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Bid Notice Abstract

Invitation to Bid (ITB)

Reference Number	6565686
Procuring Entity	CARLOS HILADO MEMORIAL STATE COLLEGE
Title	Proposed Design and Build for the Completion of 3-Storey Annex Building for Engineering and Technology (East Wing) - Talisay Campus, Brgy. Zone 1, Mabini St., Talisay City, Negros Occidental
Area of Delivery	Negros Occidental

Solicitation Number:	CHMSC 20-001-1017-I
Trade Agreement:	Implementing Rules and Regulations
Procurement Mode:	Public Bidding
Classification:	Civil Works
Category:	Construction Projects
Approved Budget for the Contract:	PHP 55,000,000.00
Delivery Period:	330 Day/s
Client Agency:	
Contact Person:	Ma. Kristina Goylos Medalla Head, BAC Secretariat Mabini Street, Brgy Zone 1 Talisay City Negros Occidental Philippines 6115 63-34-7120420 Ext.142 63-34-7128404 bac.sec@chmsc.edu.ph

Status	**Pending**
Associated Components	6
Bid Supplements	0
Document Request List	0
Date Published	18/10/2019
Last Updated / Time	17/10/2019 18:55 PM
Closing Date / Time	11/11/2019 10:00 AM

Description

CARLOS HILADO MEMORIAL STATE COLLEGE
BIDS AND AWARDS COMMITTEE
Talisay City, Negros Occidental
Telefax Nos. (034)712-8404

INVITATION TO BID
FOR PROPOSED DESIGN AND BUILD FOR THE COMPLETION OF 3-STOREY ANNEX BUILDING FOR ENGINEERING AND TECHNOLOGY (EAST WING) – TALISAY CAMPUS, BRGY. ZONE 1, MABINI ST., TALISAY CITY, NEGROS OCCIDENTAL
CHMSC 20-001-1017-I

1. The Carlos Hilado Memorial State College, through the Corporate Budget for the Contract of 2020 approved by the governing Board, intends to apply the sum of FIFTY-FIVE MILLION PESOS & 00/100 (Php 55,000,000.00) ONLY being the Approved Budget for the Contract (ABC) to payments under the contract for PROPOSED DESIGN AND BUILD FOR THE COMPLETION OF 3-STOREY ANNEX BUILDING FOR ENGINEERING AND TECHNOLOGY (EAST WING) – TALISAY CAMPUS, BRGY. ZONE 1, MABINI ST., TALISAY CITY, NEGROS OCCIDENTAL. Bids received in excess of the ABC shall be automatically rejected at bid opening.

2. The Carlos Hilado Memorial State College now invites bids for PROPOSED DESIGN AND BUILD FOR THE COMPLETION OF 3-STOREY ANNEX BUILDING FOR ENGINEERING AND TECHNOLOGY (EAST WING) – TALISAY CAMPUS, BRGY. ZONE 1, MABINI ST., TALISAY CITY, NEGROS OCCIDENTAL pursuant to the technical specifications indicated in the Terms of Reference to be provided. Completion of the Works is required within Three Hundred Thirty (330) calendar days upon receipt of Notice to Proceed. Bidders should have completed, within ten (10) years from

the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instructions to Bidders.

3. Bidding will be conducted through open competitive bidding procedures using the non-discretionary "pass/fail" criterion as specified in the 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act 9184, otherwise known as the "Government Procurement Reform Act".

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

4. Interested bidders may obtain further information from CARLOS HILADO MEMORIAL STATE COLLEGE and inspect the Bidding Documents at the address given below from 8:00 A.M. to 5:00 P.M.

The BAC Secretariat
Brgy. Zone I, Mabini St.,
Talisay City, Negros Occidental

5. A complete set of Bidding Documents may be acquired by interested bidders on October 18 – November 11, 2019 (9:30A.M.)from the address 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 Fifty Thousand Pesos (Php 50,000.00) Only.

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

6. The CHMSC will hold a Pre-Bid conference on 10:30 A.M., October 25, 2019 at CHMSC Conference Room, 4/F Administration Bldg. Brgy. Zone 1, Mabini St., Talisay City, Negros Occidental, which shall be open to prospective bidders.

7. Bids must be duly received by the BAC Secretariat at the address below on or before 10:00 A.M., November 11, 2019, all bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in ITB Clause 18.

Bid opening shall be on 10:30 A.M., November 11, 2019 at CHMSC Conference Room, 4/F Administration Bldg. Brgy. Zone 1, Mabini St., Talisay City, Negros Occidental. Bids will be opened in the presence of the bidders' representatives who choose to attend at the address below. Late bids shall not be accepted.

8. The Carlos Hilado Memorial State College reserves the right to reject any and all bids, declare a failure of bidding, or not to award the contract at any time prior to contract award in accordance with Section 41 of RA 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.

9. For further information, please refer to:

MA. KRISTINA G. MEDALLA
Head, BAC Secretariat
Carlos Hilado Memorial State College
Brgy. Zone 1, Mabini St.,
Talisay City, Negros Occidental
Telefax No. (034)712-8404

ROSALINDA S. TUVILLA, LLB
BAC Chairperson

Line Items

Item No.	Product/Service Name	Description	Quantity	UOM	Budget (PHP)
1	ONE (1) LOT	Proposed Design and Build for the Completion of 3-Storey Annex Bldg. for Engineering and Technology (East Wing) - Talisay Campus	1	Lot	55,000,000.00

Pre-bid Conference

Date	Time	Venue
25/10/2019	10:30:00 AM	CHMSC Conference Room, 4/F Administration Bldg. Brgy. Zone 1, Mabini St., Talisay City, Negros Occidental

Created by	Rowena De la Vida Prado
Date Created	17/10/2019

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CARLOS HILADO MEMORIAL STATE COLLEGE
BIDS AND AWARDS COMMITTEE
Talisay City, Negros Occidental
Telefax Nos. (034)712-8404

INVITATION TO BID
FOR PROPOSED DESIGN AND BUILD FOR THE COMPLETION OF 3-STOREY ANNEX BUILDING FOR ENGINEERING AND TECHNOLOGY (EAST WING) – TALISAY CAMPUS, BRGY. ZONE 1, MABINI ST., TALISAY CITY, NEGROS OCCIDENTAL
CHMSC 20-001-1017-I

1. The *Carlos Hilado Memorial State College*, through the *Corporate Budget for the Contract of 2020 approved by the governing Board,* intends to apply the sum of **FIFTY-FIVE MILLION PESOS & 00/100 (Php 55,000,000.00) ONLY** being the Approved Budget for the Contract (ABC) to payments under the contract for **PROPOSED DESIGN AND BUILD FOR THE COMPLETION OF 3-STOREY ANNEX BUILDING FOR ENGINEERING AND TECHNOLOGY (EAST WING) – TALISAY CAMPUS, BRGY. ZONE 1, MABINI ST., TALISAY CITY, NEGROS OCCIDENTAL**. Bids received in excess of the ABC shall be automatically rejected at bid opening.

2. The *Carlos Hilado Memorial State College* now invites bids for **PROPOSED DESIGN AND BUILD FOR THE COMPLETION OF 3-STOREY ANNEX BUILDING FOR ENGINEERING AND TECHNOLOGY (EAST WING) – TALISAY CAMPUS, BRGY. ZONE 1, MABINI ST., TALISAY CITY, NEGROS OCCIDENTAL** pursuant to the technical specifications indicated in the Terms of Reference to be provided. Completion of the Works is required within **Three Hundred Thirty (330) calendar days upon receipt of Notice to Proceed.** Bidders should have completed, within ten (10) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instructions to Bidders.

3. Bidding will be conducted through open competitive bidding procedures using the non-discretionary "pass/fail" criterion as specified in the 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act 9184, otherwise known as the "Government Procurement Reform Act".

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

4. Interested bidders may obtain further information from CARLOS HILADO MEMORIAL STATE COLLEGE and inspect the Bidding Documents at the address given below from 8:00 A.M. to 5:00 P.M.

   The BAC Secretariat
   Brgy. Zone I, Mabini St.,
   Talisay City, Negros Occidental

5. A complete set of Bidding Documents may be acquired by interested bidders on **October 18 – November 11, 2019 (9:30A.M.)**from the address 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 **Fifty Thousand Pesos (Php 50,000.00)** Only.

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

6. The CHMSC will hold a **Pre-Bid conference** on **10:30 A.M., October 25, 2019** at **CHMSC Conference Room, 4/F Administration Bldg. Brgy. Zone 1, Mabini St., Talisay City, Negros Occidental**, which shall be open to prospective bidders.

7. Bids must be duly received by the BAC Secretariat at the address below on or before **10:00 A.M., November 11, 2019,** all bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 18.

   Bid opening shall be on **10:30 A.M., November 11, 2019** at **CHMSC Conference Room, 4/F Administration Bldg. Brgy. Zone 1, Mabini St., Talisay City, Negros Occidental**. Bids will be opened in the presence of the bidders' representatives who choose to attend at the address below. Late bids shall not be accepted.

8. The Carlos Hilado Memorial State College reserves the right to reject any and all bids, declare a failure of bidding, or not to award the contract at any time prior to contract award in accordance with Section 41 of RA 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.

9. For further information, please refer to:

   MA. KRISTINA G. MEDALLA
   Head, BAC Secretariat
   Carlos Hilado Memorial State College
   Brgy. Zone 1, Mabini St.,
   Talisay City, Negros Occidental
   Telefax No. (034)712-8404

COMMISSION ON AUDIT
RECEIVED
BY: M DATE: OCT 18 2019
OFFICE OF THE REGION

CARLOS HILADO MEMORIAL STATE COLLEGE RECORDS SECTION RELEASED BY: DATE: 10/18/19

Section III. Bid Data Sheet

Notes on the Bid Data Sheet

This Section is intended to assist the CHMSC in providing the specific information in relation to corresponding clauses in the ITB included in Section II, and has to be prepared for each specific procurement.

The CHMSC should specify in the BDS information and requirements specific to the circumstances of the CHMSC, the processing of the procurement, the applicable rules regarding bid price and currency, and the bid evaluation criteria that will apply to the Bids. In preparing this Section, the following aspects should be checked:

(a) Information that specifies and complements provisions of Section II. Instructions to Bidders must be incorporated.

(b) Amendments and/or supplements, if any, to provisions of Section II. Instructions to Bidders as necessitated by the circumstances of the specific procurement, must also be incorporated.

Bid Data Sheet

ITB Clause	
1.1	The Procuring Entity is CARLOS HILADO MEMORIAL STATE COLLEGE. The name of the Contract is **PROPOSED DESIGN AND BUILD FOR THE COMPLETION OF 3-STOREY ANNEX BUILDING FOR ENGINEERING AND TECHNOLOGY (EAST WING) – TALISAY CAMPUS, BRGY. ZONE 1, MABINI ST., TALISAY CITY, NEGROS OCCIDENTAL.** The identification number of the Contract is: **6565686/CHMSC 20-001-1017-I**
2	The Funding Source is: The Government of the Philippines (GoP) through the 2020 Corporate Budget of the College approved by the governing Board, in the amount of **FIFTY FIVE MILLION PESOS & 00/100 (Php 55,000,000.00) ONLY.** The name of the Project is: **PROPOSED DESIGN AND BUILD FOR THE COMPLETION OF 3-STOREY ANNEX BUILDING FOR ENGINEERING AND TECHNOLOGY (EAST WING) – TALISAY CAMPUS, BRGY. ZONE 1, MABINI ST., TALISAY CITY, NEGROS OCCIDENTAL.**
3.1	No further instructions.
5.1	No further instructions.
5.2	Bidding is restricted to eligible bidders as defined in ITB Clause 5.1.
5.4 (a)	No further instructions.
5.4(b)	For this purpose, similar contracts shall refer to Building (vertical building), and completed within the period stated in the Invitation to Bid.
8.1	"Subcontracting is allowed." The following works may be subcontracted: 1. Preparation of the design package as described on the Technical Specification Part I

	2. Mechanical System and Fire Protection 3. Electrical Works, Fire Alarm System and Electronics System
8.2	The prospective bidder shall submit all the required documents for all the subcontractors it intends to employ for infrastructure projects specified in Clause 12
9.1	**The Procuring Entity will hold a pre-bid conference for this Project on:** **DATE: OCTOBER 25, 2019** **TIME: 10:30 A.M.** **VENUE: CHMSC Conference Room, 4/F Administration Building, Brgy. Zone 1, Mabini St., Talisay City, Negros Occidental**
10.1	The Procuring Entity's address is: CARLOS HILADO MEMORIAL STATE COLLEGE Brgy. Zone 1, Mabini St., Talisay City, Negros Occidental ROSALINDA S. TUVILLA, LLB BAC Chairperson Tel. No. (034) 712-8404 chmsc_bacsec@yahoo.com
10.4	No further instructions.
12.1	In the submission of bids, the first envelope (Technical Proposal) shall contain all the required documents for infrastructure projects under Section 25.2(b) of the IRR of R.A. 9184 and the following additional documents: 1. Preliminary Conceptual Design Plans in accordance with the degree of details specified by the Procuring Entity; 2. Design and Construction Methods; 3. List of design and construction personnel, to be assigned to the contract to be bid, with their complete qualification and experience data and; 4. Value engineering analysis of design and construction method. 5. The conceptual plans and cost estimates of the items specified in clause 5.2.1.12. #10 of the Technical Specification Part 1 must be included on the bids and to be mentioned on the presentation in MS Power Point Format and saved on a CD.

