	MARIANO MARCOS STATE UNIVERSITY Procurement Division		Document Code	PD-FRM-002
	Request for Quotation (RFQ) (Goods and Services)		Revision No.	5
			Effectivity Date	April 20, 2022

REQUEST FOR QUOTATION (RFQ)

Date: May 06, 2022
 PR No. 2022-05-164 (0520644)

Sir/Madam:

Please quote your lowest price on the item/s listed below, and submit your quotation duly signed by you or your duly authorized representative not later than **3 days** subject to the Terms and Conditions provided at the last page of this RFQ.

Delivery period must be at least within 30 days upon receipt of the Notice to Proceed or Purchase Order.

For any clarification, you may email us at bac@mmsu.edu.ph.



NATHANIEL R. ALBUYOG
 BAC Chair

ITEM	QTY	Unit	ITEM DESCRIPTION	ABC/unit	UNIT PRICE
	2	lot	AIRCON, Airconditioning unit, Split type wall mounted – VFD type (inverter), 27,000 BTU per hour cooling capacity; 28, 620 Kj/h; 2.5 TR ; 3 HP, 220/60/1 V/hz/ph *Includes FULL INSTALLATION and purchase of electrical wirings needed	78,200.00	

TOTAL ESTIMATED BUDGET: Php. 156,400.00

REMARKS/NOTE:

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After having carefully read and accepted your Terms and Conditions, I/we submit our quotation/s on the item/s at prices indicated above.

Business Name: _____
 Business Address: _____
 Printed Name of the Owner: _____
 Signature over Printed Name
 TIN: _____
 Tel. No./Cellphone No./e-mail address
 PhilGEPS Registration Number: _____
 Date
 Business Permit: _____
 Omnibus Sworn Statement: _____
 Annual Income Tax Return: _____

Canvassed by: _____

TERMS AND CONDITIONS:

- Bidders shall provide correct and accurate information required in this form.
- Bidders may quote for any or all of the items.
- Bidders shall submit a copy of the following documents along with the Quotation:
 - PhilGEPS Registration Number
 - Mayor's Permit / Business Permit
 - Omnibus Sworn Statement (for ABC's above P 500,000.00)
 - Income/Business Tax Return (for ABC's above P 500,000.00)
 - Certificate of Public Conveyance (CPC) for vehicle rentals and truckings
- Price quotation/s, to be denominated in Philippine peso, shall include all taxes, duties and/or levies payable.
- Quotations exceeding the Approved Budget for the Contract shall be rejected.
- Award of contract shall be made to the lowest quotation which complies with the minimum technical specifications and other terms and conditions stated herein.
- Any interlineations, erasures or overwriting shall be valid only if they are signed or initialed by you or any of your duly authorized representative/s.
- The item/s shall be delivered according to the requirements specified in the Technical Specifications.
- The University has the right to inspect and/or test the goods to confirm their conformity to the technical specifications.
- Liquidated damages equivalent to one tenth of one percent (0.1%) of the value of the goods not delivered within the prescribed delivery period shall be imposed per day of delay.

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MARIANO MARCOS STATE UNIVERSITY
COOLING LOAD ESTIMATES

Project: PROVISION OF AIR CONDITIONING UNIT
Location: STUDENT CENTER / ETEAP OFFICE
Date: 29-Apr-22

DESIGN CRITERIA: 2017 ASHRAE Handbook Fundamentals

Outdoor Temp: Summer: 95.0 °F db; 82.4 °F wb; 60.0 %RH ho= 38.70 btu/lb
 Winter: °F db; °F wb; %RH
 Indoor Temp: Summer: 75.0 °F db; °F wb; 55.0 %RH hi= btu/lb
 Winter: °F db; °F wb; %RH
 Hottest Month: May
 Summer: ΔT = 15.0 °F Δh = - Winter: ΔT = °F

Elevation above sea level: 26.248 feet
 Air Density Ratio
 Air Density 0.077 lb/ft³
 Air Factor - Btu/h/cfm-°F
 Latitude 18 N

Basis for Design: 2017 ASHRAE Handbook Fundamentals

Factors:
 People: Sensible: 256.0 btu/h per person Latent: 188.0 btu/h per person
 Lights: Type: Fluorescent W/m²: Wattage: 324.0
 Fsa: 1.0 Ful: 1.0
 Appliances: 2,204.0 Watts (1 - water dispenser, 10 - desktop computers, 8 - printers)
 Power: n/a Watts

Infiltration: No infiltration considered for new building

Occupancy Schedules:	People	Lights	Appliances	Power	Desktop computers =	Printers =	Dispensers =	Ceiling Fan =	Total =
	8 hrs	8 hrs	8 hrs	8 hrs	83	43	550	80	2,204.0
					10	8	1	6	
					830.0	344.0	550.0	480.0	

Prepared by:


 DENNIS CLYDE G. ACANTILADO, RMEE, RMP
 Mechanical Engineer

**MARIANO MARCOS STATE UNIVERSITY
COOLING LOAD ESTIMATES**

Project: PROVISION OF AIR CONDITIONING UNIT
Location: STUDENT CENTER / ETEAP OFFICE
Date: 29-Apr-22
Space: ETEAP/OJT/SIPP OFFICE
Time of Day: 15:00 03:00pm

Conduction:

