Quality Tertiary Education Act of 2017 (R.A. 10931) that intends to promote and protect the rights of all Filipinos to accessible quality education, the college has to accommodate as many enrollees and give priority to academically able students from poor families.

In congruence with this, the college intends to adapt the paradigm shift in delivering services, from traditional reading area to adapting learning commons and e-library.

The project will be implemented using the guidelines for the **design-and-build scheme** for the procurement and contract implementation of infrastructure projects as per R.A.9184 and its Implementing Rules and Regulations.

I. Project Description

1. General

Davao del Sur State College aims to provide holistic support to the cacao industry in Davao del Sur and Mindanao. Target activities span from cocoa farming support, cacao products production, business development, sensory and fundamental research. To reach these goals, the project aims to establish three (3) components: Cacao Production and sensory laboratory, Isotope laboratory and Cacao nursery.

With the increasing concerns about food insecurity and the need to feed a growing population, there is a converted focus on giving women the access to productive resources as men to boost productivity. Closing the gender gap in agricultural yields would reduce the number of undernourished people and could increase agricultural output in developing countries. Every woman in any industry is unique and has the choice to take on leadership roles, thus it is a great step towards overcoming gender inequality in farming.

This facility will provide learning resources adopting new technologies in cacao bean grading among women and men users. Inputs of women and men to agricultural decision-making will be incorporated for future farming decisions to improve its social and economic position. The users of this learning facility must not discriminate on the basis of gender or marital status and must not test for pregnancy and differently-abled persons. Furthermore, the facility ensured that all users must not engage in, support, or tolerate behavior that is sexually intimidating, abusive or exploitative.

For monitoring and evaluation of the project, collection of sex-disaggregated data of the women and men users will also be practiced.

To foster shared understanding of constraints to longevity and to enhance the design of the project at the start, an exit strategy in the early phases allows users to clearly define its goals and outline what is to be achieved at the end.

The establishment of Cacao Laboratory will be primarily used for cacao and cocoa production, sensory and quality grading laboratory whereas the Isotope laboratory will be used to house future instruments for measuring stable isotope analysis. As there is already an existing nursery within DSSC, the project's part of the budget will go to rehabilitation of this facility. Detailed breakdown of the project will be as follows:

- (1) Allocated Budget for the Contract: 15 Million PhP (building and equipment); Target year of completion (2022)

- (a) Building initial capacity for cacao production and cacao grading with focus on sensory, physical and isotope analysis under the budget of Nine Million Pesos Only (9,000,000.00 PhP) further broken down as follows:
 - (i) Cacao Sensory Production and cacao grading laboratory building: Five million five hundred thousand pesos only (5,500,000.00 PhP)
 - (ii) Isotope Laboratory and rehabilitation of clonal nursery: Three million five hundred thousand pesos only (3,500,000.00 PhP)
- (b) Equipment outlay including production, technical and scientific equipment under the budget of Six Million Pesos Only (6,000,000 PhP)

The primary objective in the Isotope laboratory design is to provide a safe environment for DSSC students and faculties to conduct research and experiments. Therefore, all health and safety hazards must be identified and carefully evaluated so that protective measures can be incorporated into the design. The basic laboratory design features listed in this section illustrate some of the basic health and safety elements to include in all new laboratories of DSSC.

2. Scope of Work

In accordance with the Design and Build Scheme for the Procurement of Infrastructure Projects of RA 9184, the Contractor shall perform both the planning and implementation phases of the project. As such, he shall be solely responsible for the general integrity of the detailed engineering design of the building structure. Likewise, he shall also be responsible for the general design and liable for any structural defects and/or failures that may be found in the completed Project.

The Contractor shall be aware that the Procuring Entity does not guarantee that the preliminary data provided herein are fully correct, up to date and are applicable to the project. He shall be solely responsible for the accuracy and applicability of all data that he will use in his design and build proposal and services.

By submitting his proposal, the Contractor expresses that he has thoroughly examined, carefully reviewed and fully understands all the information including governing laws, standards, conditions and requirements pertinent to the implementation of the project and that his proposal is in agreement therewith.

1.1 Preliminary Design.

Prospective bidders shall submit in 20”x 30” blueprint (One set only).

(For the drawings/designs) the **development proposal** containing the design drawings based on the design concept provided in section VI: All measurements shall be expressed in metric units.

- i. 3D walkthrough
 - (For Exterior showing all the sides and top view of the roof)
 - (For Interior showing the production area)

- ii. Site Development Plan of scale not smaller than 1:200 (signed and sealed)
- iii. Perspective View of the Building, Photorealistic Presentation (signed and sealed)
- iv. Floor Plans, clearly labeled (signed and sealed)
- v. Building Elevations, four (4) views, clearly labeled (signed and sealed)
- vi. Building Sections, two (2) sections, clearly labeled (signed and sealed)
- vii. Interior Designs, in perspective view (signed and sealed)
- viii. Engineering Plans and Details (*Structural-Foundation plan*) (signed and sealed)
- ix. Signed and sealed structural design, analysis of the structure.

1.2 Detailed Design and Bill of Quantities

- Detailed Architectural Plans and Design (Refer to section VI)
- Detailed Structural Plans and Design (Refer to section VI)
- Detailed Electrical Plans and Design (Refer to section VI)
- Detailed Sanitary and Plumbing Plans and Design (Refer to section VI)
- Structural Design Computations including Test Results, Seismic Analysis and Electrical Design Computations
- General Notes on the manner under which the working plan is to be executed
- Technical Specifications of works and type and quality of construction materials to be used
- Bill of Quantities following the prescribed format given in section VIII, Detailed Cost Estimates indicating the unit prices of construction materials, labor rates and equipment rentals and Detailed Unit Price Analysis

The hard copies of the Detailed Designs/Drawings shall be printed on 20" x 30" blueprint. All measurements shall be expressed in metric units. For clarity and ease of appreciation, use different line-weights (and line-type and colors if necessary), proper labeling of rooms and furniture/fixtures, appropriate drawing scales as per applicable building codes and standards, and appropriate font style and height for both the printed and electronic copies of the drawings. The following documents shall be deemed complete and comprehensive.

- 1.3** The **winning bidder** shall submit as-built drawings, shop drawings and any other drawings related to the project as required by the HoPE.

- 1.4 Construction.** As a rule, contract implementation guidelines for the procurement of Infrastructure projects shall comply with Annex “E” of this IRR. The following provisions shall supplement these procedures:
- 2.4.1 No works shall commence unless the Contractor has submitted the required documentary requirements and the Procuring Entity has given written approval. Work execution shall be in accordance with reviewed and approved documents.
 - 2.3.2 The Contractor shall be responsible for obtaining all necessary information as to risks, contingencies and other circumstances which may affect the works and shall prepare and submit all necessary documents specified by the Procuring Entity to meet all regulatory approvals as specified in the contract documents.
 - 2.3.3 The Contractor shall submit a detailed program of work within fourteen (14) calendar days after the issuance of the Notice to Proceed for approval by the Procuring Entity that shall include, among others:
 - 2.3.3.1 The order in which it intends to carry out the work including anticipated timing for each stage of design/detailed engineering and construction;
 - 2.3.3.2 Periods for review of specific outputs and any other submissions and approvals;
 - 2.3.3.3 Sequence of timing for inspections and tests as specified in the contract documents;
 - 2.3.3.4 General description of the design and construction methods to be adopted;
 - 2.3.3.5 Number and names of personnel to be assigned for each stage of the work;
 - 2.3.3.6 List of equipment required on site for each major stage of the work; and
 - 2.3.3.7 Description of the quality control system to be utilized for the project.
 - 2.3.4 Any errors, omissions, inconsistencies, inadequacies or failure submitted by the Contractor that do not comply with the requirements shall be rectified, resubmitted and reviewed at the Contractor’s cost. If the Contractor wishes to modify any design or document which has been previously submitted, reviewed and approved, the Contractor shall notify the Procuring Entity within a reasonable period of time and shall shoulder the cost of such changes.
 - 2.3.5 As a rule, changes in design and construction requirements shall be limited only to those that have not been anticipated in the contract documents prior to contract signing and approval. The following guidelines shall govern approval for change or variation orders:

2.3.5.1 Change Orders resulting from design errors, omissions or non-conformance with the performance specifications and parameters and the contract documents by the Contractor shall be implemented by the Contractor at no additional cost to the Procuring Entity.

2.3.5.2 Provided that the Contractor suffers delay and/or incurs costs due to changes or errors in the Procuring Entity's performance specifications and parameters, he shall be entitled to either one of the following:

2.3.5.2.1 An extension of time for any such delays under Section 10 of Annex "E" of RA 9184; or

2.3.5.2.2 Payment for such costs as specified in the contract Documents, provided, that the cumulative amount of the variation order does not exceed ten percent (10%) of the original contract price.

2.3.6 The contract documents shall include the manner and schedule of payment specifying the estimated contract amount and installments in which the contract price will be paid.

2.3.7 The Contractor shall be entitled to advance payment subject to the provisions of Section 4 of Annex "E".

2.3.8 The Procuring Entity shall define the quality control procedures for the design and construction in accordance with agency guidelines and shall issue the proper certificates of acceptance for sections of the works or the whole of the works as provided for in the contract documents.

2.3.9 The Contractor shall provide all necessary equipment, personnel, instruments, documents and others to carry out specified tests.

2.3.10 This design and build projects shall have a minimum Defects Liability Period of one (1) year after contract completion or as provided for in the contract documents. This is without prejudice, however, to the liabilities imposed upon the engineer/architect who drew up the plans and specification for a building sanctioned under Section 1723 of the New Civil Code of the Philippines.

2.3.11 The Contractor shall be held liable for design and structural defects and/or failure of the completed project within the warranty periods specified in Section 62.2.3.2 of the IRR.