12.1(a)(iii)	PCAB Registration/PCAB License **Medium B (up to 100M)**
12.1(b)(ii.2)	The minimum work experience requirements for Design key personnel are the following:

Key Personnel	General Experience	Relevant Experience (years)
1. Licensed Architect	Registered Architect	3
2. Structural Engineer	Registered Civil Engineer	3
3. Professional Mechanical Engineer	Registered Professional Mechanical Engineer	3
4. Professional Electrical Engineer	Registered Professional Electrical Engineer	3
5. Master Plumber	Registered Master Plumber	3
6. Professional Electronics Engineer	Registered Professional Electronics Engineer	3

The minimum work experience requirements for Construction key personnel are the following:

Key Personnel	General Experience	Relevant Experience (years)
1. Project Manager	Registered Civil Engineer	8
2. Project Engineer	Registered Civil Engineer	5
3. Materials/Quality Control Engineer	Licensed Material Engineer	5
4. Foreman	High School	5
5. Construction Safety and Health Personnel	College Graduate	5
6. Licensed Surveyor	College Level	5

12.1(b)(iii.3) The minimum major equipment requirements are the following:

Equipment	Capacity	Number of Units
1. Backhoe	0.80 cu.m.	1
2. Dump Truck	10 cu.m.	2
3. Plate Compactor		1

	4. Walk – Behind	1
	5. One – Bagger Mixer	1
	6. Water Pump	2
	7. Cutting Outfit	3
	8. Concrete Vibrator	3
	9. Transit Mixer	2
	10. Bar Bender	1
	11. Bar Cutter	1
	12. Pumpcrete or Truckcrete	1
	13. Welding Machine	1
	14. Service Vehicle	1
13.1	The Bidder shall: 1. Fill in the prices for all items of the works described in the Summary of Bids. 2. Prepare the Detailed Unit Price Analysis (DUPA) to cover all the items in the works which upon the judgement of the Design/Build Contractor are necessary for the completion of the scope of works defined by the Drawings and Technical Specifications Part I and II. 3. The Bidder shall be responsible that all the items described on the drawings as prepared by the Design/Build Contractor shall not claim for payment of works on items specified on the drawings but not included on the DUPA unless approved in writing by the Procuring Entity. 4. The Bidder must ensure that the total price included the Summary of Bids prescribed in Clause 15.2.1 shall not be more than the allowable Approved Budget for the Contract (ABC). In the event that the said total calculated cost on the Summary of Bids shall be more than the ABC, the bid shall be automatically rejected.	
13.1(b)	This shall include all of the following documents: 1) Bid prices in the Bill of Quantities; 2) Detailed estimates, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; and 3) Cash flow by quarter or payment schedule.	
13.2	**The Approved Budget for the Contract (ABC) is FIFTY-FIVE MILLION PESOS & 00/100 (Php 55,000,000.00) ONLY.** Any bid with a financial component exceeding this amount shall not be	

	accepted.
14.2	No further instructions.
15.4	No further instructions.
16.1	The bid prices shall be quoted in Philippine Pesos.
16.3	No further instructions.
17.1	Bids will be valid until **March 10, 2020 (120 calendar days upon the date of bid opening).**
18.1	The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts: 1. The amount of not less than **Php 1,100,000.00 (2% of ABC)**, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; 2. The amount of not less than **Php 2,750,000.00(5% of ABC)** if bid security is in Surety Bond.
18.2	The bid security shall be valid until **March 10, 2020 (120 calendar days upon the date of bid opening).**
20.3	Each Bidder shall submit one (1) original and two (2) copies of the first and second components of its bid. Hard Copy and Soft Copy in PDF Format of the same documents.
21	The address for submission of bids is: **The Bids and Awards Committee** **Carlos Hilado Memorial State College** **Brgy. Zone 1, Mabini St.** **Talisay City, Negros Occidental** The deadline for submission of bids is: **DATE: NOVEMBER 11, 2019** **TIME: 10:00 A.M.**
24.1	The place of bid opening is: **The Bids and Awards Committee** **Carlos Hilado Memorial State College** **Brgy. Zone 1, Mabini St.** **Talisay City, Negros Occidental**

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24.1	The place of bid opening is: **The Bids and Awards Committee** **Carlos Hilado Memorial State College** **Brgy. Zone 1, Mabini St.** **Talisay City, Negros Occidental**

	The date and time of bid opening is: **DATE: NOVEMBER 11, 2019** **TIME: 10:30 A.M.**
24.2	No further instructions.
24.3	No further instructions.
27.3	Partial bid is not allowed. The infrastructure project is packaged in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award.
27.4	No further instructions.
28.2	Bidders have the option to submit manually filed tax returns or tax returns filed through the Electronic Filing and Payments System. ***Note: The latest income and business tax returns are those within the last six (6) months preceding the date of bid submission.***
31.4(f)	Additional contract documents relevant to the Project: 1) Construction Schedule/GANTT Chart (MS Project Format) & S-curve 2) Manpower Schedule 3) Construction Methods 4) Equipment Utilization Schedule 5) Construction Safety and Health Program (approved by the DOLE) 6) PERT/CPM 7) Statement of Cash Flow & Payment Schedule 8) Organizational Chart 9) Soft Copy of all submitted documents in PDF File (submit in CD)

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Section V. Special Conditions of Contract

Notes on the Special Conditions of Contract

Similar to the Section III. Bid Data Sheet, the clauses in this Section are intended to assist the CHMSC in providing contract-specific information in relation to corresponding clauses in the GCC.

The provisions of this Section complement the GCC, specifying contractual requirements linked to the special circumstances of the CHMSC, Philippines, the sector, and the Works procured. In preparing this Section, the following aspects should be checked:

(a) Information that complements provisions of Section IV. General Conditions of Contract must be incorporated.

(b) Amendments and/or supplements to provisions of Section IV. General Conditions of Contract, as necessitated by the circumstances of the specific project, must also be incorporated.

However, no special condition which defeats or negates the general intent and purpose of the provisions of Section IV. General Conditions of Contract should be incorporated herein.

Special Conditions of Contract

GCC Clause	
1.17	The **Intended Completion Date** is **330 calendar days upon receipt of the Notice to Proceed** **Breakdown of 330 calendar days are as follows:** **60 days for design and building permit processing.** **270 days for actual construction with 30 days included for unfavorable weather condition.** ***NOTE: The contract duration shall be reckoned from the start date and not from contract effectivity date.***
1.22	The **Procuring Entity** is CARLOS HILADO MEMORIAL STATE COLLEGE BRGY. ZONE 1, MABINI STREET TALISAY CITY, NEGROS OCCIDENTAL
1.23	The **Procuring Entity's Representative** is ROSALINDA S. TUVILLA BAC CHAIRPERSON CARLOS HILADO MEMORIAL STATE COLLEGE BRGY. ZONE 1, MABINI STREET TALISAY CITY, NEGROS OCCIDENTAL
1.24	The Project Site is located at CARLOS HILADO MEMORIAL STATE COLLEGE, TALISAY CAMPUS, BRGY. ZONE 1, MABINI ST., TALISAY CITY, NEGROS OCCIDENTAL.
1.28	The **Start Date** is Upon receipt of Notice to Proceed.
1.31	The **Works** consist of the items defined in the following: 1. Technical Specifications Part I and 2. Technical Specifications Part II
2.2	If different dates are specified for completion of the Works by section ("sectional completion"), these dates should be listed here
5.1	The **CHMSC** shall give possession of all parts of the Site to the Contractor upon receipt of Notice to Proceed by the latter.
6.5	The Design and Build Contractor shall employ the following **Key**

Personnel:

A. Design Firm or Design Key Personnel:

1. Licensed Architect
2. Structural Engineer
3. Professional Mechanical Engineer
4. Professional Electrical Engineer
5. Master Plumber
6. Professional Electronics Engineer

B. Project/Construction Key Personnel:

1. Project Manager
2. Project Engineer
3. Materials/Quality Control Engineer
4. Foreman
5. Construction Safety and Health personnel
6. Licensed Surveyor

The Contractor must ensure that nominated and/or approved key personnel will not be demobilized from site unless replacement is duly evaluated and approved by the Procuring Entity through its duly authorized representative.

The non-availability of any of the key personnel for construction from the project site will be subject to penalty/deduction from the next billing:

No.	Key Personnel	Amount of Deduction per Day of Non-appearance
1	Project Manager	Php1,000.00
2	Project Engineer	Php900.00
3	Materials/Quality Control Engineer	Php700.00
4	Foreman	Php700.00
5	Construction Safety & Health Personnel	Php800.00
6	Licensed Surveyor	Php700.00

The following condition will be ground for withholding of payment for the next billing.

1. Poor Supervision and inaction of the concerned contractor to the items and points included on Project Manager's Instruction (PMI's), Site Observation Reports (SOR's), Official Letters and other form of instructions and reports related to any observed non-conformity and non-compliance to the relevant clauses of the contract and the technical specifications – Php1,000.00/point.

2. Prescribed (PPE's) Personal Protective Equipment
   2.a No safety hats – Php500.00/worker/day of occurrence
   2.b No safety shoes – Php500.00/worker/day of occurrence

	2.c Non-availability or improper use of the body harness and other life-saving equipment on site – Php500.00/worker/day of occurrence. 2.d Cigarette butts found inside the site premises – Php100.00/butts. 3. Implementation of critical works without permit such as concrete pouring, installation of devices, wires and conduits without prior samples and approval and other forms of work – Php10,000.00/point. 4. Non-submission of reports such as but not limited to, Daily Reports and Look Ahead Schedules– Php. 1,000.00/day of occurrence and delay. 5. Non-submission of brochures and samples of materials prior to installation at site and installation of unapproved materials – Php. 10,000/point. 6. Non-Submission of FCD Plan after completion of the final design – Php. 1,000.00/day of delay. 7. Non-requisition of building permit after the allotted duration for the processing of building permits has elapsed. – Php. 1,000.00/day of delay. 8. Non-availability of pledge equipment and manpower at site. – Php. 1,000.00/day of occurrence. The Contractor should show proof of remittances to SSS, BIR, Phil health and other government agencies for any of the deductions being imposed from its personnel. ***NOTE: The names of the Key Personnel and their designation shall be filled out by winning contractor prior to contract signing.***
7.4(c)	No further instructions.
7.7	No further instructions.
8.1	No further instructions.
10	The site investigation reports are:
12.3	No further instructions.
12.5	In case of permanent structures, such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems,

	power plants, transmission and communication towers, railway system, and other similar permanent structures: Fifteen (15) years.
13	All partners to the joint venture shall be jointly and severally liable to the

DESIGN AND BUILD FOR THE CONSTRUCTION OF 3-STOREY ANNEX BUILDING
FOR ENGINEERING AND TECHNOLOGY (NORTH WING)
CHMSC - TALISAY

FINISHING SCHEDULE

NO.	FLOOR	ROOM	DESCRIPTION	AREA (sq.m.)	FLOOR FINISHING																WALL FINISHING																CEILING FINISHING										DOORS										WINDOWS								
					CERAMIC/HOMOGENEOUS TILES	PEBBLED BORDER AND NON-SKID WITH GROOVE TILE COMBINATION	SMOOTH CONC. FINISH BORDER & NON-SKID TILE COMBINATION	INDUSTRIAL HIGH STRENGTH NON-SKID EPOXY FLOOR COVERING	WOODEN PLANKS WITH SCRATCH PROOF TOP COATING	WATERPROOFING WITH ASPHALT BEDDING	SMOOTH CONCRETE	UNFINISHED CONCRETE	STEEL DECKING	WOOD PARQUET	PEBBLES	CARPET	PAINTED WALL	GLASS PARTITION	ALUMINUM CLADDING	VARNISHED FINISH	FABRIC PANEL	BASE BOARD/SKIRTING	CORNICE TRIM	HARDIFLEX CLADDING	CERAMIC TILES	PLASTERED CEMENT WALL	CHB	DRY WALL PARTITION	LOW PARTITION	STAINLESS STEEL HANDRAILS	CONCRETE SOFFIT	GYPSUM BOARD	HARDIFLEX	PLYWOOD FINISHING	ACOUSTIC CEILING TILES	WOODEN PANELING	PAINTED	UNPAINTED	VARNISHED	ALUMINUM PANELING	SINGLE DOOR	DOUBLE DOOR	ROLL-UP DOOR GRILLE TYPE	LOW EMISSION GLASS PANELS IN ALUM. POWDER COATED FRAME	SLIDING	SWING	WOODEN FLUSHED	WOODEN PANEL	ALUMINIUM	STEEL	PVC	ALUMINIUM JALOUPLAST	ALUMINIUM GLASS	LOW EMISSION GLASS PANELS IN ALUM. POWDER COATED FRAME	SLIDING GLASS	AWNING GLASS	ARTIFICIAL VENTILATION	FIXED GLASS	LOUVERS	WOODEN
1	Ground	Lobby, Hallway and storageroom	with stainless railing and roof skirting	SEE CONCEPTUAL PLANS FOR AREA			o										o									o	o				o											o									o						
2	Ground	Staircases and Landing	provide brass nosing w/stainless railings				o										o									o	o				o											o									o						
3	Ground	Sidewalk				o											o									o	o				o											o									o						
4	Ground	Ramp	with stainless railing			o											o									o	o				o											o									o						
5	Ground	Male toilet	GAD Compliance		o																					o	o				o											o									o						
6	Ground	Female toilet	GAD Compliance		o																					o	o				o											o									o						
7	Ground	PWD toilet	GAD Compliance		o																					o	o				o											o									o						
8	Ground	RAC lecture room							o								o									o	o				o											o									o						
9	Ground	Kitchen laboratory	with airconditioning unit (inverter type)						o								o									o	o				o											o									o						
10	Ground	Food service laborary	with airconditioning unit (inverter type)						o								o									o	o				o											o									o						
11	Second	Lobby, Hallway and storage room	Hallway with roof skirting				o										o									o	o				o											o									o						
12	Second	Staircases and Landing					o										o									o	o				o											o									o						
13	Second	Male toilet			o																					o	o				o											o									o						
14	Second	Female toilet			o																					o	o				o											o									o						
15	Second	PWD toilet	Enclosed with artificial ventilation	SEE CONCEPTUAL PLANS FOR AREA	o																					o	o				o											o									o						
16	Second	Fabrication Laboratory room							o								o									o	o				o											o									o						
17	Second	Fab.Lab.office, conference room and lounging area							o								o									o	o				o											o									o						
18	Second	CIT office							o								o									o	o				o											o									o						
19	Second	CIT Deans office							o								o									o	o				o											o									o						
20	Second	CIT unit head area							o								o									o	o				o											o									o						
21	Second	CIT accreditation room							o								o									o	o				o											o									o						

FINISHING SCHEDULE

DESIGN AND BUILD FOR THE CONSTRUCTION OF 3-STOREY ANNEX BUILDING
FOR ENGINEERING AND TECHNOLOGY (NORTH WING)
CHMSC - TALISAY

NO.	FLOOR	ROOM	DESCRIPTION	AREA (sq.m.)
22	Second	CIT toilets and pantry areas		SEE CONCEPTUAL PLANS FOR AREA
23	Third	Lobby, Hallway and storageroom	Hallway with roof skirting	
24	Third	Staircases and Landing		
25	Third	Male toilet	GAD Compliance	
26	Third	Female toilet	GAD Compliance	
27	Third	PWD toilet	GAD Compliance	
28	Third	Theater type lecture room	provided with Air Condition units	
29	Third	Food tech.lab. for sandwiches and the like		
30	Third	Food tech.lab. for cakes and pastries	GAD Compliance	
31	Third	CADD room	GAD Compliance	
32	Roof deck	Staircases and Landing		
33	Roof deck	Viewing deck	Stainless railing with glass cladding	
34	Roof deck	Roof deck floor slab		

FLOOR FINISHING

NO.	CERAMIC/HOMOGENEOUS TILES	PEBBLED BORDER AND NON-SKID WITH GROOVE TILE COMBINATION	SMOOTH CONC. FINISH BORDER & NON-SKID TILE COMBINATION	INDUSTRIAL HIGH STRENGTH NON-SKID EPOXY FLOOR COVERING	WOODEN PLANKS WITH SCRATCH PROOF TOP COATING	WATERPROOFING WITH ASPHALT BEDDING	SMOOTH CONCRETE	UNFINISHED CONCRETE	STEEL DECKING	WOOD PARQUET	PEBBLES	CARPET
22	o											
23			o									
24			o									
25	o											
26	o											
27	o											
28					o							
29				o								
30				o								
31				o								
32			o									
33			o									
34						o						

WALL FINISHING

NO.	PAINTED WALL	GLASS PARTITION	ALUMINUM CLADDING		VARNISHED FINISH	FABRIC PANEL	BASE BOARD/SKIRTING	CORNICE TRIM	HARDIFLEX CLADDING	CERAMIC TILES	PLASTERED CEMENT WALL	CHB	DRY WALL PARTITION	LOW PARTITION	STAINLESS STEEL HANDRAILS
22	o									o	o	o			
23	o										o	o			
24	o										o	o			
25	o										o	o			
26	o										o	o			
27	o										o	o			
28	o										o	o			
29	o										o	o			
30	o										o	o			
31											o	o			
32	o										o	o			
33	o										o	o			
34															

CEILING FINISHING

NO.	CONCRETE SOFFIT	GYPSUM BOARD	HARDIFLEX	PLYWOOD FINISHING	ACOUSTIC CEILING TILES	WOODEN PANELING	PAINTED	UNPAINTED	VARNISHED	ALUMINUM PANELING
22	o		o				o			
23	o						o			
24		o					o			
25		o					o			
26		o					o			
27		o					o			
28		o					o			
29		o					o			
30	o						o			
31	o						o			
32	o						o			
33	o						o			
34										

DOORS

NO.	SINGLE DOOR	DOUBLE DOOR	ROLL-UP DOOR GRILLE TYPE	LOW EMISSION GLASS PANELS IN ALUM. POWDER COATED FRAME	SLIDING	SWING	WOODEN FLUSHED	WOODEN PANEL	ALUMINIUM	STEEL	PVC
22	o					o		o			
23	o					o		o			
24											
25	o					o		o			
26	o					o		o			
27											
28				o		o					
29				o		o					
30				o		o					
31											
32											
33											
34											

WINDOWS

NO.	ALUMINIUM JALOUPLAST	ALUMINIUM GLASS	LOW EMISSION GLASS PANELS IN ALUM. POWDER COATED FRAME	SLIDING GLASS	AWNING GLASS	ARTIFICIAL VENTILATION	FIXED GLASS	LOUVERS	WOODEN
22	o								
23	o							o	
24		o			o			o	
25	o							o	
26	o							o	
27						o			
28			o		o		o		
29			o		o		o		
30			o		o		o		
31									
32									
33									
34									

Physical Plant and Development Management Office

chmsct_ppdm@yahoo.com *(63-34) 712-0420 local 115*

Subject: Design Parameters and Space Requirements
Project Title: **Proposed Design and Build for the Completion of 3-Storey Annex Building for Engineering and Technology.**
Project Location: CHMSC-Talisay Campus

- **Architectural Design**

1. Ecological Architecture Concept
2. Lecture rooms with whiteboard and provisions for smart T.V.
3. Kitchen laboratory equipped with LPG piping system (safety and control), LPG storage area, water system, range hood with exhaust blowers, hood suppression, stainless steel deep sink with counter, preparatory table with sink, storage room, floor drainage system and with compliance to the sanitary code of the Phil. chapter 3 section 17 requirements and CHED, OBO and BFP requirement as well.
4. Harmonize architectural facade design from the ETGB annex
5. Natural grade line to ground floor line (to level from the existing Green Bldg. hallway floor line)
6. Provide glass cladding on three sides with design compliant to green architecture (low emission) for food tech. kitchen lab. and food tech. lecture room, food tech. lab. At 3rd.flr., fab. lab. and theater type lecture room.
7. Directional signages and emergency evacuation chart per floor with room labeling to be installed.
8. Use industrial strength epoxy floor covering in all food laboratory.
9. Smooth concrete/pebbled finish border and non-skid tile combination in hallways, staircases, landings, viewing deck and storage rooms.
10. Wooden planks with scratchproof top coating floor material in all lecture rooms.

- **Civil / Structural Design (in accordance w/NSCP 2015)**

1. Excavation, backfilling and compaction Works
2. Structural Steel and Concrete Design (4000psi @14days)
3. Structural Analysis and Design
4. Soil Analysis and boring capacity test
5. Soil poisoning for footing, FTB, SOG and perimeter of the building.
6. Structural reinforcement grade 60 for rebars 16mm up
7. Roof deck waterproofing with asphalt bedding and overflow outlets
8. Independent Connection of new structure to the existing bldg.
9. Bridge construction at third floor with provisions for future connection to the proposed College Library Building.

- **Plumbing / Sanitary Design (provide water meter)**

1. Water Supply Lines (connect to ETGB annex)
2. Sanitary / Sewer Lines and vents (connect to ETGB annex)
3. Grease Trap and separate septic vault for kitchen and food lab.
4. Rain Water Tank and fire tank (use in ETGB annex)

5. Provide RC pipe (0.80m) as replacement to the existing canal that will be covered by the building, Put manhole on both sides.
6. Septic vault for toilet w/ pipes and accessories going to STP.
7. Overhead tank 2-2000 liters above each last floor toilet from Cistern and Rain water tank.

- **Electrical Design**

1. 4 sets 18"orbital type ceiling fan per lecture room
2. Distribution panel per floor with individual Sub meter
3. Main distribution panel with meter, all panel to be provided with gutters
4. Installation of lighting and power system includes water pump, grounding and lightning protection system.
5. Motion activated lighting system in every office and lecture rooms and photo sensor controlled lighting system with Manual Bypass in 3 - Way Switch Configuration in hallways and open spaces
6. Lighting for laboratories to be connected to RFID with Slot switch
7. Solar power system with software (10 KVA) Net metering with MTS per floor
8. Complete level control system for all tanks

- **Mechanical and Fire Protection Design**

1. Design, supply and installation of Air Conditioning system (Inverter Type) for the ff. areas:

    a. Fabrication laboratory, offices, conference rooms and lounging area
    b. Theater type lecture room/ Function room
    c. Laboratory for cakes, pastries and sandwiches, kitchen laboratory and food service laboratory
    d. CIT deans office, CIT office, Unit heads area, Accreditation and CADD room

2. Sprinkler system (connect from ETGB)
3. Exhaust fan for the ff. areas: Kitchen and toilets, electrical, electronics and storage room
4. LPG pipeline with leak monitoring, safety shut-off, controls and LPG storage area (for kitchen and Food laboratory)
5. Rangehood and exhaust ducting up to roof deck with exhaust blowers (Kitchen and Food Laboratory
6. Hood suppression system compliant with BFP
7. 1 Unit regenerative scenic elevator 11 person capacity (PWD Compliant) w/ UPS and AVR, Earth quake and brownout safety features at least 850 kg

- **Fire Detection and Alarm System (FDAS) (connect from ETGB annex)**
    1. addressable with UPS and AVR at FACP

- **Electronics and Network Communication**
    1. CCTV system on each floor level to monitor all entrances, exits and hallways (connect from ETGB annex)
    2. PABGM system with individual volume controller (all rooms) (connect to ETGB annex)
    3. Data/Tel. system (LAN) per room except, storage and toilets (connect from ETGB annex) with server accessories

4. All lecture rooms with provisions ready for interactive projector with brackets and speaker.
5. RFID card dead latch door lock system with hardware and software in all laboratory and lecture rooms, all offices and accreditation room
6. All electronics Devices must be compatible with the existing CHMSC system

- **Scope of Works and Bill of Quantities**
- **Green Architecture Compliance (minimum)**
- **Health, safety and environmental full compliance**
- **Disposal should comply w/DENR regulation and law**
- **Signed and Sealed all Plans and Permits for Building Construction, FCD, as built plans and Building Occupancy**

Space Requirements
Ground Floor

2-Units Concrete stair (NGL to Ground Floor) with ramp (pebbles and tiles combination) and stainless handrail
1-Unit Hallway with stainless railing and roof skirt
1-Unit Concrete sidewalk
1-Unit Lobby with grille type roll-up gate
1-Unit Concrete staircase (Ground Floor To Second Floor) with grille type roll-up gate in ground floor
1-Unit Kitchen laboratory room w/storage and LPG area (with sinks and utilities).
1-Unit Food Service laboratory
1-Unit Regenerative elevator PWD compliant with scenic view towards the football field
1-Unit PWD gender neutral toilet
1-Unit Female comfort station
1-Unit Male comfort station
2-Units RAC lecture room

Space Requirements
Second Floor

1-Unit Concrete staircase (Second Floor To Third Floor)
1-Unit Fab. laboratory room for engineering and technology with lounging area, fab lab office and conference room
1-Unit CIT department office w/receiving, staff and lounging area toilet w/pantry and filling cabinet room
1-Unit CIT deans office w/unit heads area
1-Unit Accreditation room with toilet and pantry
1-Unit Hallway with stainless railing and roof skirt

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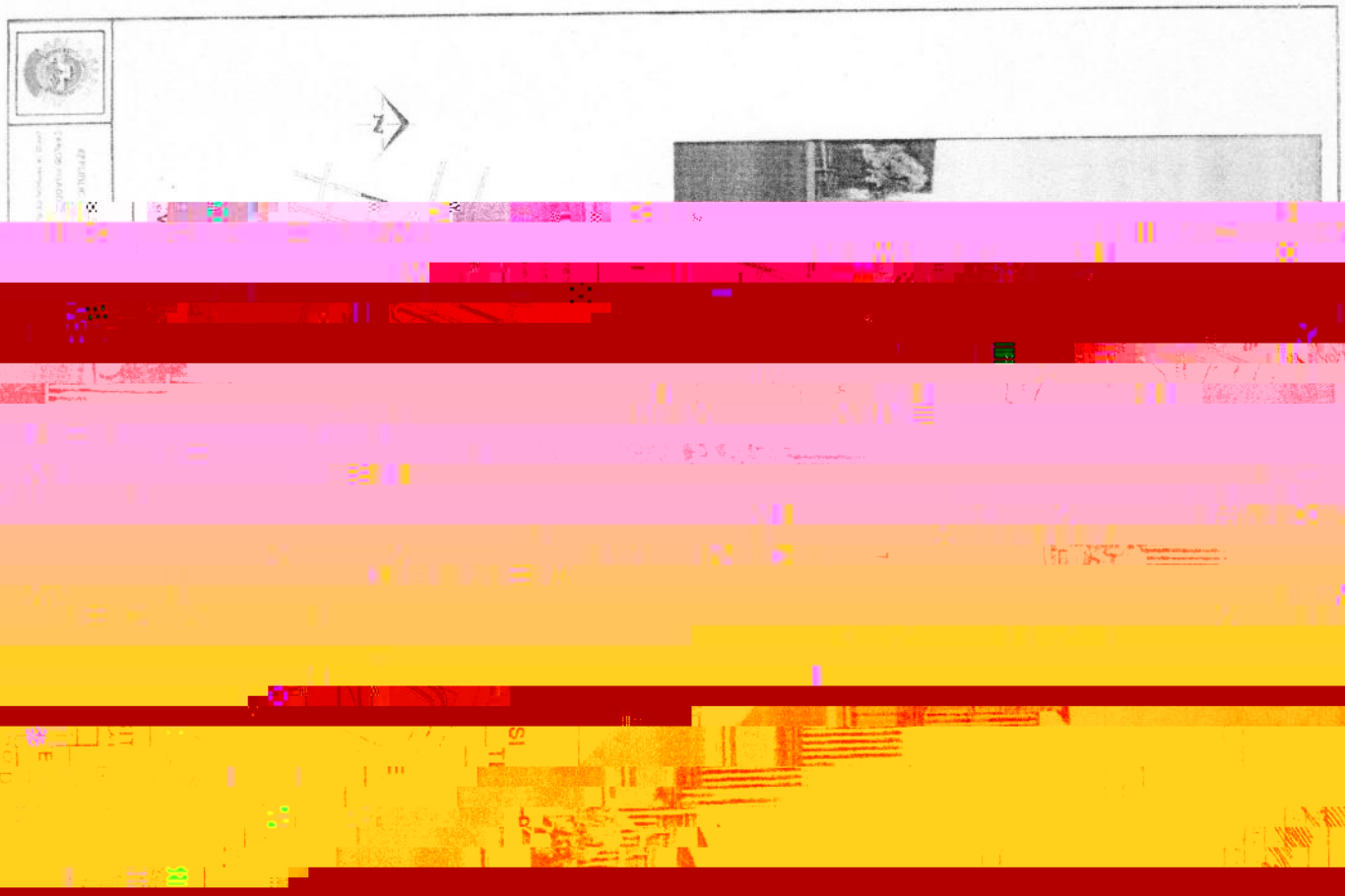
1-Unit Lobby with storage room
1-Unit Regenerative elevator PWD compliant w/ scenic view
1-Unit PWD gender neutral toilet
1-Unit Female comfort station
1-Unit Male comfort station
1-Unit Concrete ledge

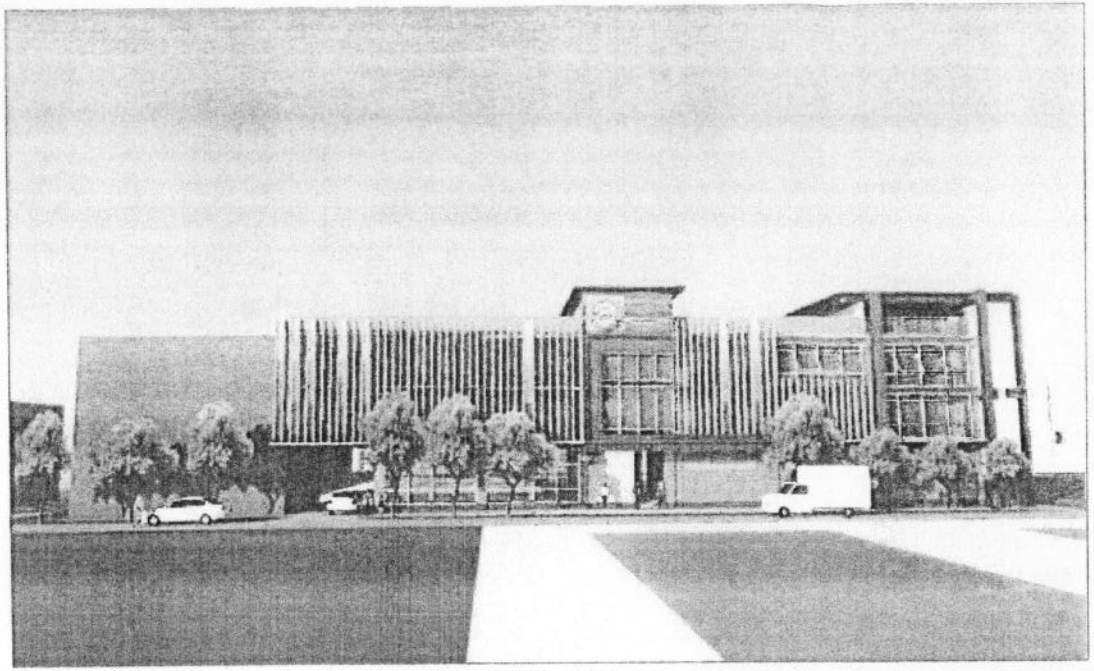
Space Requirements
Third Floor

1-Unit Concrete staircase (Third Floor To roof deck)
1-Unit Theater type lecture room/Function room
1-Unit Laboratory room for cakes and pastries
1-Unit Laboratory room for sandwiches
1-Unit CADD laboratory room
1-Unit Hallway with stainless railing and roof skirt
1-Unit Lobby with storage room
1-Unit Regenerative elevator PWD compliant w/ scenic view
1-Unit PWD gender neutral toilet
1-Unit Female comfort station
1-Unit Male comfort station
1-Unit Concrete Bridge with provision for future extension
1-Unit Concrete ledge

Space Requirements
Roof deck Floor

1-Unit Enclosed concrete staircase w/roof slab
(roof deck back to third floor)
1-Unit concrete parapet wall with wall mounted lights at every column
1-Unit Viewing deck with roof slab and stainless railings with tempered glass panels
1-Unit Regenerative elevator PWD compliant w/ scenic view
1-Unit Waterproofed roof deck slab with floor drains and overflow pipes
1-Unit Concrete ledge
xxxxXXXXxxxxNothing FollowsxxxxXXXXxxxx