1.5 Completion. Upon completion, the Contractor shall submit a complete set of As-Built (AB) Documents to the Procuring Entity as described in their contracts. These shall be submitted in both electronic (1 copy-CAD file) and hard (3 copies: 1 orig. copy, 2 reproduced copies). The hard copies of the Detailed Designs/Drawings shall be reproduced on 20" x 30" blueprint.

I. Time Frame

The Contractor is required to complete the Project within a period as shown below to start upon the receipt and signing of Notice to Proceed:

Activity	Months											
	Jan 2022	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov 2022	Dec 2022
Planning, Detailed Design and approval												
Construction and acquisition of all applicable permits												

II. Approved Budget for the Contract (ABC)

The total Approved Budget for the Contract (ABC) of this Design and Build Project is Nine Million Pesos only (PhP 9, 000, 000.00). This are further partitioned into two building infrastructure

- 205.37 sqm. Cacao Production and sensory laboratory
- 172.95 sqm. Isotope Laboratory including rehabilitation of clonal nursery

Part 1: Cacao Sensory Production and Cacao Grading Laboratory

III. Design Concepts and Requirements

Allocated budget:	PhP 5,500,000.00
Important Notes:	<ul style="list-style-type: none"> ● Lobby or receiving area shall be aesthetically pleasing, space-saving (minimalist modern) concept with wood accents and shall give the impression of a chocolate and cocoa factory ● Production area shall be well-ventilated and shall give the impression of a wide space ● Production area shall follow the minimum standards for food manufacturing hygiene standards ● Sensory laboratory should follow the design mentioned in this proposal as the design was based on standard ISO 8589
Total Area	205.37 sqm

DESIGN PARAMETERS

ARCHITECTURAL DESIGN PARAMETERS

I. Codes and Standards

The Architectural Works shall be in accordance with the following Laws, Codes and Standards.

Laws and Codes:

1. National Building Code of the Philippines and its Latest and Amended IRR
2. RA 9266 or Architectural Law and its Latest and Amended IRR
3. BP 344 or Accessibility Law and its Latest and Amended IRR
4. RA 9514 Fire Code of the Philippines
5. Existing Local Codes and Ordinances
6. And other Laws that applies to the projects
7. Bureau of Product Standards (BPS)
8. Underwriters Laboratory (UL)

II. General Drawing Guidelines

1. General:

- All drawings shall be computer-drafted.
- Keep the same orientation for all plans. The north orientation shall be indicated in all architectural floor plans. The orientation of the architectural plans shall be consistent with all the engineering plans.
- Existing buildings and new works shall be clearly indicated and labeled in the site plans.
- Detailed plans shall have a scale not smaller than 1:50 meters.
- All materials shall be fire and moisture resistant, non-toxic and non-attractive to termite attack.
- Door knobs shall be of lever type and made of stainless steel for all wooden doors. Provide grab bar stainless steel (304) 1” diameter for all frameless glass doors. Installation height shall conform to BP 344.
- Use flat latex paints for ceilings. Interior wall finish shall be of semi-gloss acrylic latex paints, while exterior finish shall be of watertight solvent-based paints.
- Spot details like plans, elevations, and sections shall have a scale not smaller than 1:10 meters.
- Avoid notes such as ‘see architectural detail’ or ‘see structural’.
Always refer with a call out to the specific detail drawing and sheet

2. Site Development Plan:

- The site development plan shall have a scale not smaller than 1:200 meters and shall show the structures in relation to each other and its natural or built surroundings.
- The main entrance and facade of the building shall be oriented perpendicular to the access road.
- Wide entrance approach shall be incorporated in the plan.
- Site Development Plan shall include the following.
 - a. Reference location of existing trees
 - b. Reference location and footprint of existing buildings, with the corresponding building names and dimensions, including distances between adjacent buildings, and distances between buildings and the nearest property line.

3. Floor Plans:

- All plans shall be 1: 100 meters. The same scale shall be used for the rest of the architectural, structural, sanitary, plumbing, electrical plans, except for each trade’s site plan, detailed plans and spot details.
- Provisions for floor spaces deemed necessary but not specifically listed in the table (e.g., hallways, waiting area, receiving lobby, etc.) shall be provided.

Drawing Requirement:

- Reflect floor space designations and occupancy, floor elevations and finishes, doors and windows with Clear and Readable labels/callout.
- Unless areas indicated for blow-up details, indicate dimensions for all plan elements.
- Elevation callouts shall be indicated on the floor plans and shall be consistent with the elevation drawing.
- Section line callouts on the floor plans shall be consistent with the section drawings.
- Detail callouts shall be consistent with the blow-up/spot detail drawings.
- Other callouts may be used for toilets, stairs, etc.
- Door callouts shall be circles with the proper numbering, e.g. D/1.
- Window callouts shall be hexagons with the proper numbering, e.g. W/1.

Minimum Floor Space Allocation

Space Allocation	Floor Area
● Entry Porch/Ramp	7.56 sqm + 27.62 sqm
● Lobby with information counter and display counter	25.00 sqm
● Production area (White zone)	39.41 sqm
● Hallway	7.28 sqm
● Dressing area/Toilet/Shower room	15.00 sqm
● Quality grading laboratory	36.00 sqm
● Training/sensory room	36.00 sqm
● Kitchen/ Red zone	11.50 sqm

Minimum Room Requirements

Quality Grading Laboratory

- **Provide and conspicuously display printed texts of 80mm height indicating the title QUALITY GRADING LABORATORY outside the room. The design of the board and label need not to be plain but shall be aesthetically pleasing and apt for the chocolate and cocoa theme**
- **Under the two (2) built in instrument counters, provide under counter built in cabinets, shelves and drawers with the following dimensions:**
 - **Total Length: 8.00 meters**
 - **Provide two (2) shelves and two (2) drawers per equally distributed cabinet**
 - **Provide one (1) meter leg space at the center**
- **Provide one (1) unit built-in analysis working table with onyx overhang countertop**
 - **Total Length: 4.675 meters**
- **Provide five (5) units of white bar stool adjustable chairs with sufficient back support; dimensions shall be appropriate to allow ergonomic adjustments/compatibility while working in the analysis working table**
- **Provide one (1) working table with stainless steel shelf and drawers; countertop made of white onyx stone with the following dimensions:**
 - **Length: 1.5 meters**
 - **Width: 1.5 meters**
- **Provide one way viewing glass window facing hallway with view in favor of hallway. The dimensions as follows**
 - **Width: 2.0 meters**
 - **Height: 1.2 meters**
- **Provide combination fixed transom and awning glass window facing exterior, adjacent to the analysis working table**
 - **For dimensions, refer to schedule of windows**

- Provide sufficient LED lights which can provide 300-500 lux illumination in the room for detailed analysis. This shall mimic daylight (6500K) and shall be flush mounted in the ceiling
- Provide air conditioning unit using the latest split type inverter technology capable to maintain room temperature at 25C maximum
- Provide three (3) two-nodes LAN outlet
- Provide electrical outlet strategically positioned for equipment:
 - Provide eight (8) wall-mounted three prong universal convenience outlet
 - Provide central one (1) ceiling mounted retractable three prong universal convenience outlet

i. Training/Sensory Room

General Description and function of the room: The room should comply with the general guidance for design of test rooms intended for sensory analysis of products under known and controlled conditions with minimum distractions; to reduce the effects that psychological factors and physical conditions can have on human judgement.

- Provide and conspicuously display printed texts of 80mm height indicating the title SENSORY LABORATORY outside the room. The design of the board and label need not to be plain but shall be aesthetically pleasing and apt for the chocolate and cocoa theme
- Construct five (5) test booths made of laminated wooden boards except for the working table within the test booth which shall be made of white onyx countertop. Follow the following requirements of the individual test booths as these are very specific to the sensory ISO 8589 standards
 - Provide five (5) units of adjustable and ergonomic white chair
 - Working table shall be 0.8 meters wide and 0.5 meters deep with space inclusive of the spit sink and faucet. Consider PWD in the entire width of the booth
 - Height of partitions for each booth shall be at least 0.70 meters from the working table

- **Each booth shall be numbered with conspicuous texts on the partition wall facing the entry door for easy visuals upon entry. Design and aesthetics of the labels shall conform with the overall building theme. Labels shall be:**
 - 1
 - 2
 - 3
 - 4
 - 5
- **Provide secured bracket mounting for holding electronics such as computer tablet**
- **Provide sliding windows as opening for easy passage of samples from the production area serving counters to test booths. The openings shall be covered by sliding doors or hatches which close quietly. Recommended dimensions**
 - width: 0.40 meters
 - height: 0.30 meters
- **Control switch requirement:**
 - **Provide a total of ten (10) control switches inside the booth with each booth having one of each switches: (the purpose of this switches is to provide non-verbal cue to the production people from test subjects on the status of their analysis**
 - **Green Switch: corresponding to Green light indicator in the production area**
 - **Red Switch: corresponding to Red light indicator in the production area**
- **Light requirements: the light requirements for each sensory booths are very specific and must be followed strictly**
 - **Provide a total of twenty (20) colored light bulbs for all booths on which control switches are color coded with the same color of the corresponding light in the serving counter wall in the production area. These lights shall be placed inside the booth in an area where they could sufficiently**

mask (masking effect) the entire lighting of the working table in the test booth without blinding the test subjects.