CONCEPTUAL DESIGN
SCALE NOTS

VICINITY MAP
SCALE NOTS

THE SITE

SITE DEVELOPMENT PLAN
SCALE NOTS

TABLE OF CONTENT

DPWH
REPUBLIC OF THE PHILIPPINES
OFFICE OF THE BUILDING OFFICIAL
CITY OF TALISAY

LAND USE & ZONING:

LINE & GRADE:

ARCHITECTURAL:

STRUCTURAL:

ELECTRICAL:

CITY HEALTH OFFICE:

SANITARY:

FIRE DEPARTMENT:

MECHANICAL:

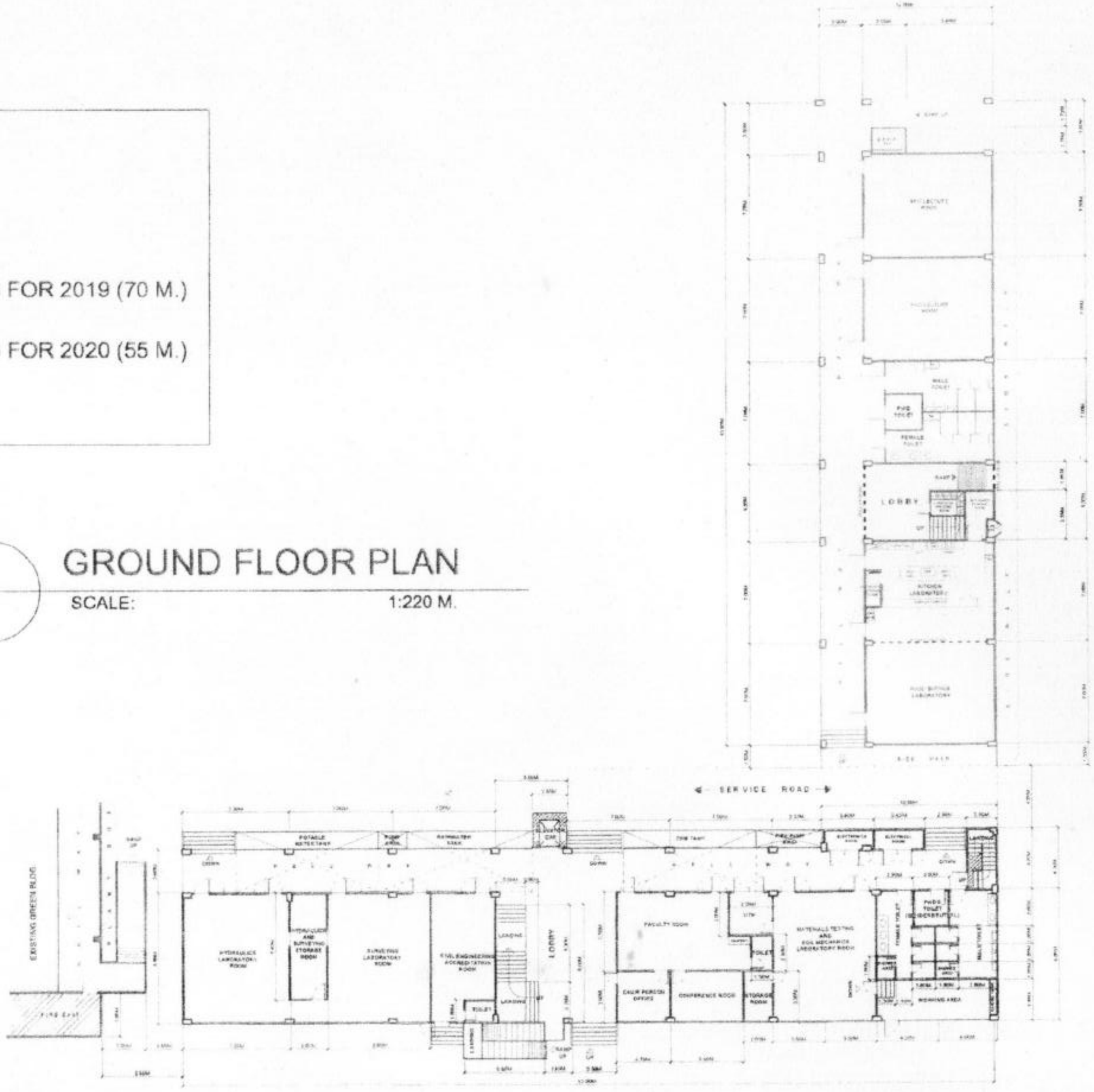
REPUBLIC OF THE PHILIPPINES CARLOS HILADO MEMORIAL STATE COLLEGE OFFICE OF PHYSICAL FACILITIES DEVELOPMENT	PROJECT TITLE: Proposed Design & Build for the Completion of 3-Storey Annex Building for Engineering and Technology PROJECT LOCATION: CHMSC TALISAY CAMPUS	PREPARED BY: ARNEL R. LATURNAS COLLEGE DRAFTSMAN	CHECKED BY: ARCH. [illegible] A. LACSON, UAP COLLEGE ARCHITECT	RECOMMENDING APPROVAL: SERGIO NICOMEDES C. [illegible], PhD, TM PDOA DIRECTOR	[illegible] ANTONIO L. DIZON JR., Ph.D. VP ADMINISTRATION & FINANCE	APPROVED BY: RENATO M. SORCELA, Ph.D. SUC PRESIDENT III	SHEET NO. A 1

LEGEND:

EXISTING BUILDING

PROPOSED BUILDING FOR 2019 (70 M.)

PROPOSED BUILDING FOR 2020 (55 M.)



GROUND FLOOR PLAN

SCALE: 1:220 M.

REPUBLIC OF THE PHILIPPINES
CARLOS HILADO MEMORIAL STATE COLLEGE

PROJECT TITLE: Proposed Design & Build for the Completion of 3-Storey Annex Building for Engineering and Technology

PREPARED BY: COLLEGE DRAFTSMAN

CHECKED BY: COLLEGE ARCHITECT

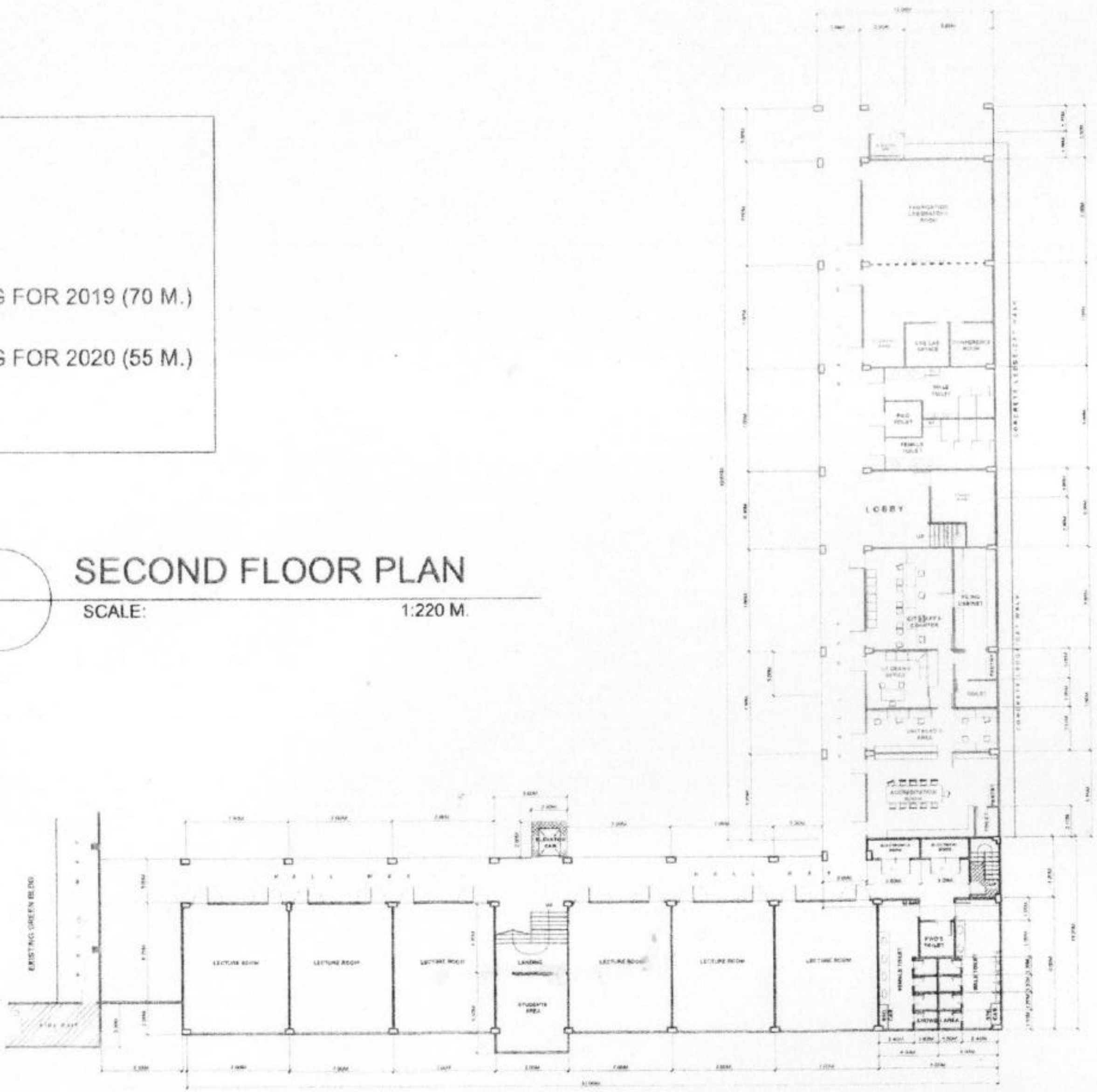
RECOMMENDING APPROVAL: PPDM DIRECTOR; VP ADMINISTRATION & FINANCE

APPROVED BY: RENATO M. SOROLLA, PH.D. SUC PRESIDENT III

SHEET NO. A 2

LEGEND:

- EXISTING BUILDING
- PROPOSED BUILDING FOR 2019 (70 M.)
- PROPOSED BUILDING FOR 2020 (55 M.)



SECOND FLOOR PLAN

SCALE: 1:220 M.

	PROJECT TITLE:	PREPARED BY:	CHECKED BY:	RECOMMENDING APPROVAL:		APPROVED BY:	SHEET NO.
REPUBLIC OF THE PHILIPPINES CARLOS HILADO MEMORIAL STATE COLLEGE	Proposed Design & Build for the Completion of 3-Storey Annex Building for Engineering and Technology	ARNEL K. JATUKMAD	COLLEGE ARCHITECT	PPDM DIRECTOR	ANTONIO L. DERAJA, Ph.D. VP ADMINISTRATION & FINANCE	RENATO M. SOROLLA, Ph.D. SUC PRESIDENT III	A 3
	PROJECT LOCATION: CHMSC TALISAY CAMPUS	COLLEGE DRAFTSMAN					

LEGEND:

- EXISTING BUILDING
- PROPOSED BUILDING FOR 2019 (70 M.)
- PROPOSED BUILDING FOR 2020 (55 M.)

THIRD FLOOR PLAN

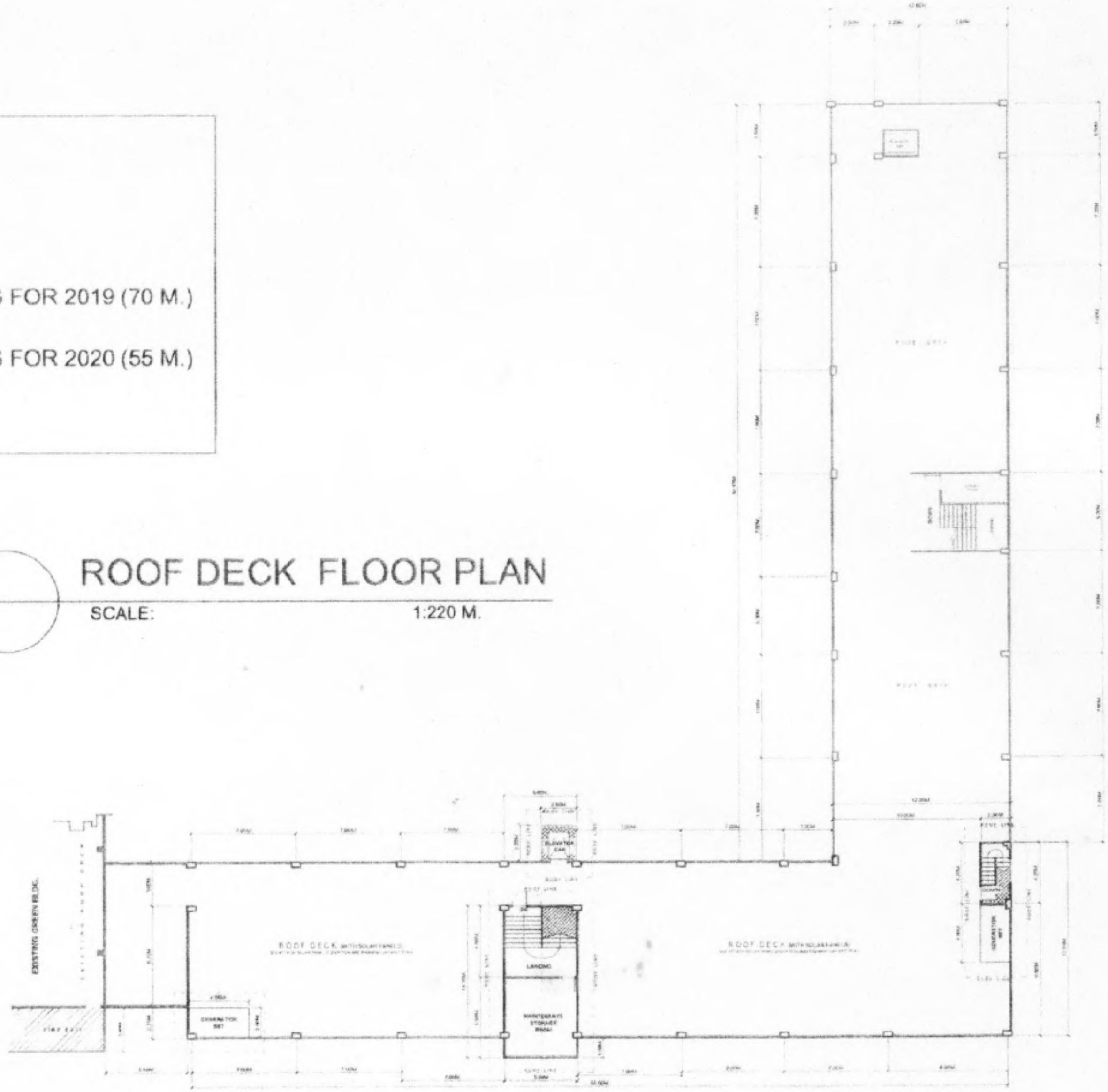
SCALE: 1:220 M.

REPUBLIC OF THE PHILIPPINES	PROJECT TITLE: Proposed Design & Build for the Completion of 3-Storey Annex Building for Engineering and Technology	PREPARED BY: COLLEGE CRAFTSMAN	CHECKED BY: COLLEGE ARCHITECT	RECOMMENDING APPROVAL: PPDM DIRECTOR	VP ADMINISTRATION & FINANCE	APPROVED BY: RENATO M. SCROLLA, Ph.D. SUC PRESIDENT III

SHEET NO. A 4

LEGEND:

- EXISTING BUILDING
- PROPOSED BUILDING FOR 2019 (70 M.)
- PROPOSED BUILDING FOR 2020 (55 M.)



ROOF DECK FLOOR PLAN

SCALE: 1:220 M.

REPUBLIC OF THE PHILIPPINES CARLOS HILADO MEMORIAL STATE COLLEGE	PROJECT TITLE: Proposed Design & Build for the Completion of 3-Storey Annex Building for Engineering and Technology PROJECT LOCATION: CHMSC TALISAY CAMPUS	PREPARED BY: ARIEL R. LATURNAS COLLEGE DRAFTSMAN	CHECKED BY: ARCH. A. JACSON, UAP COLLEGE ARCHITECT	RECOMMENDING APPROVAL: SERGIO NICOLAS SOBREPEÑA, Ph.D. TM PPDM DIRECTOR	ANTONIO L. OFRAJA, Ph.D. VP ADMINISTRATION & FINANCE	APPROVED BY: RENATO M. SOROLLA, Ph.D. SUC PRESIDENT III

SHEET NO. A 5

PROPOSED DESIGN AND BUILD FOR THE COMPLETION OF 3-STOREY ANNEX BUILDING FOR ENGINEERING AND TECHNOLOGY (EAST WING) AT TALISAY CAMPUS

ITEM	DESCRIPTION	PROJECT CONSTRUCTION COST
A.	**DESIGN AND PLANS**	
A.1.	STRUCTURAL WORKS	
A.2.	ARCHITECTURAL WORKS	
A.3.	MECHANICAL WORKS	
A.4.	FIRE PROTECTION SYSTEM	
A.5.	ELECTRICAL WORKS	
A.6.	PLUMBING WORKS	
A.7.	Sub. Total (DESIGN AND PLANS)	
B.	**CONSTRUCTION**	
B.1.	GENERAL REQUIREMENTS	
B.2.	STRUCTURAL WORKS	
B.3.	ARCHITECTURAL WORKS	
B.4.	MECHANICAL WORKS	
B.5.	FIRE PROTECTION SYSTEM	
B.6.	ELECTRICAL WORKS	
B.7.	PLUMBING WORKS	
B.8.	Sub. Total (CONSTRUCTION)	
C.	**TOTAL DIRECT COST (A.7 + B.8)**	
D.	**MISCELLANEOUS AND CONSUMABLES**	
E.	**OVERHEAD, ADMIN AND PROFIT**	
F.	**TOTAL INDIRECT COST (D+E)**	
G.	**TOTAL COST (C+F)**	
H.	**VAT (12% OF ITEM G)**	
I.	**GRAND TOTAL PROJECT COST (G+H)**	

NOTE:

We understand that the total preparation of the design and plans including the signatures and seal for all disciplines for the application of the building and occupancy permits shall not exceed 3% of the total direct cost (Item C Above).

Signature of Bidder _____

Name of Firm _____

Date

PROJECT TITLE:

PROPOSED DESIGN AND BUILD FOR THE COMPLETION OF 3-STOREY ANNEX BUILDING FOR ENGINEERING AND TECHNOLOGY (EAST WING) AT TALISAY CAMPUS

TECHNICAL SPECIFICATIONS PART I

ARTICLE

ARTICLE 1 SCOPE OF WORK

The Design/Build Contractor has overall responsibility for and shall provide complete Pre-Construction Phase Services and Construction Phase Services and furnish all design services, materials, equipment, tools and labor as necessary or reasonably inferable to complete the Project, or any phase of the Project, in accordance with the Procuring Entity's requirements and the terms of this Agreement.

ARTICLE 2 CONTRACT DOCUMENTS

The Contract Documents form the entire and integrated Contract between Design/Build Contractor and supersede all prior negotiations, representations or agreements, written or oral. The Contract Documents consist of:

2.1 This Agreement and all attachments hereto;
2.2 The Technical Specifications for Building Construction Contracts for Carlos Hilado Memorial State College;
2.3 Special Conditions of the Contract prepared by the Procuring Entity;
2.4 The Procuring Entity's Design Guidelines;
2.5 The Campus Master Plan;
2.6 All Addenda issued prior to the Effective Date of this Agreement;

2.7 The Subcontracting Plan for Design Phase Services;
2.8 The Subcontracting Plan for Construction Phase Services when accepted by the Procuring Entity;
2.9 All Additional Services Proposals when accepted by the Procuring Entity;
2.10 All Change Orders issued after the Effective Date of this Agreement;
2.11 The Drawings and Specifications developed by Design/Build Contractor and accepted by Procuring Entity;
2.12 The Drawings and Specifications developed or prepared by Procuring Entity's PPDM and Project Management Team; and
2.13 Any other documents listed in this Agreement.

ARTICLE 3 DEFINITIONS

The terms, words and phrases used in the Contract Documents shall have the meanings given in the General Conditions of Contract Conditions and as follows.

3.1 **"PROCURING ENTITY"** means Carlos Hilado Memorial State College.

3.2 "**CONTRACT VALUE**" means the maximum monetary amount payable to the Design/Build Contractor for all Construction Phase services, materials, labor and other work required for completion of the Work in accordance with the Contract Documents. The CONTRACT VALUE includes, without limitation, the General Conditions Costs, the Cost of the Work, the Construction Phase Fee and the Design/Build Contractor's Contingency.

3.3 "**Construction Services**" means the implementation and execution of the construction work required by the Contract Documents. The construction phase of the Project may be divided into different stages, each with different start and completion dates.

3.4 "**Contract Sum**" means the total amount of all compensation payable to the Design/Build Contractor for the Project Any costs that exceed the Contract Sum shall be borne solely by Design/Build Contractor without reimbursement by Procuring Entity.

3.5 "**Project Management Team**" or "PMT" means any licensed professionals or firms engaged by Procuring Entity as independent consultants for the Project Improvements. The PMT shall act as the Procuring Entity's representative during the implementation of the project. The Design/Build Contractor shall be informed in writing of the composition of the PMT.

3.6 "**Design Services**" means all professional services required to fulfill the Pre-Construction Phase and Additional design obligations of this Agreement, including, but not limited to, programming, schematic design, design development and construction documents.

3.7 "**Direct Construction Cost**" means the sum of the amounts that the Design/Build Contractor actually and necessarily incurs for General Conditions Costs, Cost of the Work and Design/Build Contractor's Contingency during the Construction Phase as allowed by this Agreement. Direct Construction Cost does not include Pre-Construction Phase Services Fees or Construction Phase Fees.

3.8 "**Direct Salary Expense**" or "DSE" means the actual gross salary, expressed on an hourly wage basis, of Design/Build Contractor's and Project Architect's employees and consultants directly engaged on the Project. For DSE purposes, Project Architect's employees includes, but is not limited to, architects, officers, principals, engineers, designers, job captains, draftspersons, and specifications writers, who are performing consultation, research or design, or who are producing drawings, specifications, plans, or other documents pertaining to the Project, or who are performing services that are directly attributable to and necessary for the Project.

3.9 "**Estimated Construction Cost**" means the total cost of all elements of the project, including, without limitation, all alternates, allowances and contingencies, designed and specified by the Design/Build Contractor. The Estimated Construction Cost shall include, at current market rates with a reasonable allowance for overhead, profit and price escalation, the cost of labor and materials furnished by the Procuring Entity and any equipment which has been shown in the plans, specified, and specially provided for by the Design/Build Contractor. Estimated Construction Cost does not include Design Phase Fees. Estimated Construction Cost does not include the cost of the land, rights-of-way, or any costs that are the responsibility of the Procuring Entity.

3.10 "**General Conditions Costs**" means costs incurred and minor work performed on the jobsite by the Design/Build Contractor without the need for competitive bids/proposals. The allowable General Conditions items are further described in the Agreement and limited by attached exhibit.

3.11 "**Standards and Standard Specifications**" means the construction and design requirements and standards of Carlos Hilado Memorial State College Office of Facilities Planning and Construction (""), and various building and life safety codes as specified in the Procuring Entity's Design Guidelines which are incorporated by reference.

3.12 "**Subcontractor**" means a person or entity who has an agreement with the Design/Build Contractor to perform any portion of the Work. The term Subcontractor does not include the any person or entity hired directly by the Procuring Entity.

3.13 "**Total Project Cost**" or "TPC" means the total budget established for the Project by the Board of Trustees of Carlos Hilado Memorial State College at the end of the design development phase (subject to subsequent modification by Procuring Entity), which includes but is not limited to professional services costs, Design/Build Contractor's costs, the costs of the General Conditions items, furniture, fixtures and equipment costs, landscaping costs, moving costs, and other miscellaneous costs.

3.14 "**Work**" means the provision of all services, labor, materials, supplies, and equipment which are required or reasonably inferable to complete the Project in strict accordance with the requirements of the Contract Documents. Work includes, but is not limited to, the Pre-Construction Phase Services, Design Services, the GMP proposal, the Construction Phase Services, and any Additional Services and other services required. The term "reasonably inferable" takes into consideration the understanding of the parties that not every detail will be shown on the Drawings and included in the Specifications.

ARTICLE 4 DESIGN/BUILD CONTRACTOR'S GENERAL RESPONSIBILITIES

4.1 Design/Build Contractor shall perform all services specifically allocated to it by the Contract Documents as well as those services reasonably inferable from the Contract Documents as necessary for completion of the Work and the Project. Design/Build Contractor agrees to perform these services using its best efforts, skills, judgments and abilities.

4.1.1 The Design/Build Contractor shall hire a design firm to implement the design requirements for the complete building structure including but not limited to all disciplines (i.e. structural, architectural, electrical, mechanical, plumbing, fire protection, fire detection and alarm, electronic and auxiliary systems). The hiring of the said design firm shall be covered by a notarized MOA between the design/build contractor and the design firm.

4.1.2 The construction scope of the Design/Build Contractor shall cover items awarded through this contract. The succeeding construction phases will be covered by separate contracts.

4.1.3 The design firm will responsible for the design phases of the projects specifically on the following:

- 4.1.3.1 Design of all components

4.1.3.2 Preparation of plans
4.1.3.3 Sign and seal of all plans and documents
4.1.3.4 Attendance to all coordination meetings, site inspections and other essential consultancy services as and when required during the implementation of all phases of the entire project.

4.2 Design/Build Contractor shall coordinate with the Project Management Team and endeavor to further the interests of the Procuring Entity and the Project. Design/Build Contractor shall furnish Pre-Construction Phase Services and Construction Phase Services and complete the Project in an expeditious and economical manner consistent with the interests of the Procuring Entity and in accordance with the Project Schedule.

4.3 Within three (3) days of receipt of the Notice to Proceed with Pre-Construction Phase Services, the Design/Build Contractor shall submit for the Procuring Entity's review and acceptance a CPM Milestone Schedule in accordance with the Project Planning and Scheduling requirements of the Procuring Entity's Specifications. The CPM Milestone Schedule shall encompass the entire Project duration, including performance of the both the Pre-Construction Phase Services and the Construction Phase Services with sufficient total Project float to allow for a minimum of Construction Phase float as specified.

4.4 The CPM Milestone Schedule for the Pre-Construction Phase of the Project shall include reasonable amounts of time for the Procuring Entity's review and approval of design drawings and specifications and for approval of authorities having jurisdiction over the Project.

4.5 Upon acceptance of the CPM Milestone Schedule, it shall become the baseline for evaluating performance of the Project and Design/Build Contractor shall monitor the progress of the Project in relation to the CPM Milestone Schedule and provide the Procuring Entity with at least weekly updates and status reports as outlined in the Procuring Entity's Specifications. The time periods established in the CPM Milestone Schedule for the Pre-Construction Phase and the Construction Phase and the overall duration of the Project shall not be changed without written consent from the Procuring Entity. Modifications to the CPM Milestone Schedule logic, coding, layouts and filters, detail, and activity durations shall be in accordance with the Procuring Entity's Specifications.

4.6 Design/Build Contractor shall designate representative preferably an architect or a civil engineer authorized to act on the Design/Build Contractor's behalf with respect to the Project.

4.7 Design/Build Contractor shall establish procedures for communication and coordination among the Subcontractors, separate contractors, and others with respect to all aspects of the construction of the Project, and implement such procedures.

4.8 Design/Build Contractor shall establish and maintain a numbering and tracking system for all Project records, including changes, requests for information, submittals, and supplementary instructions and shall provide updated records at each Procuring Entity's meeting and when requested.

4.9 Fast Track/Multiple Completion Times. If the Procuring Entity elects to "fast-track" or develop the Project in multiple stages, Design/Build Contractor shall organize and perform its services as appropriate to each stage. Each stage of the Project may have a unique schedule for completion and a specific CONTRACT VALUE, at Procuring Entity's discretion.

4.10 Design/Build Contractor shall identify to the Project Management Team the employees and other personnel that it will assign to the Project. Design/Build Contractor shall also identify any consultants that will be performing services for the Project. After execution of this Agreement by the Procuring Entity, Design/Build Contractor shall not remove or replace the persons or entities assigned to the Project except with the Procuring Entity's written consent, which consent shall not be unreasonably withheld. Design/Build Contractor shall not assign to the Project or contract with any person or entity to which

Procuring Entity has a reasonable objection. Design/Build Contractor shall promptly update the list of persons and consultants if they change during the course of the Project.

ARTICLE 5 PRE-CONSTRUCTION PHASE

The Pre-Construction Phase shall be deemed to commence upon the date specified in a Notice to Proceed with Pre-Construction Phase Services issued by Procuring Entity and shall continue through completion of the Construction Documents and procurement of all major Subcontractor agreements. Design/Build Contractor is not entitled to reimbursement for any costs incurred for Pre-Construction Phase Services performed before issuance of the Notice to Proceed. Pre-Construction Phase Services may overlap Construction Phase Services. The Design/Build Contractor shall perform the following Pre-Construction Phase Services.

5.1 PRE-CONSTRUCTION SERVICES

5.1.1 General Coordination

5.1.1.1 The Design/Build Contractor's Pre-Construction Phase Services team shall attend Project Management Team meetings with the Procuring Entity, the Procuring Entity's representatives, and the Design/Build Contractor at regularly scheduled intervals throughout the Pre-Construction Phase

5.1.1.2 Provide a preliminary evaluation of the Procuring Entity's Design Criteria and the CONTRACT VALUE, each in terms of the other.

5.1.1.3 Review and understand the standards and requirements in Procuring Entity's Specifications and perform all services in accordance with those standards and requirements.

5.1.1.4 Visit the site and inspect the existing facilities, systems and conditions to insure an accurate understanding of the existing conditions as required. The frequency and total number of such visits will be upon the discretion of the Design/Build Contractor the cost of which will be deemed included within the project cost.