- **Each booth shall be provided with one (1) of each color; total of four (4) different light bulbs per booth**
 - **Green: Provide total of five (5) bulbs**
 - **Red: Provide total of five (5) bulbs**
 - **White: Provide total of five (5) bulbs**
 - **UV: Provide total of five (5) bulbs**
- **Provide sufficient LED lights which can provide 300-500 lux illumination in the room for detailed analysis. This shall mimic daylight (6500K) and shall be flush mounted in the ceiling . The room shall also serve as training or meeting room**
- **Provide all necessary accessories to make the room soundproof or to minimize external noise**
- **The room highly require an odor free environment so installation of carbon filters and/or sufficient exhausts for good air circulation are highly recommended**
- **Provide air conditioning unit using the latest split type inverter technology capable to maintain room temperature at 25C maximum**
- **Provide one way viewing glass window facing hallway with view in favor of the production area. The dimensions as follows**
 - **Width: 0.30 meters**
 - **Height: 1.20 meters**
- **Provide three (3) two-nodes LAN outlet**
- **Provide electrical outlet for equipment:**
 - **Provide eight (4) wall-mounted three prong universal convenience outlet**
 - **Provide central one (1) ceiling mounted retractable three prong universal convenience outlet**

ii. Production Area

General Description and function of the room: The room shall comply with the basic hygiene standards for food manufacturing design without compromising the aesthetic appeal.

- **Provide and conspicuously display printed texts of 80mm height indicating the title PRODUCTION on the door facing the lobby. The design of the board and label need not to be plain but shall be aesthetically pleasing and apt for the chocolate and cocoa theme**
- **Provide one (1) serving counter adjacent to the wall facing the sensory test booths. Dimensions as follows:**
 - **Width: 0.40 meters**
 - **Length: 4.20 meters**
 - **Provide built-in cabinets and shelves under the serving counter equivalent to five (5) equal compartments corresponding approximately each test booth width**
 - **Control switch and indicator button requirements: These parameters shall be strictly followed**
 - **Provide ten (10) indicator lights corresponding to the control switches in the test booth. Each booth shall have one of each indicator light situated above the sliding window**
 - **Red indicator light: total of five (5) for all booths**
 - **Green indicator light: total of five (5) for all booths**
 - **The light need not necessarily be a light bulb as these are only signal lights. Button lights can also be considered**
 - **Provide twenty (20) properly color coded control switches corresponding to the bulbs in the test booth. The main purpose is that the control of the lights within the test booth shall be under the discretion of the production staff**
- **Provide fourteen (14)-compartment closet made of stainless steel**
 - **Length: 2.8 meters**
 - **Height: 2.10 meters**

- Exterior glass panel shall be a combination of transom and awning glass. For dimensions, refer to the schedule of windows

- Wall furnishings shall be aesthetically pleasing with design texts
 - #W-1: Shall be furnished with 100 mm x 200 mm white brick type wall tile.
 - Provide the texts “CRAFT YOUR FUTURE” using panaflex materials with warm white lights
 - Provide the logo of Davao del Sur State College using panaflex materials with warm lights

- Provide a foldable PVC wall divider with color and design appropriate for the overall design. The purpose of the divider is to hide the serving counter from the view of the test subjects who will enter the sensory room
 - Length: 1.2 meters
 - Height: 1.8 meters

- Provide two (2) two-nodes LAN outlet

- Provide electrical outlet for equipment
 - Provide total of eight (8) wall-mounted three prong universal convenience outlet with three (3) specific for the serving counter
 - Provide two (3) ceiling mounted retractable three prong universal convenience outlet strategically positioned across the production for ease of use on portable equipment.

- Provide sufficient LED lights which can provide 300-500 lux illumination in the room for detailed analysis. This shall mimic daylight (6500K) and shall be flush mounted in the ceiling . Lights shall have cover to prevent contamination in case of breakage

iii. Lobby

General Description and function of the room: The receiving/information counter serves as the first point of contact for the public with the Cacao sensory and production building. It also serves as a visitors lounge and waiting area for assessors therefore it should be the most well-designed room. The booth will serve as both information and office for assigned staff

- **Provide and conspicuously display printed texts of 80mm height indicating the title INFORMATION on the information counter. The design of the board and label need not to be plain but shall be aesthetically pleasing and apt for the chocolate and cocoa theme**
- **Provide an L-shaped information booth with one side slightly less elevated and wider as this will serve as office table. Table shall be made of wood with glossy finish and need not be plain.**
- **Provide built in cabinets, shelves and drawers**
- **Provide four (4) high bar chairs made of wood and steel and design appropriate for the concept of the building; the accent should be on the concept of wood bar**
- **Provide one (1) handwashing sink with basin type ceramic and wood counter**
- **Aesthetically pleasing wood bar concept mirror shall be placed in front of handwashing sink**
- **Provide a Tsikwate bar for drinking either coffee or chocolate on which materials shall be made of wood**
- **Provide sufficient LED lights which can provide 300-500 lux illumination in the room**
- **Provide optional ambiance light appropriate for the theme**
- **Windows shall be combination of awning/fixed window type whose height spans from floor to ceiling. Refer to the schedule of windows**

v. Kitchen (Red Zone)

General Description and function of the room: This room serves as the entry point for ingredients and raw materials as well as for hot or fire prone equipment. It serves as a prestaging area

- **Provide perimeter grills and sliding steel door for security**

- **Open area covered only with roof to protect machine and ingredients from rain**
- **Design should be aesthetically pleasing and complements the lobby as this is also a first visual touchpoint of the building**

vi. Hallway (Floor)

- **Provide 1% slope to prevent water from production area from going into dressing area, toilet and shower**

vii. Shared Comfort rooms and shower

- **Comfort rooms shall be furnished with complete sets of fixtures including stainless grab bars and urinals (G.N./PWD C.R.). Floors and walls shall be tiled finish (with trims) of colors and pattern as approved by the Procuring Entity or his representative (From Floor to ceiling. Ceiling height – 2.4 m).**
- **Provide lavatory with pedestal for (G.N./PWD C.R.)**
- **The design of the entire toilet shall be compliant to BP 344 (accessibility law) for PWD (Person with Disabilities)**
- **For identification, handicapped symbol (with printed texts if necessary) shall be displayed on the entrance door.**

III. ARCHITECTURAL WORKS

a. Floor Plans:

- The structural, sanitary, electrical, plumbing and mechanical designs are required to refer to architectural plans and specifications in case of discrepancies. If an engineering design will have any possible conflict or interference on the architectural design, the latter may be adjusted provided the aesthetic value will not be compromised.
- The architectural and engineering design plans shall be consistent all through out in terms of dimensions and locations of columns, beams, walls, roof line, conduits, pipes and fixtures among others. Column and beam grid lines shall also be consistent in all the architectural and engineering plans.
- Public toilets shall have provisions and fixtures for persons with disability as required by BP 344. If enough space allows, toilets specially made and designated for persons with disability is preferable.

b. Walls:

Foldable wall divider shall be made of PVC material.

Regular steps shall have risers at least 150mm high and treads at least 350mm wide. Handrails shall be 900mm high. Clearances shall conform with the requirements of the Fire Code of the Philippines. Handrails must be 304 stainless steel (1.5" diameter). Railings must be 16mm square bars of 150mm O.C. Use aluminum step nosing 2" wide for all steps.

- Concrete hollow block 6" thick (600 psi) on all external walls including entire walls for the Training/Sensory Room. All the other rooms have an interior CHB walls 4" thick (600 psi) cement plastered and painted finished

c. Floors:

Floor finish parameters

- a. **#F-1:** Shower room and toilet floors shall be made of 300x300 mm ceramic unglazed tile (matte white), non-skid
- b. **#F-2:** Entry Porch, Lobby and Kitchen (Red Zone) shall be made of 100x1000 mm ceramic unglazed tile (Earth/wood pattern), non-skid
- c. **#F-3:** Training Sensory Room, Quality Grading Room, Hallway and Production shall be made of easily wipeable, non-slip/skid, acid-resistant, non-toxic 400x400 mm ceramic unglazed tile matt-off white suitable for food production wet areas

d. Ceiling Works:

- Except for Training/Sensory Room and Quality Grading Laboratory which shall have flat drop, textured white painted ceilings, all the other ceilings must integrate the aesthetic design apt for cocoa and chocolate production. Integration of suspended ceilings, coffered ceilings, coved ceilings, beam ceilings, curves and other aesthetically pleasing designs are highly recommended for all other rooms including that of Production Area and most especially Lobby and Kitchen (Red Zone) as these are the first point of vision. Special aesthetic treatment shall be provided however, such designs must appropriately complement the distribution and arrangement of lighting fixtures and ceiling-concealed air-condition vents and must align with the theme of cocoa and chocolate

Drawing Requirement:

- Clearly reflect ceiling mounted fixtures (**lighting, smoke detectors, vents, exhaust fans**) on the ceiling plan. The description, distribution and location of these fixtures shall be consistent with the electrical and mechanical plans. Callouts or labels for specification of finishes, materials to be used, attached fixtures and framing shall be clearly indicated. Main ceiling height relative to the finished floor line shall be in proportion to the floor area but not be less than 3m.

- All other areas except Training/Sensory room: 9.0 mm thick gypsum board on metal framings. Metal rod hangers with adjustable clips, and NOT galvanized iron wires, shall be used to support and suspend the carrying channel and light gauge metal furrings
- Training/Sensory room: use acoustic boards on metal framings. Metal rod hangers with adjustable clips, and NOT galvanized iron wires, shall be used to support and suspend the carrying channel and light gauge metal furrings.

e. Architectural Metals:

- Railings must be 304 stainless steel
- All stainless materials mentioned in plans and parameters should be grade 304.

f. Door and Windows:

Door requirements -general provisions of weather-stripping for all doors for prevention of pests entry, minimize dust and especially noise

- a. Main lobby entrance (#D1) shall be made of 2-900x2100 mm double door frameless clear tempered glass
- b. Exit door towards Kitchen Red Zone (#D1A) shall be made of 1-900x2100mm and 1-400x2100 mm frameless clear tempered glass
- c. Lobby to production entry (#D2), Quality Grading Laboratory (#D2), Training Sensory Room (#D2) shall be made of 900 x1200 mm aluminum panel door “medium bronze” with stainless steel kickplate
- d. Toilet and shower room door shall be made of 900 x 2100 mm Kiln-Dried Wooden panel door with stainless steel kickplate and without viewing glass
- e. Door knobs shall be of lever type stainless steel. Door closer for all doors shall be provided
- f. Provision of fixed one-way viewing clear glass (6mm thick.) in specific rooms
 - a. Quality Grading Laboratory: side facing hallway: width = 2 meters, height= 1.2 meters
 - i. Provide one way viewing glass in favor of the hallways towards the laboratory
 - b. Fixed viewing glasses facing interior production from lobby and viewing glass from sensory/training room, exit: width= 0.4 meters , height= 1.2 meters
 - c. Three (3) clear strip PVC curtains shall be provided and installed on Kitchen Door and Lobby Door going to production from hallway to toilet. Each of these curtains shall favor the protection of the production area from pests/insects entry.
 - d. Height: 2200 mm
 - e. Width: varies based on door size and width of hallway
- g. Glass windows (fixed transom and awning type) must be of clear type with a minimum thickness of six (6) millimeters on powder coated aluminum frames

- h. Roller type blinds, colored white, shall be provided for all glass windows except for windows in dressing rooms, toilet and production area

g. Stairs, Pathwalk and Corridors:

- Provide Covered Pathwalk at least 6 meters in length covered pathwalk connecting Cacao Sensory Production and Grading Laboratory with the Isotope Laboratory; with design concept specifically for cocoa and chocolate and need not be plain

h. Fixtures and Accessories:

Use laminated marine plywood boards complete with accessories; color scheme and aesthetics shall align with the theme of chocolate and cocoa to be approved by project leader unless otherwise stated

- a. for built-in cabinet,shelves and drawers under information counter and office table (#4)
- b. for built-in closet/cabinet and shelves (#10) in Dressing areas
- c. for partitions and dividers of each test booth in the Training/Sensory Room. For this room, the color shall be white.

Use stainless steel complete with accessories type

- a. for built-in shelves and drawers under the working table (#3) in Quality Grading Laboratory
- b. for built-in cabinets, shelves and drawers under the instrument counters (#12) in Quality Grading Laboratory
- c. for serving counter (#14) in the Production Area

Countertops shall be made of white onyx stone unless otherwise stated

- a. for working table (#3) in Quality Grading Laboratory
- b. for instrument counters (#12) in Quality Grading laboratory
- c. for analysis working table (#13) in Quality Grading laboratory
- d. for serving counter (#14) in the Production Area
- e. individual working tables in test booths in Training/Sensory Room

i. Roofing Works:

- Rafter or Truss use A36 or A6 steel members
- Purlins - Use 1.5mm thick x 2" x 6" CEE Purlins spaced at 700 mm O.C. Use 2-12mm dia. Plain Round Bars for Sag Rods.

- Fascia Frame - Use 2-4mm thick angle bar for Fascia Frame. Use 12mm thk Fiber Cement Board for Fascia Board.
- Roofing- use 0.40mm thk Pre-painted Roofing Sheets, Rib-Type, Blue. Use Aluminum Radiant Heat Insulation MF 800 6-layer double-sided aluminium foil laminate with superior strength and puncture resistant properties on Galvanized Iron Wire Ga. 16 spaced at 300mm O.C. diagonals. All bended panels shall be 0.40mm thick, prepainted, pre-moulded.
 - The slope of the roof shall not be less than 5 degrees.
 - Indicate roof finish/es, slope and slope direction.
 - Indicate gutter finish.
 - Indicate exterior building wall line (hidden line).
 - Indicate location of down spouts.
 - Provide details for gutters & down spouts.

j. Painting:

- a. Apply concrete neutralizer for all concrete surfaces. Apply concrete primer for all concrete surfaces and ceiling boards. All painting works shall be fully-putty. Painted ceiling shall be in at least latex finish. Painted interior wall shall be at least two (2) coats in semi-gloss latex finish for all rooms- Painted exterior wall shall be at least two (2) coats in moisture-resistant/water-repellant solvent-based paint finish, smooth finish- Apply emulsion clear paint on all exterior concrete surfaces. Paint color and shade shall be approved first before application.

k. Landscaping

Provide landscaping and hardscaping around the building perimeter at least 15 sqm. Plants and ground cover varieties will be subject to Procuring Entities' approval.

1.2. Specific Requirements

Provide spot detail plans and sections of the following:

1. Gutter and eaves.
2. Ceiling – cove light, special connections and design, mouldings, valances.
3. Stairs – handrail, and bluster design
4. Ramps – handrail design and floor pattern
5. Doors & windows
6. Special Architectural Treatment and Design, e.g. façade design

DESIGN PARAMETERS (STRUCTURAL/CIVIL WORKS)

I. Code and Standards

The Civil/Structural Design shall be in accordance with the following Codes and Standards

Codes

1. National Structural Code of the Philippines (NSCP) 2001
2. National Building Code of the Philippines and its revised IRR
3. Accessibility Law
4. Local Codes and

Ordinances Standards

1. Bureau of Product Standards (BPS)
2. Philippine National Standards (PNS)
3. DPWH Blue Book
4. American Concrete Institute (ACI)
5. American Society for Testing Materials (ASTM)
6. American Welding Society (AWS)

II. Building

1. This building should be designed using seismic importance factor of 1.25 for immediate occupancy category. Buildings should be designed in accordance with NSCP Requirements up to Magnitude 8 for those near seismic source Type A.
2. This building should be designed also using wind importance factor of 1.15 (especially for design of trusses/roofing system). Concrete gutters and parapet walls should be provided as additional protection to nearest active fault lines and with the DENR for geo-hazard mapping.
3. The structural designer should verify with Philippine Volcanology and nearest active fault lines and with the DENR for geo-hazard mapping.
4. Soil investigation (at least three bore holes) should be conducted to determine soil bearing capacity and recommended foundation design (applicable even for one storey structure).
5. The structural designer is encouraged to use fire-resistive and non-toxic materials.

III. Details – the following shall be provided:

1. Connection details of beams and columns following the requirements of NSCP on confined areas.
2. Connection of rafter to beams and columns.

IV. Summary of Materials:

1. Concrete shall have a minimum 28-day compressive strength of 21 Mpa.
2. Fine aggregates shall consist of hard, tough, durable and uncoated particles of natural sand.
3. Coarse aggregates shall consist of crushed stone or rock, or a combination thereof conforming to ASTM C33.
4. Use Portland cement conforming to ASTM C150, Type I or Type II. All cement shall be a product of one reputable manufacturer.
5. Reinforcing steel shall be deformed billet steel bars conforming to PNS Grade 40 for 12mm dia. and below. Use PNS Grade 60 for 16mm dia. and larger bars.
6. Concrete hollow block 6” thick (600 psi) on all external walls including Training Sensory Room. Interior CHB walls 4” thick (600 psi) cement plastered finished.
7. Structural steel (W or S section) for column, beams and plates and bars shall conform to ASTM specification A36/A6M.
8. Welding Electrodes shall be E60, or E70, WAS specs D1.1.

SANITARY/PLUMBING DESIGN PARAMETERS

I. Codes and Standards

The Sanitary/Plumbing Design shall be in accordance with the following Codes and Standards.

Codes:

1. National Building Code of the Philippines and Its New IRR
2. Fire Code of the Philippines
3. National Plumbing code
4. Sanitation Code of the Philippines
5. Existing Local Codes and Ordinances.

Standards:

1. Bureau of Product Standards (BPS)
2. Philippine National Standards for Drinking-Water
3. Underwriters Laboratory (UL)
4. National Water Resources Board (NWRB)
5. National Plumbers Association of the Philippines (NAMPAAP)
6. Philippines Society of Sanitary Engineers. Inc. (PSSE)

II. Site Works

- a. Use series 1000 for sanitary/storm drainage pipings and fittings. For cold waterlines, use Polypropylene Pn16/Pn20 Fusion Weld Pipes with trims and fittings. Septic vault shall be of sufficient volume capacity consisting of three chambers. Water closets shall be 1.6 gpf. ADA manual flush valve, powerful direct-fed siphon jet action. Use a waterless, replaceable cartridge wall hung urinal. Use standard stainless steel faucets for comfort rooms.
- b. Provide two (2) PVC drainage channel with cover in the Production area and Kitchen Red Zone, parallel to the wall;
 - i. Production Area: length= 4.20 meters
 - ii. Kitchen (Red Zone) Area: length= estimate based on floor plan
- c. Provide five (5) PVC spit sink with built-in stainless steel gooseneck faucet
- d. Provide three (3) double hub stainless sink with kitchen spray head sink pull-down/retractable faucet with provisions of hot and cold water in Quality grading laboratory, Production area and Kitchen (Red zone). All with provisions of hot and cold water.
 - i. Provide two (2) garden hose with reel within the area of PVC drainage channel in
 1. Kitchen Red Zone (5 meters)
 2. and Production Area (15 meters)
 - ii. Provide one (1) shower mixer with provisions of hot and cold water
 - iii. Provide one (1) Lavatory, one (1) water closet, one (1) urinal in the toilet room

- iv. Provide one (1) ceramic basin and one (1) faucet in the Lobby area.

III. Building Facilities Sanitary/Plumbing System

1. Sewer line and Vent System

Provide complete Sewer line and Vent System from all (Domestic) plumbing fixtures and floor drains, laid by gravity connect its effluent to the Septic vault;

For Drainage Fixture Units: refer to Chapter 7, Table 7-2 NPCP

2. Wastewater line and Vent System

For all Wash Areas, provide separate Wastewater line and Vent System, connect its effluent to the Septic vault.

For Drainage Fixture Units; refer to Chapter 7, Table 7-2, NPCP

3. Waterline System

Provide complete cold water supply pipes to all plumbing fixtures coming from the main water source.

4. Storm Drainage System

Complete Storm Drainage System shall be provided for roofs flow connected to a leader/pipe line leading to the natural ground level storm drainage network.