5.1.1.5 Provide recommendations and information to the Project Management Team on: site usage and site improvements; building systems, equipment and construction feasibility; selection and availability of materials and labor; time requirements for installation and construction; assignment of responsibilities for safety precautions and programs; temporary Project facilities; equipment, materials and services for common use of the Design/Build Contractor and Procuring Entity's separate contractors, if any; cost factors, including costs of alternative materials or designs, preliminary budgets, and possible cost savings; recognizing and tracking the resolution of conflicts in the proposed Drawings and Specifications; methods of delivery of materials, systems, and equipment; and any other matters necessary to accomplish the Project in accordance with the Project Schedule (as defined herein) and the CONTRACT VALUE.

5.1.1.6 Select and direct the services of surveyors, soils engineers, existing facility surveys, testing and balancing, environmental surveys or other special consultants to develop additional information for the design or construction of the Project.

5.1.2 Constructability Program

5.1.2.1 Implement and conduct a constructability program to identify and document Project cost and schedule savings opportunities. The constructability program shall follow accepted industry. Whenever the term "value engineering" is used in conjunction with this Agreement or the Project, it has its commonly accepted meaning within the construction industry and does not imply the practice of professional engineering without a license. If any value engineering activities constitute the professional practice of engineering, then such activities shall be performed by a licensed engineer.

5.1.2.2 Prepare a "Request for Information" that identifies items that, in the Design/Build Contractor's opinion, may negatively impact construction of the Project. The RFI shall address the overall coordination of Project Drawings, Specifications, and details and identify discrepancies that may generate Change Orders or claims once Project construction commences. The RFI shall be updated at least monthly during the Pre-Construction Phase.

5.1.2.3 Provide and implement a system for tracking questions, resolutions, decisions, directions and other information matters that arise during the development of the Drawings and Specifications for the Project. The decision tracking system shall be in a format approved by the Procuring Entity and updated at least bi-monthly during the Pre-Construction Phase.

5.1.3 Budget and Cost Consultation

5.1.3.1 The Design/Build Contractor shall prepare and update all procurement and construction cost estimates and distributing them to the Project Management Team throughout the duration of the Project.

5.1.3.2 Provide Estimated Construction Cost (ECC) reports at the required stages of completion of the schematic design, design development, and construction document stages of the Project. The Estimated Construction Cost reports for the design development and construction document stages shall be detailed estimates derived from cost quantity surveys based on unit prices for labor, materials, overhead and profit, organized in Construction Specifications Institute Division 1-16 format for each portion of the Work.

5.1.3.3 Provide continuous cost consultation services throughout the duration of the Project, including identification and tracking of decisions that affect the scope or quality of the Project and providing ongoing updates of their cost and budget impact.

5.1.3.4 Advise the Project Management Team immediately if the Design/Build Contractor has reason to believe that the most current ECC will exceed the CONTRACT VALUE or not meet Schedule requirements and recommend reasonable strategies for bringing the Project in line with the CONTRACT VALUE and the Schedule.

5.1.4 Coordination of Design and Construction Contract Documents

5.1.4.1 Review all Drawings, Specifications, and other Construction Documents as they are developed during the schematic design, design development, and construction document design stages of the Project.

5.1.4.2 Consult with the PMT on the selection of materials, equipment, component systems, and types of construction used on the Project. Advise the PMT on site use, construction feasibility, availability of labor and materials, procurement time requirements, and construction coordination.

5.1.4.3 Advise the PMT of any error, inconsistency or omission discovered in the Drawings, Specifications, and other Construction Documents.

5.1.4.4 Advise Procuring Entity / PMT on reasonable adjustments in the Project scope, quality or other options for keeping the Project cost within the CONTRACT VALUE.

5.1.4.5 Review the Construction Documents for compliance with all applicable laws, rules and regulations of RA 9184 and with CHMSC System requirements.

5.1.5 Construction Planning and Bid Package Strategy

5.1.5.1 Identify equipment or material requiring extended delivery times and advise Procuring Entity on expedited procurement of those items. Advise Procuring Entity and/or the PMT on the preparation of performance specifications and requests for technical proposals for the procurement and installation of systems and components and for the procurement of long lead items. If requested by Procuring Entity, and

subject to Procuring Entity's prior approval, issue requests for technical proposals to qualified sources and receive proposals and assist in their evaluation.

5.1.5.2 Advise PMT of any tests to be performed, and nominate in selecting testing laboratories and consultants, without assuming direct responsibility for the work of such laboratories and consultants. The PMT however, will approve the testing center from the list nominated by the Design/Build Contractor.

5.1.5.3 Provide an analysis of the types and quantities of labor required for the Project and review the appropriate categories of labor required for critical phases or Stages. Make recommendations that minimize adverse effects of labor shortages.

5.1.6 Safety

5.1.6.1 In accordance with Procuring Entity's General Conditions of Contract Conditions, Design/Build Contractor is responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. The safety program shall comply with all applicable requirements of the Occupational Safety and Health Standards, as amended 1989 and all other applicable national and local laws and regulations and with the requirements of an Procuring Entity controlled insurance program, if any.

5.1.6.2 Design/Build Contractor shall provide recommendations and information to Procuring Entity and PMT regarding the assignment of responsibilities for safety precautions and programs, temporary Project facilities, and equipment, materials, and services for common use of the Subcontractors. Design/Build Contractor shall verify that appropriate safety provisions are included in the Construction Documents. The existence or creation of any Procuring Entity controlled insurance program in connection with the Work shall not lessen or reduce the Design/Build Contractor's safety responsibilities.

5.2 DESIGN SERVICES

5.2.1 General Responsibilities

5.2.1.1 Design/Build Contractor shall designate in writing a design coordinator preferably a licensed architect and/or a civil engineer who is responsible for the day-to-day management of the Design Services. The designated representative shall be the Procuring Entity's primary contact during the design phase of the Project and shall be available as required for the benefit of the Project and the Procuring Entity. The designated representative shall be authorized to act on behalf of and to bind the Design/Build Contractor in all matters related to Design Services. The designated representative shall not be changed without advance written approval from the Procuring Entity, which approval shall not be unreasonably withheld.

5.2.1.2 Design/Build Contractor shall engage the services of a Project Architect/Civil Engineer, Structural Engineer, Professional Mechanical Engineer, Professional Electrical Engineer, Professional ECE, Master Plumber, and other qualified professionals as required for performance of the Design Services. Design/Build Contractor certifies that the project architect/engineer and all other professional design engineers have been or will be selected on the basis of competence, qualifications and previous working experience on similar scope for at least three (3) years.

5.2.1.3 In the event that the Design/Build Contractor is not capable to perform any design services directly, he may opt to hire the services of a licensed design firm. The Design/Build Contractor shall submit not later than seven (7) calendar days from the date of the NTP the certified true copy of the notarized MOA with the design firm who shall undertake the design requirements. All drawings, specifications, change orders and other design documents shall be signed and sealed by the licensed professionals who prepared them in accordance with the applicable laws and regulations of the Philippines.

5.2.1.4 Project Architect/Civil Engineer shall be solely responsible for all obligations to the Design/Build Contractor and shall pay for the services of the Project Architect/Civil Engineer and all other professional

service providers out of the fees for this Agreement. However, the Procuring Entity shall be identified as an intended beneficiary in all such agreements and the Design/Build Contractor and all other professional service providers shall acknowledge that they owe a duty of professional care to the Procuring Entity for the Design Services provided for the Project. Nothing in this Agreement shall create any contractual obligation from the Procuring Entity to the Project Architect or other design professionals not hired directly by the Procuring Entity.

5.2.1.5 The Project Architect shall be responsible for managing the Design Services so as to insure that the Project, as designed, can be constructed for an amount that is within CONTRACT VALUE and will achieve the energy and operational savings required by the Contract. The obligation to design the Project so as to achieve the Program objectives of scope and cost shall continue through completion and acceptance of Construction Documents. Any adjustment to the scope or quality considered necessary to comply with the CONTRACT VALUE or the Program during the design phase shall be mutually agreed upon and shall be considered normal to that process.

5.2.1.6 The Design/Build Contractor shall submit the names of all proposed consultants for Design Services, including the Project Architect and any of its consultants, for approval by the Procuring Entity, which approval shall not be unreasonably withheld. The Design/Build Contractor shall provide the Procuring Entity with a copy of the fully executed contract or agreement authorizing services by any such consultant. All such contracts shall provide that the consultants are bound to Design/Build Contractor in the same manner and to the same extent as Design/Build Contractor is bound to Procuring Entity.

5.2.1.7 The Design Services shall incorporate current technology as appropriate to the stated mission of the institution and the programmed functional activities that is compatible with any existing facility and acceptable to the Procuring Entity.

5.2.1.8 All Design Services for the Project shall be provided in accordance with the Procuring Entity's Design Guidelines, Design Criteria, which are incorporated herein by reference, and any other criteria applicable to the facility program and the needs of the institution.

5.2.1.9 The Design/Build Contractor warrants to Procuring Entity the sufficiency and completeness of all Design Services performed and that all drawings, specifications, and other information furnished or provided by Design/Build Contractor shall be free from material errors and omissions. Approval or acceptance of any Design Services by Procuring Entity shall not in any way release Design/Build Contractor from any duty, responsibility or liability for such services, it being understood that Procuring Entity is at all times relying upon Design/Build Contractor's skill and knowledge in performing the Design Phase Services.

5.2.1.10 Procuring Entity shall have the right to reject any defective Design Services or other defective Work on the Project of which Procuring Entity becomes aware and Design/Build Contractor shall promptly correct any such defect at Design/Build Contractor's expense. Should any portion of the Project Work be damaged or defective due to an error or omission in the Design Services, including errors or omissions in any plans, drawings, specifications, and other construction document materials prepared or furnished by Design/Build Contractor, Design/Build Contractor shall promptly correct any such damage or defect at no additional cost to the Procuring Entity. Should the Design/Build Contractor refuse or neglect to correct any such damage or defect within a reasonable time after notice, Procuring Entity may cause the damage or defect to be corrected and withhold payment or collect monetary damages equal to the cost of replacing or repairing the defective Work.

5.2.1.11 Procuring Entity may elect, at its option, to stage or to "fast-track" construction of the Project in different stages. Such stages may or may not overlap. Design/Build Contractor shall perform Design Services in staged packages as appropriate to each stage of construction which may result in differing schedules and reviews for the completion of each design stage and for each stage of planned construction.

5.2.1.12 At each stage of the Design Services, Design/Build Contractor shall prepare the drawings and implement the following services as appropriate:

1. Architectural Design
    1.1. Ground Floor Plan
    1.2. Second Floor Plan
    1.3. Third Floor Plan
    1.4. Ground Floor Wall and Floor Finishes Plan
    1.5. Second Floor Wall and Floor Finishes Plan
    1.6. Third Floor Wall and Floor Finishes Plan
    1.7. Ground Floor Reference Plan
    1.8. Second Floor Reference Plan
    1.9. Third Floor Reference Plan
    1.10. Ground Floor Inverted Ceiling Plan
    1.11. Second Floor Inverted Ceiling Plan
    1.12. Third Floor Inverted Ceiling Plan
    1.13. Front Elevation, Left Side Elevation
    1.14. Rear Elevation, Right Side Elevation
    1.15. Cross Section
    1.16. Longitudinal Section
    1.17. Main Stair Details
    1.18. (Typical) Ramp Details
    1.19. Logo Details, Signages, Louver Details
    1.20. Elevation Details
    1.21. Male and Female Toilet Details with GAD Compliant
    1.22. PWD Details Compliant to International Standards
    1.23. Classroom Details (Typical)
    1.24. Laboratory Layouts
    1.25. Schedule of Doors & Windows
    1.26. Perspective Plan with Index of Drawings

2. STRUCTURAL
    2.1. General Notes
    2.2. Standard Details
    2.3. Foundation Plan
    2.4. Second Floor Framing Plan
    2.5. Third Floor Framing Plan
    2.6. Roof Deck Framing Plan
    2.7. Roof Structure Details for Solar Panel
    2.8. Schedule of Footings and Typical Details
    2.9. Wall Footing Details
    2.10. Schedule of Beams and Typical Details
    2.11. Schedule of Tie Beams and Typical Details
    2.12. Slab on Grade Detail (Typical)
    2.13. Schedule of Columns and Typical Details
    2.14. Staircase Details (Main and Fire Exit)
    2.15. Septic Vault Details
    2.16. Ramp and Steps Details
    2.17. Provision of Grease Tank

3. Sanitary/Plumbing Design
    3.1. General Notes, Legend and Symbols, Material Specifications, Miscellaneous Details
    3.2. Ground Floor Drainage Layout
    3.3. Second Floor Drainage Layout
    3.4. Third Floor Drainage Layout
    3.5. Roof-deck Drainage Layout
    3.6. Ground Floor Sewer/Vent Layout
    3.7. Second Floor Sewer/Vent Layout

3.11. Second Floor Waterline Layout
3.12. Third Floor Waterline Layout
3.13. Sewer and Vent Isometric Layout
3.14. Waterline Isometric Layout
3.15. Drainage Isometric Layout
3.16. Grease Trap
3.17. Septic Vault Connection Details
3.18. Rainwater harvesting filtration system (before going to rainwater tank)

4. Mechanical & Fire Protection Design
   4.1. Air Conditioning System (Split Type Inverter for Fab. Laboratory, offices, conference rooms, theater type lecture room/Function room, Laboratory for cakes, pastries and sandwiches, Food Tech. kitchen Lab. and lecture room, CIT Dean's Office and CADD Room..)
   4.2. Fire Protection System (Sprinkler System connect from ETGB Annex)
   4.3. Ducted fresh air supply and Range Hood with Hood Suppression System compliant to BFP and exhaust ducting up to roof deck with exhaust blowers for Kitchen and Food Laboratory.
   4.4. Ventilation System (Exhaust fan with piping cover for Toilets, Electronics and Electrical Room, Storage Areas.)
   4.5. LPG Pipeline with leak monitoring, safety shut-off control, and LPG storage area for Kitchen and Food Laboratory.
   4.6. 1-unit regenerative scenic elevator with 11-person capacity (800 kgs.), PWD compliant, with UPS and AVR, and Earthquake and brownout safety features. (Shaft, Sump Pit, Sump Pump and cooling provision on the electronics control at the top of elevator shaft.)

5. Electrical and Electronics Design
   5.1. Electrical and Electronic General Notes, Legends and Symbols
   5.2. Single Line Diagram
   5.3. Schedule of Loads
   5.4. Complete Diagram and Layout of the following systems
      5.4.1 Lightings
      5.4.2 Power
      5.4.3 Lightning Protection and Grounding System
      5.4.4 CCTV
      5.4.5 Data / Telephone with server and accessories (includes networking) per room except, storage and toilets. (connect from ETGB Annex).
      5.4.6 RFID card dead latch door lock system with hardware and software in all laboratory and lecture rooms, all offices and accreditation room with contactor connected in lighting laboratories.
      5.4.7 Lighting for laboratories to be connected to RFID with contactor.
      5.4.8. Complete level control system for all tanks and pumps.
      5.4.7 Fire Detection and Alarm System (Addressable)
      5.4.8 Public Address and Background Music
   5.5. Detailed Drawing of Device Mounting and Installation
   5.6. Solar Power System (10KW) with software and projects on information display savings,

6. Minimum Philippine Green Building Code Compliant
   The Design and Plans must incorporate the following aspects of the Philippine Green Building Code of 2015:
      6.1 Energy Efficiency
      6.2 Water Efficiency
      6.3 Material Sustainability
      6.4 Site Sustainability
      6.5 Indoor Environmental Quality

8. Preparation of Bill of Quantities
   8.1. Preparation of the Detailed Unit Price Analysis showing all items to be incorporated into the works. Those items mentioned on the drawings but not listed on the BOQ and are deemed necessary for the completion of works shall be implemented on site.