IV. Summary of Materials

- Sewer and Vent pipes: Unplasticized Polyvinyl Chloride (uPVC) extra series 1000 (Conforming to ISO 4435 ASTM D2729 including Trims and Fittings)
- Storm Drainage pipes; Downspouts, Unplasticized Polyvinyl Chloride (uPVC) extra series 1000(Conforming to ISO 4435 ASTM D2729 including Trims and Fittings, BPS Certified)

- Catch Basin;CHB with reinforced concrete cover manhole
- Wastewater pipeline; Unplasticized Polyvinyl Chloride (uPVC) extra series 1000 (Conforming to ISO 4435 ASTM D2729 including Trims and Fittings)
- Floor Drains; Stainless (BPS Certified)
- Cold Waterline pipes; for buildings. Polypropylene Pn20 Fusion Weld Pipes including Trims and Fittings (BPS Certified)
- Plumbing Fixtures including Trims, Fittings and accessories; (BPS Certified)
 - a) Water Closet-Direct Flush Valve
 - b) Lavatory(Pedestal Type) with C-spout faucet
 - c) Urinal-Wall hung flush valve/lever/push button

ELECTRICAL DESIGN PARAMETERS

16. Electrical Design

Electrical design shall anticipate future electrical expansion and development. Building's Electrical Service Entrance connection shall have roughing-in provisions for the cabling distribution from the nearest situated Electrical Three-phase Power house. Use 230-Volts line to line, 1-phase service entrance connection for the building. There shall be a digital electrical meter installed. Entrance wires shall be in rigid steel conduit embedded and sufficiently grounded. Grounding system that is compliant to the provisions of the Philippine Electrical Code.

1 Laws, Codes and Standards. Electrical installations of the equipment shall conform to a well-recognized engineering practice and the Laws, Codes and Standards listed below:

- i. Philippine Electrical Code (PEC)
- ii. National Electrical Code (NEC)
- iii. New Fire Code of the Philippines
- iv. National Building Code of the Philippines and Its New IRR
- v. Existing Local Codes and Ordinances
- vi. American Society for Testing Materials (ASTM)
- vii. Bureau of Product Standards (BPS)
- viii. Underwriters Laboratory (UL)
- ix. National Fire Protection Association
- x. International Electrotechnical Commission (IEC)
- xi. Illumination Engineering Society (IES)
- xii. National Electrical Manufacturer's Association (NEMA)
- xiii. IEEE Standards

2 Materials. All materials to be installed shall be brand new conforming to the applicable standards.

- i. The use of LED (Light-Emitting Diode) lighting fixtures recommended by DOE (Department of Energy) is highly recommended.

- ii. Use THHN copper wire (UL Listed) of size not smaller than 3.5 sq. mm.
- iii. No conduit of dia. less than 20mm shall be installed. PVC conduit shall be rigid. Rigid steel pipes (RSC, RMC, EMT, IMC, EMT) shall be zinc coated or galvanized.
- iv. Panel boards shall be flush mounted with MCCB main and din-rail type miniature circuit breakers for branch circuits. Panel boards shall have earth and neutral terminals/bus.
- v. Electrical tapes shall be of electrical friction or rubber with insulation and protection rating of 600V.
- vi. All boxes shall be uPVC type and approved products of reputable manufacturers. The size shall be 50mm x 100mm for utility boxes and 100mm octagonal for junction boxes.
- vii. Switches shall be LED illuminated, wide series and product of reputable manufacturer with ratings 10A, 250V or as noted and approved.
- viii. General use receptacles shall be three (3) prong universal type and product of reputable manufacturer with ratings 15A, 250V or as noted and approved.
- ix. Special purpose receptacles shall be product of reputable manufacturer with ratings as indicated on the drawings and specifications with provision for earth terminal.

3 Power System

Electrical Panel boards shall be power-coated, ground-bonded and with lockable covers. Panel boards shall be flush-mounted. All Panel boards and all Branch circuits shall be properly labelled and tagged. The system shall be ready for emergency power (alternate source) connection in case of brownout.

Power outlets shall be adequate for office functions. Supply and install floor outlets if space and room utilization so require (discourage the use of extension wires for power connection).

4 Lighting System

Adopt an energy-saving design. The lighting design shall be adequate for the size, type, and in conformance to illumination standards for institutional buildings (300 – 500 lux). Lighting fixtures shall be flush mounted on ceilings. Ornamental lighting designs may be considered if deemed necessary. Emergency lights shall be provided in every habitable rooms, stairways and hallways. Emergency Exits shall be labelled with illuminated doubled faced exit lights and signage. Three-way electrical light switches shall be provided at both ends of a corridor. Other Special Lighting requirements shall be as approved by the implementing agency.

5 Auxiliary System

Provide and install Auxiliary systems for communication (telephone, LAN, PABX, etc.) and security system.

6. Fire detection and alarm system (FDAS)

The building shall be equipped with Smoke/Heat Detectors. It shall be installed on all suitable rooms, hallways and any place which deemed necessary.

7. Other Requirements

Provide a separate electrical circuit system in the Production Area for one (1) unit of electric baking/roasting oven with a continuous load of around 3000 W and in the Processing Area for (1) unit of Seed Oil Expeller (Screw type) Press for cocoa beans which has an electric motor.

4.8 Proposal should include the following:

- Ø General Notes and Legends
- Ø Location and Site Plan
- Ø Lighting Layout (scale 1:100m minimum) including details
- Ø Power Layout (scale 1:100m minimum) including details
- Ø Auxiliary System Layout (scale 1:100m minimum) including details (LAN System,)
- Ø Schedule and Details of Loads
- Ø Riser Diagram
- Ø Other Detail
- Ø Electrical Computation
- Ø Design Analysis
- Ø Electrical Technical Specifications
- Ø Electrical Scope of Works
- Ø Electrical Bill of Quantities
- Ø Cost Analysis

D. MECHANICAL WORKS DESIGN

I. Codes and Standards

The Mechanical Design shall be in accordance with the following Philippine laws, Codes and Standards.

- Codes:
 1. National Building Code of the Philippines and its New IRR
 2. New Fire Code the Philippines
 3. Mechanical Engineering Code of the Philippines (ME Code)
 4. Existing Local Government Codes and Ordinances

- Standards:
 1. Bureau of Product Standards (BPS)
 2. Philippine National Standards (PNS)
 3. Underwriters Laboratory (UL) and Factory Mutual (FM)
 4. International Electro-Technical Commission (IEC) 1988
 5. National Fire Protection Association (NFPA)
 6. National Fire Protection Association (NFPA) 99 Standard for Health Care Facilities.
 7. American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE).
 8. Center for Disease Control and Prevention (CDC) Manual.

II. Ventilation and Air Conditioning System

- Provide and install split-type inverter air-conditioning system (Lobby/receiving area, Quality grading laboratory, Training/Sensory Room, production area) in accordance with the latest air-conditioning technology.

17. Rehabilitation of Clonal Nursery

Supply of:

- Submersible pump: 1.5 HP

Part 2 (Building 2): Isotope Laboratory

Allocated budget:	PhP 3,500,000.00
Important Notes:	<ul style="list-style-type: none">● Construction of Isotope laboratory● Construction of covered concrete pathwalk from Cacao Sensory and Grading Laboratory to Isotope Laboratory (Building 1 to Building 2). Please refer above (Section 6: Other Requirements No. 9 and 10)● There is an existing clonal nursery on which rehabilitations are needed and indicated above. (Section 6: Other Requirements No. 9 and 10)
Total Area	172.95 sqm

A.2. Minimum Floor Space Allocation for Isotope Laboratory

Space Allocation	Floor Area
<ul style="list-style-type: none"> ● Entry porch/ramp 	14.58 sqm + 27.62 sqm
<ul style="list-style-type: none"> ● Isotope Laboratory 	34.35 sqm
<ul style="list-style-type: none"> ● Instrumentation 	30 sqm
<ul style="list-style-type: none"> ● Staff Room 	10.55 sqm
<ul style="list-style-type: none"> ● Lobby/Hallway 	47.66 sqm
<ul style="list-style-type: none"> ● Toilet/shower 	8.19 sqm

The primary objective in laboratory design is to provide a safe environment for DSSC student and faculties to conduct research and experiments. Therefore, all health and safety hazards must be identified and carefully evaluated so that protective measures can be incorporated into the design. The basic laboratory design features listed in this section illustrate some of the basic health and safety elements to include in all new laboratories of DSSC. The subsections of Section 2.1 provide specific guidance on additional critical features of a general laboratory (e.g., fume hoods, hazardous materials storage, and compressed gases.)

SPECIAL REQUIREMENTS FOR LABORATORIES

This section deals with the spaces used for research or teaching activities with a technical or scientific function, in which there is a potential risk or hazard to users are described as “Laboratories”.

Non-hazardous spaces often called “Dry Laboratories” which may include computer facilities and language laboratories.

Laboratories may be required in areas such as Biosciences, Medical Research, Physics, or Chemistry and may include teaching, research, quality control, testing or analysis. These activities may require the usage of chemicals, including dangerous goods, hazardous

substances, electrical or radiation hazards, pathogens, quarantine materials or work processes which could also be hazardous.

Special Hazard Laboratories are areas within laboratories (or whole laboratories) in which particularly hazardous substances are used or specific hazardous processes are required which necessitate the requirement to conform to specific standards and legislation in the design and operation.

The standards relating to these special hazard laboratories will be over and above the regulatory requirements which are listed in the following section. These special hazard laboratories may include microbiological laboratories, vivariums, cytotoxic chemical preparation rooms, clean rooms and radiological laboratories to cite examples.

The designated laboratory area should include, or have access to, all support spaces required, such as; instrument and preparation labs, laboratory stores, sample stores, chemical stores, wash up, media prep, sterilization facilities, waste storage and waste treatment facilities.