9. Installation of temporary fencing.

- Architectural Design

1. Ecological Architecture Concept
2. Lecture rooms with whiteboard and provisions for smart T.V.
3. Kitchen laboratory equipped with LPG piping system (safety and control), LPG storage area, water system, rangehood with exhaust blowers, hood suppression, stainless steel deep sink with counter, preparatory table with sink, storage room, floor drainage system & with compliance to the sanitary code of the Phil. chapter 3 section 17 requirements and CHED, OBO and BFP requirement as well.
4. Harmonize architectural facade design from the ETGB annex
5. Natural grade line to ground floor line (to level from the existing Green Bldg. hallway floor line)
6. Provide glass cladding on three sides with design compliant to green architecture (low emission) for food tech. kitchen lab. and food tech. lecture room, food tech.lab. At 3rd.flr., fab.lab. and theater type lecture room.
7. Directional signages and emergency evacuation chart per floor.
8. Use industrial strength epoxy floor covering in all food laboratory.
9. Smooth concrete/pebbled finish border and non-skid tile combination in hallways, staircases, landings, viewing deck and storage rooms.
10. Wooden planks with scratchproof top coating floor material in all lecture rooms.

Civil / Structural Design (in accordance w/NSCP 2015)

1. Excavation, backfilling and compaction Works
2. Structural Steel and Concrete Design (4000psi @14days)
3. Structural Analysis and Design
4. Soil Analysis and boring capacity test
5. Soil poisoning for footing, FTB, SOG and perimeter of the building.
6. Structural reinforcement grade 60 for rebars 16mm up and grade 40 for 12mm down
7. Roof deck waterproofing w/asphalt bedding & overflow outlets
8. Independent Connection of new structure to the existing bldg.
9. Bridge construction at third floor with provisions for future connection to the proposed College Library Building.

- Plumbing / Sanitary Design (provide water meter)

1. Water Supply Lines (connect to ETGB annex)
2. Sanitary / Sewer Lines and vents (connect to ETGB annex)
3. Grease Trap & separate septic vault for kitchen & food lab.
4. Rain Water Tank and fire tank (use in ETGB annex)
5. Provide RC pipe (0.80m) as replacement to the existing canal that will be covered by the building, Put manhole on both sides.
6. Septic vault for toilet w/ pipes and accessories going to STP.
7. Overhead tank 2-2000 litters above each last floor toilet from Cistern & Rain water tank.

- Electrical Design

1. 4 sets 18"orbital type ceiling fan per lecture room
2. Distribution panel per floor with individual Sub meter
3. Main distribution panel w/ meter, all panel to be provided with gutters
4. Installation of lighting and power system includes water pump,

grounding and lightning protection system.

5. Motion activated lighting system in every office and lecture rooms and photo sensor controlled lighting system in hallways and open spaces
6. Lighting for laboratories to be connected to RFID w/ contactor
7. Solar power system w/ software (10 KVA) Net metering w/ MTS per floor, panels located at the viewing roof slab.
8. Complete level control system for all tanks

- Mechanical and Fire Protection Design

1. Design, supply and installation of Air Conditioning system (Inverter Type) for the ff. areas:

    a. Fabrication laboratory, offices, conference rooms and lounging area
    b. Theater type lecture room/ Function room
    c. Laboratory for cakes, pastries and sandwiches, kitchen lab. and food service lab.
    d. CIT dean's office, CIT office, Unit heads area, Accreditation and CADD room

2. Sprinkler system (connect from ETGB)
3. Exhaust fan for the ff. areas:
   Kitchen & toilets, electrical, electronics & storage room
4. LPG pipeline w/ leak monitoring, safety shut-off, controls and LPG storage area (for kitchen & laboratory)
5. Rangehood and exhaust ducting up to roof deck w/ exhaust blowers
6. Hood suppression system compliant with BFP
7. 1 Unit regenerative scenic elevator 11-person capacity (PWD Compliant) w/ UPS & AVR, Earth quake & brownout safety features at least 850 kg

- Fire Detection and Alarm System (FDAS) (connect from ETGB annex)

1. addressable with UPS & AVR at FACP Electronics and Network Communication

1. CCTV system on each floor level to monitor all entrances, exits and hallways (connect from ETGB annex)
2. PABGM system with individual volume controller (all rooms) (connect to ETGB annex)
3. Data/Tel. system (LAN) per room except, storage and toilets. (connect from ETGB annex) w/ server accessories
4. All lecture rooms w/provisions ready for interactive projector w/ brackets and speaker.
5. RFID card deadlatch door lock system w/ hardware & software in all laboratory & lecture rooms, all offices & accreditation room
6. Provide electronic cable raceways in every floor

- Scope of Works and Bill of Quantities
- Green Architecture Compliance (minimum)
- Health, safety and environmental full compliance
- Tree cutting, clearing & hauling w/in the campus specified location
- Clearing of debris from the demolished structure & hauling w/in the campus specified location
- Disposal should comply w/DENR regulation and law

10. Rooms to be Required and to be included on the conceptual plans and drawings.

Ground Floor

2 units- Concrete Stair (NGL to Ground floor) with ramp (pebbles – beige and black, and tiles combination) and stainless handrail.

1 units- Hallway with stainless railing and roof skirt

1 unit – Concrete sidewalk

1-Unit Lobby with grille type roll-up gate

1 unit- Concrete Staircase (Ground Floor to Second Floor) with stainless handrail and with grille type roll-up gate in ground floor.

1-Unit Kitchen laboratory room w/storage & LPG area (with sinks and utilities).

1-Unit Kitchen laboratory lecture room

1-Unit Regenerative elevator PWD compliant w/ scenic view towards the football field, 11-person capacity (800 kgs.), with UPS and AVR, and Earthquake and brownout safety features.

1-Unit PWD gender neutral toilet

1-Unit Female comfort station

1-Unit Male comfort station

2-Units RAC lecture room

Second Floor

1-Unit Concrete staircase (Second Flr. To Third Flr.) with stainless handrail

1-Unit Fab. laboratory room for engineering & technology

with lounging area, fab lab office & conference room

1-Unit CIT department office w/receiving, staff & lounging area

toilet w/pantry conference room

1-Unit CIT deans office w/unit heads area

1-Unit Accreditation room with toilet and pantry

1-Unit Hallway with stainless railing and roof skirt

1-Unit Lobby with storage room

1-Unit Regenerative elevator PWD compliant w/ scenic view

1-Unit PWD gender neutral toilet

1-Unit Female comfort station

1-Unit Male comfort station

1-Unit Concrete ledge

Third Floor

1-Unit Concrete staircase (Third Flr. To roofdeck) with stainless handrail

1-Unit Theater Type lecture room / Function Room

1-Unit Laboratory room for cakes and pastries

1-Unit Laboratory room for sandwiches

1-Unit CADD laboratory room

1-Unit Hallway with stainless railing and roof skirt

1-Unit Lobby with storage room

1-Unit Regenerative elevator PWD compliant w/ scenic view

1-Unit PWD gender neutral toilet

1-Unit Female comfort station

1-Unit Male comfort station

1-Unit Concrete Bridge w/provision for future extension

1-Unit Concrete ledge

Roof -deck

1-Unit Enclosed concrete staircase w/roof slab(roof deck back to third floor)

1-Unit concrete parapet wall with wall mounted lights at every column

1-Unit Viewing deck with roof slab and stainless railings with tempered glass panels

1-Unit Regenerative elevator PWD compliant w/ scenic view

1-Unit Waterproofed roof deck slab with floor drains
and overflow pipes

1-Unit Concrete Ledge.

2 units – 1000-liter Stainless Day tank Design (to supply clean water to the entire building)

**every floor is inclusive of stairway and corridor.*

TOTAL FLOOR AREAS (SEE PLAN)

5.2.1.13 The Design/Build Contractor, as part of Basic Services, shall assist with and attend with Procuring Entity Representatives At a minimum, Design/Build Contractor shall provide an evaluation for the minimum compliance to the Philippine Green Building Code (P.D. 1096).

5.2.1.14 Design/Build Contractor shall seek to comply with the optimum Performance Standards of PD 1096 and provide a Statement of Compliance certifying that the project design complies with the standards.

5.2.1.15 Design/Build Contractor shall not proceed to any subsequent stage of Design Services until Procuring Entity has authorized Design/Build Contractor to proceed in writing, except at the Design/Build Contractor's sole financial risk.

5.2.2 Pre-Design Stage

5.2.2.1 The Design/Build Contractor shall provide a preliminary evaluation of the Procuring Entity's Design Criteria and the CONTRACT VALUE, each in terms of the other.

5.2.2.2 The Design/Build Contractor shall visit the site to become sufficiently familiar with the existing facilities, systems and conditions to ensure that the Project as designed will functionally interface with the existing conditions as required.

5.2.2.3 The Design/Build Contractor shall review laws applicable to the design and construction of the Project and advise the Procuring Entity if any program requirement may cause a violation of such laws.

5.2.2.4 Before proceeding to the Schematic Design Stage, the Design/Build Contractor shall obtain Procuring Entity's written approval of the Facility Program and the preliminary construction cost estimate and written authorization to proceed.

5.2.3 Schematic Design Stage

5.2.3.1 Based on the approved pre-design documents and any adjustments to the Program or CONTRACT VALUE authorized by the Procuring Entity, the Design/Build Contractor shall develop sufficient alternative approaches to design and construction of the Project and review them with the Procuring Entity. The Design/Build Contractor shall prepare Schematic Design documents and a preliminary construction cost estimate and submit them to the Procuring Entity for approval. The construction cost estimate shall affirm adherence to the CONTRACT VALUE.

5.2.3.2 The Design/Build Contractor shall furnish and deliver to the Procuring Entity the number of complete printed sets of Schematic Design documents as required.

5.2.3.3 Before proceeding to the Design Development Stage, the Design/Build Contractor shall obtain Procuring Entity's written authorization to proceed and the Procuring Entity's approval of the preliminary construction cost estimate. The total of all the costs include the Pre-Design and Design stages shall in no way exceed the Contract Value without the approved Change Order.

5.2.4 Design Development Stage

5.2.4.1 Based on the approved Schematic Design documents and any adjustments to the Program or CONTRACT VALUE authorized by the Procuring Entity, the Design/Build Contractor shall prepare Design Development documents and a detailed construction cost estimate and submit them to the Procuring Entity for approval. The Design Development Documents shall fix and describe the size and character of the entire Project, including site work, architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate. The detailed construction cost estimate shall confirm adherence to the CONTRACT VALUE

5.2.4.2 The Design/Build Contractor shall furnish and deliver to the Procuring Entity the number of complete printed sets of Design Development documents as required.

5.2.4.3 The Design/Build Contractor shall prepare presentation materials as described in Procuring Entity's Design Guidelines at completion of Design Development and, if requested, present them at a Board of Trustees meeting.

5.2.4.4 Before proceeding into the Construction Document Stage, the Design/Build Contractor shall obtain Procuring Entity's written approval of the Design Development documents.

5.2.5 Construction Documents Stage

5.2.5.1 Based on the approved Design Development Documents and any further adjustments to the Program, the CONTRACT VALUE or the Project Construction Cost as authorized by the Procuring Entity, the Design/Build Contractor shall prepare Construction Documents consisting of Drawings and Specifications and submit them to the Procuring Entity for approval. The Construction Documents shall set forth in detail the requirements for construction of the Project. The Construction Documents shall provide for the construction of the Project within the approved Contract Value.

5.2.5.2 The Construction Documents shall be consistent in all material respects with Design/Build Contractor's prior design proposals to Procuring Entity and within the approved Contract Value.

5.2.5.3 The Design/Build Contractor shall submit the construction phasing and scheduling, the construction contract time period, and such other construction conditions considered appropriate for the Project. Under no circumstance will the pre-design, design and construction phases shall exceed the contract period stipulated on the signed agreement unless an extension of time is duly approved by the Board of Trustees or is authorized representative.

5.2.5.4 The Design/Build Contractor shall assist and advise the Procuring Entity and the PMT in connection with the Procuring Entity's responsibility and procedures for obtaining approval of concerned governmental authorities having jurisdiction over the Project.

5.2.5.5 The Design/Build Contractor shall furnish and deliver to the Procuring Entity the number of complete printed sets of Construction Documents as required.

5.2.5.6 Following Procuring Entity's approval of the Construction Documents, Design/Build Contractor shall deliver to the Procuring Entity Computer-aided Design and Drafting ("CADD") system copies of the Construction Documents in the format and media specified by the Procuring Entity.

5.2.5.7 Following Procuring Entity's approval of the Construction Documents, Design/Build Contractor shall not be entitled to any adjustment in the approved Project Construction Cost except for changes in Project scope or quality which materially increase or decrease the cost to construct the Project that are ordered by Procuring Entity in writing.

5.2.6 Review Drawings

5.2.6.1 The Design/Build Contractor, at its sole expense, shall provide Procuring Entity with the required number of design document review sets at each required stage of completion:

5.2.6.2 The Design/Build Contractor shall incorporate into the documents such corrections and amendments as the Procuring Entity requests at each stage review, unless the Design/Build Contractor objects to such changes in writing and Procuring Entity agrees to the objections. Any additional cost incurred due to Design/Build Contractor's failure to incorporate Procuring Entity's requested corrections and amendments shall be borne by the Design/Build Contractor.

5.2.6.3 Design/Build Contractor shall identify to Procuring Entity in writing anything in Design/Build Contractor's drawings and specifications and any drawings, plans, sketches, instructions, information, requirements, procedures, requests for action, and other data supplied to Design/Build Contractor (by Procuring Entity or any other party) that Design/Build Contractor regards as unsuitable, improper, or inaccurate in connection with the purposes for which such documents or data are furnished. Design/Build Contractor shall be solely responsible for the use of such documents or data unless Design/Build Contractor advises Procuring Entity in writing that in its opinion such documents or data are unsuitable, improper, or inaccurate and Procuring Entity instruct the Design/Build Contractor in writing to proceed in accordance with the documents or data as originally given.

5.2.6.4 The Design/Build Contractor shall pay all costs for plans, specifications and other design and construction documents used by the Design/Build Contractor and its consultants and subcontractors, and all documents produced for review by the Procuring Entity, except for changes generated solely by Procuring Entity.

5.2.6.5 If any of the plans, specifications and other design and construction documents or other work materials produced or used by Design/Build Contractor pursuant to this Agreement are damaged or destroyed by fire or other casualty, Design/Build Contractor shall prepare and provide Procuring Entity with new copies of any such documents or materials, at no additional cost to Procuring Entity, unless Design/Build Contractor or Procuring Entity has a complete and undamaged set thereof.

5.2.7 Additional Design Services

5.2.7.1 Additional Design Services shall be provided by the Design/Build Contractor and paid for in accordance with this Agreement by the Procuring Entity if authorized in writing in the form of a Variation or Change Order by the Procuring Entity. Prior to commencing any Additional Design Service, Design/Build Contractor shall submit to the Procuring Entity an Additional Services Proposal in a form acceptable to the Procuring Entity. The Additional Services Proposal shall describe in detail the nature or scope of the Additional Design Services, the basis upon which Design/Build Contractor believes that such services are Additional Services, the maximum amount of fees and reimbursable expenses for performance of the Additional Services, and a proposed schedule for the performance of the Additional Services. Design/Build Contractor shall proceed with the Additional Design Service only after written acceptance by Procuring Entity of the Additional Services Proposal in the form of a Variation or Change Order.