Write up areas are permitted within the laboratory boundary however, these should be separated from areas where hazardous materials are stored or processes undertaken and should only be used on a temporary basis to support the scientific activities. These design requirements are for research and teaching laboratories within the DSSC environment. Specialist advice on regulatory requirements associated with such facilities should be sought.

The Isotope Laboratory Building It shall be a 172.95 sq. m total in the laboratory Buildings. This facility shall have an Architectural Finishes which is based on the Architectural, Mechanical, Electrical, Plumbing/Sanitary, and Fire protection standard for Isotope Laboratory. It shall have these following requirements;

1. Isotope Laboratory

- Supply and Installation of Master-Utility Cut Off for electricity and gas outlet.
- Supply and Installation CO2 Fire extinguisher mounted to the wall.
- Provision of gas piping for He, O₂, H₂, CO₂, N₂, SO₂ and exhaust pipe.
- Provision for electrical outlet in for the wall mounted Air conditioning unit.
- Supply and Installation of four (4) two gangs three prong universal convenience outlet per side of the laboratory room with ground fault interruption.
- 3 wall mounted ethernet ports (For LAN)

2. Instrumentation Room

- Supply and Installation of Master-Utility Cut Off for electricity and gas outlet.
- Supply and Installation CO2 Fire extinguisher mounted to the wall.
- Provision of gas piping for He.
- Well ventilated and lighted room

- Supply and Installation of four (4) two gangs three-prong outlets per side of the laboratory room with ground fault interruption.
 - Provision for electrical outlet in for the wall mounted Air conditioning unit.
 - Supply and Installation of four (4) two gangs three prong universal convenience outlet per side of the laboratory room with ground fault interruption.
 - 3 wall mounted ethernet ports (For LAN)
- 3. Preparation and Stockroom**
- Provision of Safety shower accessible to key areas.
 - Provision for Fume Hood for use of hazardous chemicals.
 - Provision for Storage of Lab Gowns and Personal Protective Equipment
 - Well ventilated and lighted room
 - The room should be ventilated with an extraction system fitted using an acid-resistant fan.
 - Supply and Installation of four (4) two gangs three-prong universal convenience outlet per side of the laboratory room with ground fault interruption.
- 4. Staff room**
- Provision for electrical rough in for the wall mounted Air conditioning unit.
 - Supply and Installation of four (4) two gangs three-prong universal convenience outlets per side of the laboratory room with ground fault interruption.
 - 3 wall mounted ethernet ports (For LAN)
- 5. Lobby**
- Supply and Installation of four (2) two gangs three-prong universal convenience outlets per side of the lobby with ground fault interruption.
 - Provision for ceiling-mounted Electric Fans.

CHECKLIST OF DRAWINGS REQUIREMENTS AND DESIGN PARAMETERS

A. ARCHITECTURAL DESIGN PARAMETERS

I. Codes and Standards

The Architectural Works shall be in accordance with the following Philippine laws, Codes and Standards.

· Laws and Codes:

1. National Building Code of the Philippines and its Latest and Amended IRR
2. RA 9266 or Architectural Law and its Latest and Amended IRR
3. BP 344 or Accessibility Law and its Latest and amended IRR
4. AO 35, s. 1994 or, AO Pertaining to the Control of Radiation Hazards
5. RA 9514 New Fire Code of the Philippines
6. Existing Local Codes and Ordinances.
7. And other Laws that applies to the projects

· Standards:

1. Bureau of Product Standards (BPS)
2. Underwriters Laboratory (UL)

II. Building Architectural Works

1. Floor Plans

- Toilets shall have provisions and fixtures for persons with disability as required by BP 344. If enough space allows, toilets specially made and designated for persons with disability is preferable.

2. Walls

- Concrete hollow block 6” thick (600 psi) on all external walls and interior walls for the Isotope Laboratory walls shall be 8” thick. This is indicative of the finished wall thickness including the plastering and tile works
- The size of the wall (W2) tiles shall be 100 mm x 200 mm brick wall tiles (Earth Color).

- The size of the wall (W3) tiles shall be 100 mm x 1000 mm wooden planks.
- The wall (W4) tiles shall be Mosaic Tile (Hexagonal Colorful / 'BOHO' Tile).
- The size of the wall (W5) tiles shall be 300 mm x 300 mm ceramic glazed tiles.

3. Floor

- The floor (F4) concrete floor rough finish with 10 mm diameter groovelines SP. @100 mm
- The size of the toilet floor tiles shall be 300 mm x 300 mm ceramic unglazed tiles.
- The size of the laboratory floor tiles (F3) shall be 400 mm x 400 mm ceramic unglazed tiles (matte white).
- The size of the floor tiles of the lobby (F2) and corridor shall not be less than 400 mm x 400 mm ceramic unglazed tiles (earth and wooden pattern) and shall be indicated in the tile pattern

4. Ceiling Works

The following rooms shall have a minimum ceiling height:

- a. Laboratory – 3000mm., to accommodate ceiling-mounted equipment
- Ceiling Board shall be gypsum board or approved equivalent light gauge metal furring.

5. Doors

- Main front doors (D1) shall be made of glass tempered doors 'clear' size 900 mm x 2100 mm
- Main exit doors (D1A) shall be made of glass tempered doors 'clear' size 1 - 900 mm x 2100 mm and 1 – 400 mm x 2100 mm
- Isotope laboratory doors (D2) shall be made of double leaf steel doors w/ S/S kick plate size 900 mm x 2100 mm
- Stock room and Staff room doors (D3) shall be made of aluminum panel door 'medium bronze' with S/S kick plate size 900 mm x 2100 mm
- Instrumentation room doors (D4) shall be made of double leaf aluminum panel door 'medium bronze' with S/S kick plate size 900 mm x 2100 mm
- Toilet room doors shall be made of kiln-dried wooden panel door with S/S kick plate size 900 mm x 2100 mm

- All doors should be provided with door closers, and shall conform to the requirements of the Fire Code of the Philippines.
- All doors room shall swing outwards and as required by the Fire Code of the Philippines.

6. *Windows*

- Window sills shall be slightly sloped outwards to prevent damage to windows and paint due to water seepage. Section details shall be required to show this slope.
- Windows is an awning type with 5 mm thick clear glass on aluminum powder coated finish with 30 cm high fixed transom

7. *Steps and ramps*

- Ramps for persons with disability shall have a slope not higher than 1:12. Handrails and clearances shall conform with the requirements of BP 344.
- Handrails shall be 900mm. high. Clearances shall conform with the requirements of the Fire Code of the Philippines.

8. *Fixtures and Accessories*

- Three-way electrical light switches shall be provided at both ends of a corridor.
- All toilets shall be provided with bidets.
- Toilets shall be provided with heavy-duty soap dispensers and electric hand dryers.
- Toilets shall always be provided with stainless steel handrails in conformity to the requirements of BP 344.

9. *Roofing Works*

- The section of the roof gutters shall be designed, in case of a clogged downspout, so that the overflow of water will be directed outside of the building and not towards the eaves or interior ceiling to prevent any damage. Provide details.

- Avoid valley or inside gutters in roof design. But in cases required in aesthetic design, valley or inside gutters and the section shall be designed with a capacity for big volume to prevent any damage due to overflow. Provide details.
- Parapets, designed as a roof protection from the winds, must be designed to satisfy the preceding parameters. Provide details.
- The slope of the roof shall not be less than 5 degrees.

B. STRUCTURAL/CIVIL WORKS DESIGN PARAMETERS

Refer to Cacao Sensory structural parameters.

C. SANITARY/PLUMBING DESIGN

Refer to Cacao Sensory plumbing parameters.

E. ELECTRICAL DESIGN PARAMETERS

18. Electrical Design

Electrical design shall anticipate future electrical expansion and development. Building's Electrical Service Entrance connection shall have roughing-in provisions for the cabling distribution from the nearest situated Electrical Three-phase Power house. Use 230-Volts line to line, 1-phase service entrance connection for the building. There shall be a digital electrical meter installed. Entrance wires shall be in rigid steel conduit embedded and sufficiently grounded. Grounding system that is compliant to the provisions of the Philippine Electrical Code.

1 Laws, Codes and Standards. Electrical installations of the equipment shall conform to a well-recognized engineering practice and the Laws, Codes and Standards listed below:

- xiv. Philippine Electrical Code (PEC)
- xv. National Electrical Code (NEC)
- xvi. New Fire Code of the Philippines
- xvii. National Building Code of the Philippines and Its New IRR
- xviii. Existing Local Codes and Ordinances
- xix. American Society for Testing Materials (ASTM)
- xx. Bureau of Product Standards (BPS)
- xxi. Underwriters Laboratory (UL)
- xxii. National Fire Protection Association
- xxiii. International Electrotechnical Commission (IEC)
- xxiv. Illumination Engineering Society (IES)

- xxv. National Electrical Manufacturer's Association (NEMA)
- xxvi. IEEE Standards

2 Materials. All materials to be installed shall be brand new conforming to the applicable standards.

- x. The use of LED (Light-Emitting Diode) lighting fixtures recommended by DOE (Department of Energy) is highly recommended.
- xi. Use THHN copper wire (UL Listed) of size not smaller than 3.5 sq. mm.
- xii. No conduit of dia. less than 20mm shall be installed. PVC conduit shall be rigid. Rigid steel pipes (RSC, RMC, EMT, IMC, EMT) shall be zinc coated or galvanized.
- xiii. Panel boards shall be flush mounted with MCCB main and din-rail type miniature circuit breakers for branch circuits. Panel boards shall have earth and neutral terminals/bus.
- xiv. Electrical tapes shall be of electrical friction or rubber with insulation and protection rating of 600V.
- xv. All boxes shall be uPVC type and approved products of reputable manufacturers. The size shall be 50mm x 100mm for utility boxes and 100mm octagonal for junction boxes.
- xvi. Switches shall be LED illuminated, wide series and product of reputable manufacturer with ratings 10A, 250V or as noted and approved.
- xvii. General use receptacles shall be three (3) prong universal type and product of reputable manufacturer with ratings 15A, 250V or as noted and approved.
- xviii. Special purpose receptacles shall be product of reputable manufacturer with ratings as indicated on the drawings and specifications with provision for earth terminal.