5.2.7.2 Upon acceptance by Procuring Entity, each Additional Services Proposal and the services performed by Design/Build Contractor pursuant to such Additional Services Proposal shall become part of this Agreement and shall be subject to all the terms and conditions of this Agreement, as fully and completely as though the same had been included in this Agreement as a Basic Service at the original execution of this Agreement

5.2.7.3 The following services, if requested by the Procuring Entity, are Additional Design Services:

a. Providing financial feasibility or other special studies other than as they relate to energy conservation and guaranteed savings, and the cost of the Project.
b. Providing planning surveys, site evaluations, environmental studies or comparative studies of prospective sites.
c. Providing services relative to future facilities, systems and equipment which are not intended to be constructed during the Construction Phase.
d. Providing services to make detailed investigation of existing conditions or facilities or to make measured drawings thereof, other than to verify the accuracy of drawings or other information furnished by the Procuring Entity.
e. Providing coordination of Work performed by Procuring Entity's separate Contractors or by the Procuring Entity's own forces.
f. Providing services in connection with the Work of separate consultants retained by the Procuring Entity.
g. Making revisions in Drawings, Specifications or other documents when such revisions are inconsistent with written approvals or instructions previously given by the Procuring Entity or due to Changes approved by the Procuring Entity and not due to errors or omissions by the Project Architect.
h. Making revisions in Drawings, Specifications or other documents when such revisions are required by the enactment or revision of codes, laws of regulations subsequent to the preparation of such documents.
i. Making investigations, surveys, valuations, inventories or detailed appraisals of existing facilities, except as necessary and appropriate for the performance of the Design Phase Services required in connection with construction performed by the Procuring Entity.
j. Providing consultation concerning replacement of any Work damaged by fire or other cause during construction, and furnishing services as may be required in connection with the replacement of such Work provided that the damage was not caused wholly or in part by the Design/Build Contractor or a Subcontractor.
k. Providing services after final payment or expiration of the Warranty, whichever is later, except as otherwise required by the Contract.
l. Preparing to serve or serving as an expert witness at the request of the Procuring Entity in connection with any public hearing, arbitration proceeding or legal proceeding.
m. Providing any other services not otherwise customarily furnished in accordance with generally accepted architectural or engineering practice.

n. Providing a Commissioning Consultant to provide commissioning expertise through the Program, Schematic Design, Design Development, Construction Document and Construction Services Phases of the Project. The Commissioning Consultant shall review input related Project objectives, methods and concepts of commissioning.

ARTICLE 6 CONSTRUCTION PHASE SERVICES

6.1 The Construction Phase shall be deemed to commence upon the date specified in a Notice to Proceed issued by Procuring Entity and shall continue until Final Completion of all Work prescribed herein. Both the Pre-Construction Phase Services and the Construction Phase Services shall be included within the contract period specified on the relevant clauses of the contract.

The Design/Build Contractor shall perform the following Construction Phase Services.

6.2 GENERAL RESPONSIBILITIES

6.2.1 Construct the Work in strict accordance with the Construction Documents and as required by the Procuring Entity's Specifications within the time required by the Project Schedule approved by Procuring Entity.

6.2.2 Organize and maintain a competent, full-time staff at the Project site with clearly defined lines of authority and communication as necessary to coordinate construction activities, monitor and direct progress of the Work, and further the goals of the Procuring Entity.

6.2.3 Designate in writing a representative who is responsible for the day-to-day management of the Construction Phase Services. The designated representative shall be the Procuring Entity's primary contact during the Construction Phase and shall be available as required for the benefit of the Project and the Procuring Entity. The designated representative shall be authorized to act on behalf of and bind the Design/Build Contractor in all matters related to Construction Phase Services including, but not limited to, execution of Change Orders and Applications for Payment.

6.2.4 Attend Procuring Entity's regularly scheduled Project progress meetings and fully advise the Project Management Team of the Project status including schedule, costs, quality and changes.

6.2.5 In addition to attending Procuring Entity's regularly scheduled Project progress meetings, Design/Build Contractor shall schedule, direct and attend interim progress meetings with other members of the Project Management Team as required to maintain Project progress. Design/Build Contractor shall record and distribute the minutes of each meeting to each Project Management Team member. The minutes shall identify critical activities that require action and the dates by which each activity must be completed.

6.2.6 In accordance with the current and latest governmental laws, orders, instructions and policies, provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, transportation, and all other facilities and services necessary for the proper execution and completion of the Work in strict accordance with the requirements of the Construction Documents.

6.2.7 Obtain building permits and special permits for permanent improvements as required by law or the Construction Documents. Assist Procuring Entity or Design/Build Contractor in obtaining all approvals required from authorities having jurisdiction over the Project.

6.2.8 Coordinate, monitor and inspect the work of Subcontractors to ensure conformance with the Construction Documents.

6.2.9 Be responsible for all construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work. The Design/Build Contractor shall keep the Procuring Entity informed of the progress and quality of the Work.

6.2.10 Design/Build Contractor shall promptly correct any defective Work at Design/Build Contractor's sole expense, unless the Procuring Entity specifically agrees to accept the Work.

6.2.11 Warrant that the materials and equipment provided for the Project will be of good quality and new unless otherwise required or permitted by the Construction Documents; that the construction will be free from faults and defects; and that the construction will conform with the requirements of the Construction Documents. The Design/Build Contractor shall be responsible for correcting Work that does not comply with the Construction Documents at its sole expense without cost to the Procuring Entity.

6.2.12 The Design/Build Contractor shall maintain and deliver the required documents that describe changes or deviations from the Construction Documents that occurred during construction and that reflect the actual "As Built" conditions of the completed Work.

6.3 CONSTRUCTION CONTRACT ADMINISTRATION

6.3.1 The Design/Build Contractor, through the Project Architect, shall furnish the following Contract Administration Services during the Construction Phase. Fees for these services are included in the Design/Build Contractor's Construction Phase Fee.

6.3.2 The Project Architect, and his related consultants, shall inspect the Project site at least once a month or as and when required appropriate to the type and stage of construction progress to observe the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. On the basis of such onsite observations, the Design/Build Contractor shall observe the progress and quality of the Work, and shall endeavor to guard the Procuring Entity against defects and deficiencies in the Work.

6.3.3 In addition to site visits for general inspection and observation, the Design/Build Contractor shall visit the site for specific purposes related to certification of progress payments, start-up or mock-up reviews for significant work activities and for formal inspections of the Work. The Design/Build Contractor shall provide written reports of all site visits to the Procuring Entity within three business days.

6.3.4 The Design/Build Contractor shall establish and maintain a numbering and tracking system for all project records, including changes, requests for information, submittals, and supplementary instructions shall provide updated records at each Procuring Entity's meeting and when requested.

6.3.5 The Design/Build Contractor shall administer all regular progress and special meetings scheduled by the Procuring Entity. The Design/Build Contractor shall attend regularly scheduled planning meetings.

6.3.6 The PMT's certification of Design/Build Contractor's Estimate for Partial Payment for Construction Phase Services shall constitute a representation by the Design/Build Contractor to the Procuring Entity, based on the PMT's observations at the site as provided in this Agreement and on the data comprising the Design/Build Contractor's Estimate for Partial Payment that the Work has progressed to the point indicated; that information and belief, the quality of the work is in accordance with the Contract Documents. However, the certification of a Design/Build Contractor's Estimate for Partial Payment shall not be a representation that the Design/Build Contractor has made any examination to ascertain how and for what purpose the Design/Build Contractor has used the moneys paid on account of the Contract Sum.

6.3.7 The Design/Build Contractor, with the approval of the Procuring Entity, shall interpret the technical requirements of the Contract Documents. The Design/Build Contractor shall render interpretations necessary for the proper execution or progress of the Work with reasonable promptness on written

request of the Procuring Entity, and shall render written recommendations to the Procuring Entity within a reasonable time on matters relating to the execution or progress of the Work or the interpretation of the Contract Documents.

6.3.8 The Design/Build Contractor shall provide consultation for the purpose of clarification and interpretation of the intent and scope of the Construction Documents. PMT's interpretations and recommendations shall be consistent with the intent of and reasonably inferable from the Contract Documents. PMT's interpretations shall be made in written and/or graphic form including, if necessary or appropriate, supplemental documents to amplify or clarify portions of the Construction Documents.

6.3.9 The Procuring Entity through the PMT shall review and approve or take other appropriate action upon the Design/Build Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformance with the design concept of the Work set forth in the Contract Documents, and shall respond to Design-Build Contractor's inquiries and questions and provide such supplemental information as appropriate. One copy of each submittal, shop drawing, product data, etc., shall be provided to the Procuring Entity.

6.3.10 The Design/Build Contractor shall provide the necessary assistance to the Procuring Entity through the PMT in the review of the Design/Build Contractor's requests for change orders and pricing thereof.

6.3.11 The Design/Build Contractor shall prepare and submit request for Change Orders for the Procuring Entity's approval and execution in accordance with the Contract Documents, and shall, with Procuring Entity's approval, have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time, which are not inconsistent with the intent of the Contract Documents. In conjunction with each Change, the Design/Build Contractor shall review the cost and time estimate and recommend to the Procuring Entity whether the proposal is appropriate. The Design/Build Contractor shall prepare revised Contract Drawings, where appropriate, to illustrate and document the work required by the Change without additional cost to the Procuring Entity.

6.3.12 All proposed changes to drawings, plans and specifications, regardless of how initiated, shall be fully described in the document depicting them as to scope of work added, removed, or changed. The original copies of the Construction Documents may be revised to show such changes, provided that all such revisions shall be separately recorded on media acceptable to Procuring Entity, including, without limitation, CADD. Such revisions shall be clearly indicated and a current revision date shall be included on the reproducible copy. Changes to the specifications shall be made by consecutively numbered and dated revision addenda. All changes to design documents or specifications will be identified by date of change, revision number and other customary identification references. Areas changed on drawings will be "clouded" to show each change. Clouds designating previous changes will be removed so that only the most recent changes will be clouded.

6.3.13 The Design/Build Contractor shall participate in concealed space inspections, systems start-up inspections, Substantial Completion and Pre-Final Inspections to determine the Dates of Substantial Completion, and Final Acceptance. The Design/Build Contractor shall also participate in the Procuring Entity's final walk thru inspection one year after Final Completion.

6.3.14 The Design/Build Contractor shall review, for conformance with the Contract Documents, Design/Build Contractor's submission of guarantees and warranties.

6.3.15 The Design/Build Contractor shall assist the PMT in checking as-built drawings during the course of the Work in association with certifying progress payments and shall review final as-built documents for completeness and compliance with Contract requirements.

6.3.16 The Design /Build Contractor shall provide "as-built" record drawings as described in the Procuring Entity's Project Closeout.

6.3.17 The Design/Build Contractor shall execute the items included on the construction punch list until all such items have been resolved to the Procuring Entity's satisfaction.

6.3.18 The Design/Build Contractor shall review Design/Build Contractor's submission of operating and maintenance instructions, and all manuals, brochures, drawings, and other close-out documentation furnished by the Design/Build Contractor for conformance with the requirements of the construction documents

ARTICLE 7 PROCURING ENTITY'S RESPONSIBILITIES

7.1 The Project Management Team shall be the authorized representative to act in the Procuring Entity's behalf with respect to the Project. The Procuring Entity's Designated Representative shall examine the documents submitted by the Design/Build Contractor and shall render recommendations pertaining thereto.

7.2 The Procuring Entity shall examine the design documents submitted by the Design/Build Contractor and provide comments concerning corrections or amendments to such documents in writing to the Design/Build Contractor. The Procuring Entity may obtain independent review of the design documents by its own Project Management Team. The Procuring Entity may require the Design/Build Contractor to halt production during design review.

7.3 Procuring Entity shall have the right to reject any defective Work on the Project. Should Design/Build Contractor refuse or neglect to correct any such Work within a reasonable time after notice, Procuring Entity may have the Work corrected and recover all expenses incurred from Design/Build Contractor on demand.

ARTICLE 8 OWNERSHIP AND USE OF DOCUMENTS

8.1 Drawings, specifications and other documents furnished by the Design/Build Contractor are instruments of service and shall remain their property whether the Project for which they are made is executed or not. The Procuring Entity shall be permitted to retain copies, including reproducible copies and CADD copies, of the drawings, specifications and other documents for information and reference in connection with the Procuring Entity's use and occupancy of the Project. Design/Build Contractor hereby grant Procuring Entity an irrevocable, fully paid-up, perpetual license and right to use the drawings, specifications and other documents furnished, including the originals thereof, and the ideas and designs contained therein, for any purpose regardless of whether their services for the Project are completed, modified or terminated. This license shall survive the termination of this Agreement. If this Agreement is terminated, Design/Build Contractor hereby expressly consent to the employment by Procuring Entity of a substitute architect to complete the Design Services under this Agreement, with the substitute architect having all of the rights and privileges of the original Project Architect.

8.2 Submission or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Design/Build Contractor's or Project Architect's rights.

ARTICLE 9 TIME

9.1 Unless otherwise approved, the Procuring Entity and the Design/Build Contractor shall perform their respective obligations under the Contract as expeditiously as is consistent with reasonable skill and care and the orderly progress of the Work.

9.2 Time limits stated in the Contract Documents are of the essence of this Agreement. The Design/Build Contractor shall be responsible for schedule development, updating and reporting throughout the entire

Project, including Pre-Construction Phase Services and Construction Phase Services. The Design/Build Contractor shall comply in all regards with requirements set forth in the Procuring Entity's Project Planning and Scheduling Specifications.

ARTICLE 10 ELECTRICAL DESIGN CONCEPTS

Design concepts that needs to be incorporated in the design

a. All lights must be of LED type with sufficient lumens for each occupied or intended space.

b. Rooms or hallways with 2 or more doors must be provided with 3-way or 4-way switches for each door. This includes both ends of hallways.

c. Restroom stalls must be provided with individual lights.

d. Provide power lines going to the proposed location of the 3-phase distribution transformer.

e. Incoming power must be 3-phase and the single-phase load should be designed to attain balance among the phases.

f. Number of power outlets should be sufficient without extensively exceeding the power needs of the occupants.

g. All auxiliary control/monitoring equipment must be located in an air-conditioned room. Equipment such as but not limited to DVR, CCTV monitor, IDF, server or WIFI, PABX, FACP, amplifier, etc.

h. All office or functional room must be provided with its own data and telephone outlet according to the number of office table or purpose of the room.

i. CCTV cameras must be provided to monitor all entry/exit points.

j. Appropriate number of smoke detectors must be provided for each room or hallway.

k. All smoke detectors must be individually addressable with a Fire Alarm Control Panel (FACP) that could monitor each detector.

l. Fire alarm bells must be situated in a location which will fully notify the occupants of the building.

m. Each room and hallway must be provided with a PABGM speaker with its individual volume control.

n. Location of pumps must be coordinated with the plumbing and sanitary design.

o. Lightning arrester must be properly grounded and located in an appropriate location on top of the building so as to completely protect the building.

p. The building must be adequately grounded.

q. See revised location of air conditioning units based on mechanical conceptual design.