3 Power System

Electrical Panel boards shall be power-coated, ground-bonded and with lockable covers. Panel boards shall be flush-mounted. All Panel boards and all Branch circuits shall be properly labelled and tagged. The system shall be ready for emergency power (alternate source) connection in case of brownout.

Power outlets shall be adequate for office functions. Supply and install floor outlets if space and room utilization so require (discourage the use of extension wires for power connection).

4 Lighting System

Adopt an energy-saving design. The lighting design shall be adequate for the size, type, and in conformance to illumination standards for institutional buildings (300 – 500 lux). Lighting fixtures shall be flush mounted on ceilings. Ornamental lighting designs may be considered if deemed necessary. Emergency lights shall be provided in every habitable rooms, stairways and hallways. Emergency Exits shall be labelled with illuminated doubled faced exit lights and signage. Three-

way electrical light switches shall be provided at both ends of a corridor. Other Special Lighting requirements shall be as approved by the implementing agency.

5 Auxiliary System

Provide and install Auxiliary systems for communication (telephone, LAN, PABX, etc.) and security system.

6. Fire detection and alarm system (FDAS)

The building shall be equipped with Smoke/Heat Detectors. It shall be installed on all suitable rooms, hallways and any place which deemed necessary.

4.8 Proposal should include the following:

- Ø General Notes and Legends
- Ø Location and Site Plan
- Ø Lighting Layout (scale 1:100m minimum) including details
- Ø Power Layout (scale 1:100m minimum) including details
- Ø Auxiliary System Layout (scale 1:100m minimum) including details (LAN System,)
- Ø Schedule and Details of Loads
- Ø Riser Diagram
- Ø Other Detail
- Ø Electrical Computation
- Ø Design Analysis
- Ø Electrical Technical Specifications
- Ø Electrical Scope of Works
- Ø Electrical Bill of Quantities
- Ø Cost Analysis

III. CONCEPTUAL DESIGN AND DRAWING

(See attached file)

Section VII. Drawings

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



SITE DEVELOPMENT PLAN
 DAVAO DEL SUR STATE COLLEGE
 Mati, Digos City, Davao del Sur



LEGEND:

- | | |
|---------------------------------------|--|
| Proposed Buildings | Virtual Library & Cultural Heritage Center |
| Existing Buildings (To be Retained) | Admin Building |
| Existing Buildings (To be Demolished) | Dev Com-IARS Building |
| Area to be Earth-filled | Electric Transformer Pad |
| Parking Spaces | IBEG Building |
| Flood Control Dike | Make Shift Classroom |
| River Streamline/Wetted Area | |
| River Channel | |
| Projected Turning Points | |
| Projected Interior Road Network | |
| Projected Property Boundary Line | |
| Opposite River Embankment | |

SITE LOCATION MAP



SITE VICINITY MAP



GENERAL NOTES:

- All plotted properties boundaries are non-authenticated.
- This map was made for presentation and planning purposes only. The map cannot be used as the basis for any legal claim.
- The plotted turning points were based on the technical descriptions declared on the land title owned and owned under the academic institution (Davao del Sur State College).

Prepared By:

ENGR. MARVIN T. LOPEZ
 Member, School LLEDP TWG

Checked By:

ENGR. CLARA A. ACEBES
 School Planning Officer

Approved By:

AUGIE E. FUENTES, Ph.D.
 School President



SCHEDULE OF FINISHES:

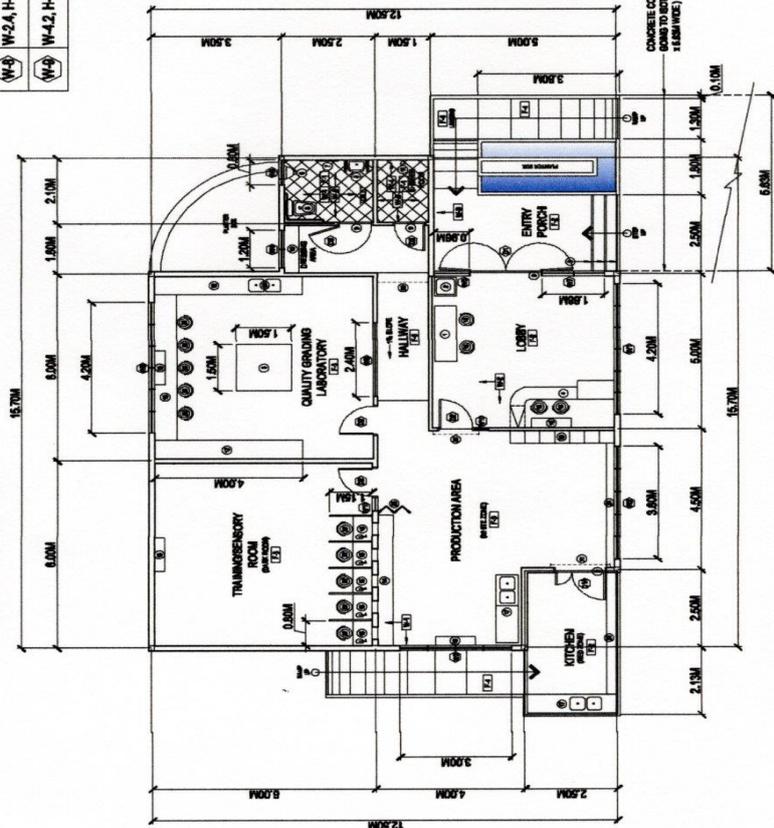
FLOOR:		WALL:	
F-1	300x300mm CERAMIC UNGLAZED TILE	W-1	100x200mm BRICK WALL TILE (WHITE COLOR)
F-2	100x100mm CERAMIC UNGLAZED TILE (EARTHWOOD PATTERN)	W-2	100x200mm BRICK WALL TILE (EARTH COLOR)
F-3	400x400mm CERAMIC UNGLAZED TILE (MATT WHITE)	W-3	100x100mm WOODEN PLANKS
F-4	CONCRETE FLOOR (ROUGH FINISH WITH 10mm DIA. GROOVELINES SP. @ 10mm)	W-4	MOSAIC TILE (HEXAGONAL COLORFUL BOCHÓ TILE)
		W-5	300x300mm CERAMIC GLAZED TILE

SCHEDULE OF DOORS:

MARK	DIMENSION (METERS)	QTY.	DESCRIPTION
D-1	W-4.90, H-2.1	2	GLASS TEMPERED DOOR CLEAR
D-1A		1	1-900x2100mm & 1-400x2100mm GLASS TEMPERED DOOR CLEAR
D-2	W-4.90, H-2.1	3	ALUMINUM PANEL DOOR MEDIUM BRONZE w/SS KICK PLATE
D-3	W-4.90, H-2.1	2	KILN-DRIED WOODEN PANEL DOOR w/SS KICK PLATE

SCHEDULE OF WINDOWS:

MARK	DIMENSION (METERS)	QTY.	DESCRIPTION
W-1	W-4.20, H-3.0	2	COMBINATION AWNINGFIXED WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH
W-2	W-3.00, H-2.6	1	COMBINATION AWNINGFIXED WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH
W-3	W-3.0, H-2.6	1	COMBINATION AWNINGFIXED WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH
W-4	W-1.2, H-0.6	1	AWNING WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH w/ 30cm HIGH FIXED TRANSON
W-5	W-0.8, H-0.6	1	AWNING WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH w/ 30cm HIGH FIXED TRANSON
W-6	W-0.08, H-3.0	1	COMBINATION AWNINGFIXED WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH
W-7	W-1.08, H-3.0	1	COMBINATION AWNINGFIXED WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH
W-8	W-2.4, H-1.2	1	FIXED WINDOW w/ 6mm THK ONE-WAY GLASS ON ALUMINUM POWDER COATED FINISH
W-9	W-4.2, H-1.2	1	AWNING WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH w/ 30cm HIGH FIXED TRANSON



CONCEPTUAL FLOOR PLAN (CACAO SENSOY LABORATORY BUILDING)
SCALE 1:100

ISOTOPE LABORATORY

SCHEDULE OF FINISHES:

FLOOR:	WALL:
F-1 300x300mm CERAMIC UNGLAZED TILE	W-1 100x200mm BRICK WALL TILE (EARTH COLOR)
F-2 400x400mm CERAMIC UNGLAZED TILE (EARTHWOOD PATTERN)	W-2 100x200mm BRICK WALL TILE (EARTH COLOR)
F-3 400x400mm CERAMIC UNGLAZED TILE (MATT WHITE)	W-3 100x100mm WOODEN PLANKS
F-4 CONCRETE FLOOR ROUGH FINISH WITH 10mm DIA. GROOVELINES SP @ 100mm	W-4 100x100mm CERAMIC UNGLAZED TILE (MATT WHITE)
	W-5 300x300mm CERAMIC UNGLAZED TILE

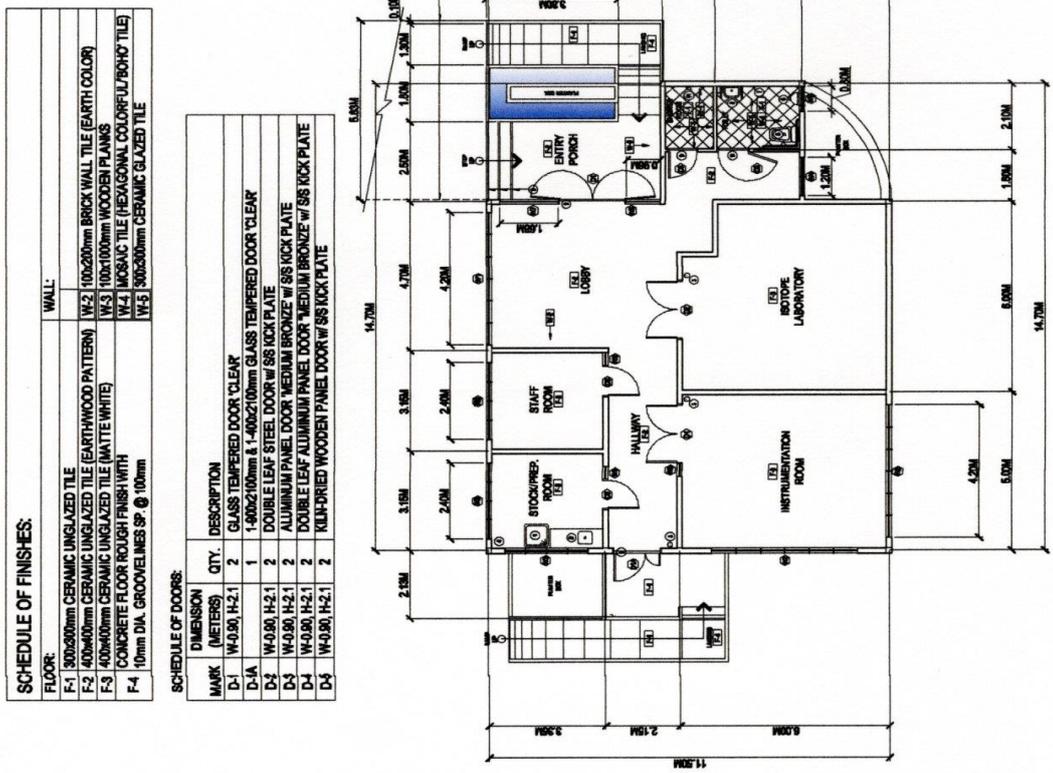
SCHEDULE OF DOORS:

MARK	DIMENSION (METERS)	QTY.	DESCRIPTION
D-1	W-0.90, H-2.1	2	GLASS TEMPERED DOOR CLEAR
D-2A	1-400x2100mm & 1-400x2100mm	1	GLASS TEMPERED DOOR CLEAR
D-3	W-0.90, H-2.1	2	DOUBLE LEAF STEEL DOOR W/ S/S KICK PLATE
D-4	W-0.90, H-2.1	2	ALUMINUM PANEL DOOR "MEDIUM BRONZE" W/ S/S KICK PLATE
D-5	W-0.90, H-2.1	2	DOUBLE LEAF ALUMINUM PANEL DOOR "MEDIUM BRONZE" W/ S/S KICK PLATE
D-6	W-0.90, H-2.1	2	KILN-DRIED WOODEN PANEL DOOR W/ S/S KICK PLATE

SCHEDULE OF WINDOWS:

MARK	DIMENSION (METERS)	QTY.	DESCRIPTION
W-1	W-2.20, H-3.0	3	COMBINATION AWNING/FIXED WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH
W-2	W-1.2, H-1.2	2	AWNING WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH w/ 30mm HIGH FIXED TRANSOM
W-3	W-2.4, H-1.2	3	AWNING WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH w/ 30mm HIGH FIXED TRANSOM
W-4	W-1.2, H-0.8	1	AWNING WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH w/ 30mm HIGH FIXED TRANSOM
W-5	W-0.8, H-0.8	1	AWNING WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH w/ 30mm HIGH FIXED TRANSOM
W-6	W-0.8, H-3.0	1	COMBINATION AWNING/FIXED WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH
W-7	W-1.08, H-3.0	1	COMBINATION AWNING/FIXED WINDOW w/ 6mm THK CLEAR GLASS ON ALUMINUM POWDER COATED FINISH

- LEGEND:**
- EMERGENCY SAFETY SHOWER AREA MUST BE RECESSED AT LEAST 50mm DOWN (PROVIDE SANITARY WASTE & COLD WATER LINE ROUGHING-IN ONLY)
 - SINK COUNTER (PROVIDE SANITARY WASTE & COLD WATER LINE ROUGHING-IN ONLY)
 - CO2 FIRE EXTINGUISHER 10kg (WALL MOUNTED)
 - PROVISION FOR FUME HOOD (PROVIDE SANITARY WASTE & COLD WATER LINE ROUGHING-IN ONLY)



CONCEPTUAL FLOOR PLAN (ISOTOPE LABORATORY BUILDING)
SCALE 1:100 N

Section VIII. Bill of Quantities

Notes on the Bill of Quantities

Objectives

The objectives of the Bill of Quantities are:

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

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

Daywork Schedule

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

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

Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the SCC should state the manner in which they will be used, and under whose authority (usually the Procuring Entity's Representative's).

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

Signature Box

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

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

CONTRACT ID NO. : DSSCPSU 2022-01-002
 NAME OF PROJECT : Establishment of Cacao Sensory and Isotope Laboratory
 LOCATION : DSSC Digos Campus, Digos City, Davao del Sur
 APPROVED BUDGET FOR THE PROJECT : Php 9,000,000.00
 TOTAL PROJECT DURATION : 273 Calendar Days

BILL OF QUANTITIES (BOQ)

ITEM DESCRIPTION	QTY	UNIT	UNIT COST (in Php)	TOTAL AMOUNT (in Php)
ITEM I: EXCAVATION <ul style="list-style-type: none"> ● Structure Excavation ● Septic Vault and Catch Basins ● Uprooting of Trees 		Cu.m. Lot Lot		
ITEM II - EARTHWORKS (Embankment) <ul style="list-style-type: none"> ● Mountain Mix ● Gravel 'Class Y' 		Cu.m. Cu.m.		
ITEM III- MASONRY AND PLASTERING WORKS <ul style="list-style-type: none"> ● 6" Concrete Hollow Blocks, 600psi ● 4" Concrete Hollow Blocks, 600psi ● Plastering Works 		Pcs Pcs Sq.m.		
ITEM IV - REINFORCED CONCRETE <ul style="list-style-type: none"> ● Footings ● Pedestals ● Slab-on-Fill ● Lintels/Stiffeners 		Cu.m.		
ITEM V - REINFORCING STEEL <ul style="list-style-type: none"> ● Footings ● Pedestals ● Slab-on-Fill ● Lintels/Stiffeners 		Kgs.		
ITEM VI - DOORS and WINDOWS <ul style="list-style-type: none"> ● Glass Tempered Doors ● Aluminum Panel Doors w/ S/S Kick Plate ● Wooden Panel Doors w/ S/S Kick Plate ● Awning Windows w/ 6mm Thk Clear Glass on Aluminum Powder Coated Finish w/ 30cm High Fixed Transom 		Units Units Units Sq.m.		
ITEM VII - STEEL WORKS <ul style="list-style-type: none"> ● Columns ● Beams ● Rafter 		Kgs.		

● Roof Framing				
ITEM VIII- CARPENTRY WORKS ● 9mm Gypsum Board thk.		Sq.m		
ITEM IX - ROOFING WORKS ● Pre-painted Rib Type Roofing		Ln.m.		
ITEM X - PAINTING WORKS ● Walling (<i>Interior & Exterior Walls</i>) ● Ceiling (<i>Interior & Exterior Walls</i>) ● Wooden Doors		Sq.m. Sq.m. Sq.m.		
ITEM XI- ELECTRICAL WORKS ● Electrical Works ● Communication		Outlets Lot		
ITEM XII- PLUMBING WORKS ● Drainage and Sanitary Piping ● Downspout and Catch Basin ● Waterline ● Plumbing Fixtures and Accessories Septic Vault		Ln.m. Lot Ln.m. Lot Unit		
ITEM XIII- TILE WORKS ● All areas including Comfort Room/Shower Room ● Walls at Production Area (<i>See Schedule of Walls</i>)		Sq.m. Sq.m.		
ITEM XIV- LABORATORY FURNITURES & FIXTURES ● Working Tables/Counters/Bars/Chairs/PVC Drainage Channel/Handrails/Grab Bars <i>All items listed on the Legend</i>		Lot		
ITEM XV - MOBILIZATION/DEMOBILIZATION		Lot		
ITEM XVI - CONSTRUCTION SAFETY AND HEALTH		Lot		
ITEM XVII - PROCESSING OF BUILDING PERMIT & OTHER CLEARANCE/S		Lot		
ITEM XVIII - PROJECT BILLBOARD & SIGNAGES		Lot		
ITEM XI - MOBILIZATION		lot		
ITEM XII - CONSTRUCTION SAFETY AND HEALTH		lot		
ITEM XIII - PROCESSING OF BUILDING PERMIT, OCCUPANCY PERMIT & OTHER CLEARANCE/S		lot		
ITEM XIV - PROJECT BILLBOARD & SIGNAGES		lot		
TOTAL AMOUNT:				

Prepared by :

Name and Signature of Bidder

Section IX. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

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

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

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

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);
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
- (e) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Technical Documents

- (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; **and**
- (g) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules;
and
- (h) Philippine Contractors Accreditation Board (PCAB) License;
or
Special PCAB License in case of Joint Ventures;
and registration for the type and cost of the contract to be bid; **and**
- (i) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
or
Original copy of Notarized Bid Securing Declaration; **and**
- (j) Project Requirements, which shall include the following:
 - a. Organizational chart for the contract to be bid;
 - b. List of contractor's key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;
 - c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**
- (k) Original duly signed Omnibus Sworn Statement (OSS);

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

Financial Documents

- (l) The prospective bidder's audited financial statements, showing, among others, the prospective bidder'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; **and**
- (m) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).

Class "B" Documents

- (n) If applicable, duly signed joint venture agreement (JVA) in accordance with RA No. 4566 and its IRR in case the joint venture is already in existence; **or** duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

II. FINANCIAL COMPONENT ENVELOPE

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

Other documentary requirements under RA No. 9184

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