Surface	Facing	Dimension	Net Area, ft ²	U	Cooling			btuh
					AT	CLTD	CLF	
Wall	E	9mX2.7m	218.529	0.409	40			3,575.13
Wall	N	7.2mX2.7m	160.829	0.409	22			1,447.13
Partition		7.2mX2.7m	209.271	0.386	5			403.89
Partition		9mX2.7m	206.687	0.386	5			398.91
Floor		9mX7.2m	697.569	0.306	5			1,067.28
Door		2.1mX1.2m	54.255	0.566	5			153.54
Roof		9mX7.2m	697.569	0.435	81			24,578.86
Glass	E		43.060	0.566	55			1,340.45
Glass	N		48.442	0.566	55			1,508.01
Subtotal =								34,473.21

Solar Transmission

Surface	Facing	Dimension	Area, ft ²	SHGF	SC	CLF	btuh
Glass	E		43.060	215.00	0.5	0.20	925.79
Glass	N		48.442	52.00	0.5	0.82	1,032.79
Subtotal =							1,958.58

Internal Sensible Heat

Source	Quantity	Factor	CLF	btuh
Occupants	10 people	256.00	0.84	2,150.40
Lights	324 watts	1.00	1.00	1,104.84
Appliances	2204 watts	1.00	1.00	7,515.64
Power	0 watts			0.00
Subtotal =				10,770.88
Total Sensible Cooling =				47,202.67

Internal Latent Heat

Source	Quantity	Factor	CLF	btuh
Occupants	10 people	188.00	1.00	1,880.00
Lights				0.00
Appliances				0.00
Power				0.00
Total Latent Cooling =				1,880.00

Total Cooling Load = 49,082.67

The Estimated Cooling Load (Rated) at 3 o'clock in the afternoon of the hottest month of the year (May).

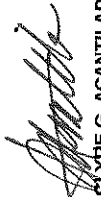
Calculated Recommendation	Rated Cooling Load			HP
	btuh	TR	KW	
	49,082.67	4.09	14.38	5.1
	52,000.00	4.50	16.52	6.0

14.4 m2/tr

Type: 2 UNITS - WALL MOUNTED TYPE
RATED COOLING CAPACITY = 26,000 BTUH, 2.5 TR
Electrical Input = 3 HP


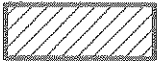
- Note:
1. the selected ACU shall have a rated cooling load capacity within the range of maximum and minimum capacity.
 2. select an "INVERTER" type or variable frequency drive ACU, 230V / 1 phase / 60 hz
 3. select a unit with high EER, preferably not less than EER 3.0.
 4. Similar Specs with KOPEL
 5. Use venetian blinds or internal shading while using air conditioner.

Prepared by:

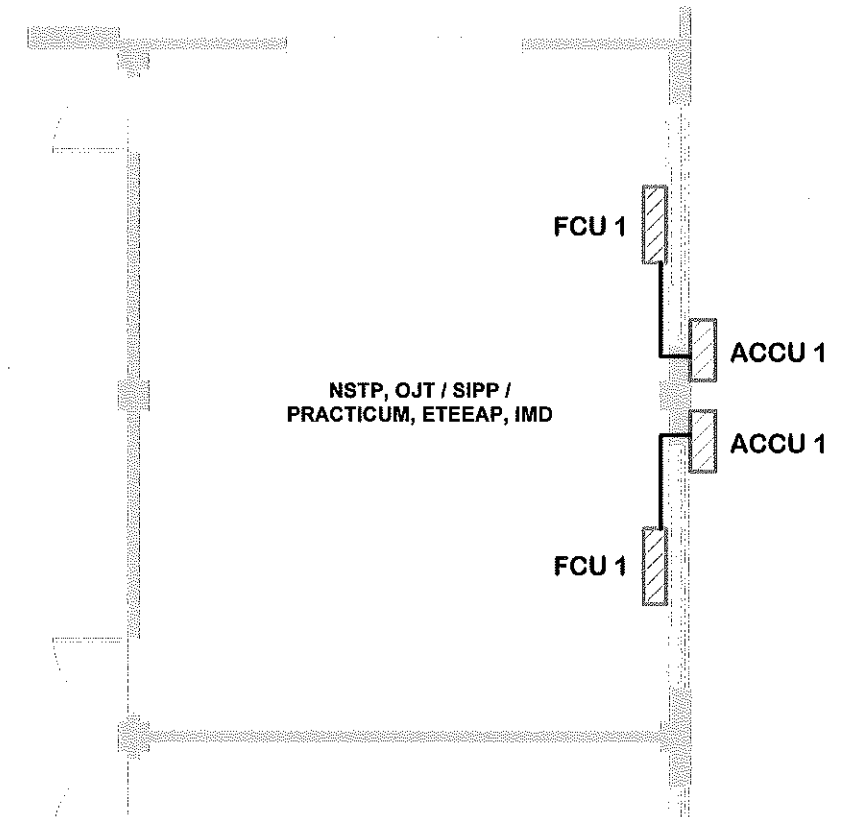

DENNIS CLYDE G. ACANTILADO
 Mechanical Engineer, MMSU PPDO

Air-Conditioning Unit Schedule								
Designation	Location	Qty	Description	Cooling Capacity			HP	V/hz/ph
				Btu/h	Kj/h	TR		
ACU 1	NSTP, OJT / SIPP / PRACTICUM, ETEEAP, IMD OFFICE	2	Split Type Wall Mounted - VFD Type (Inverter) Similar to Daikin, Kolin, Koppel, Carrier or LG	27,000	28,620	2.5	3.0	220/60/1

SCHEDULE OF EQUIPMENT


-  - OUTDOOR UNIT (ACCU)
-  - INDOOR UNIT (FCU)

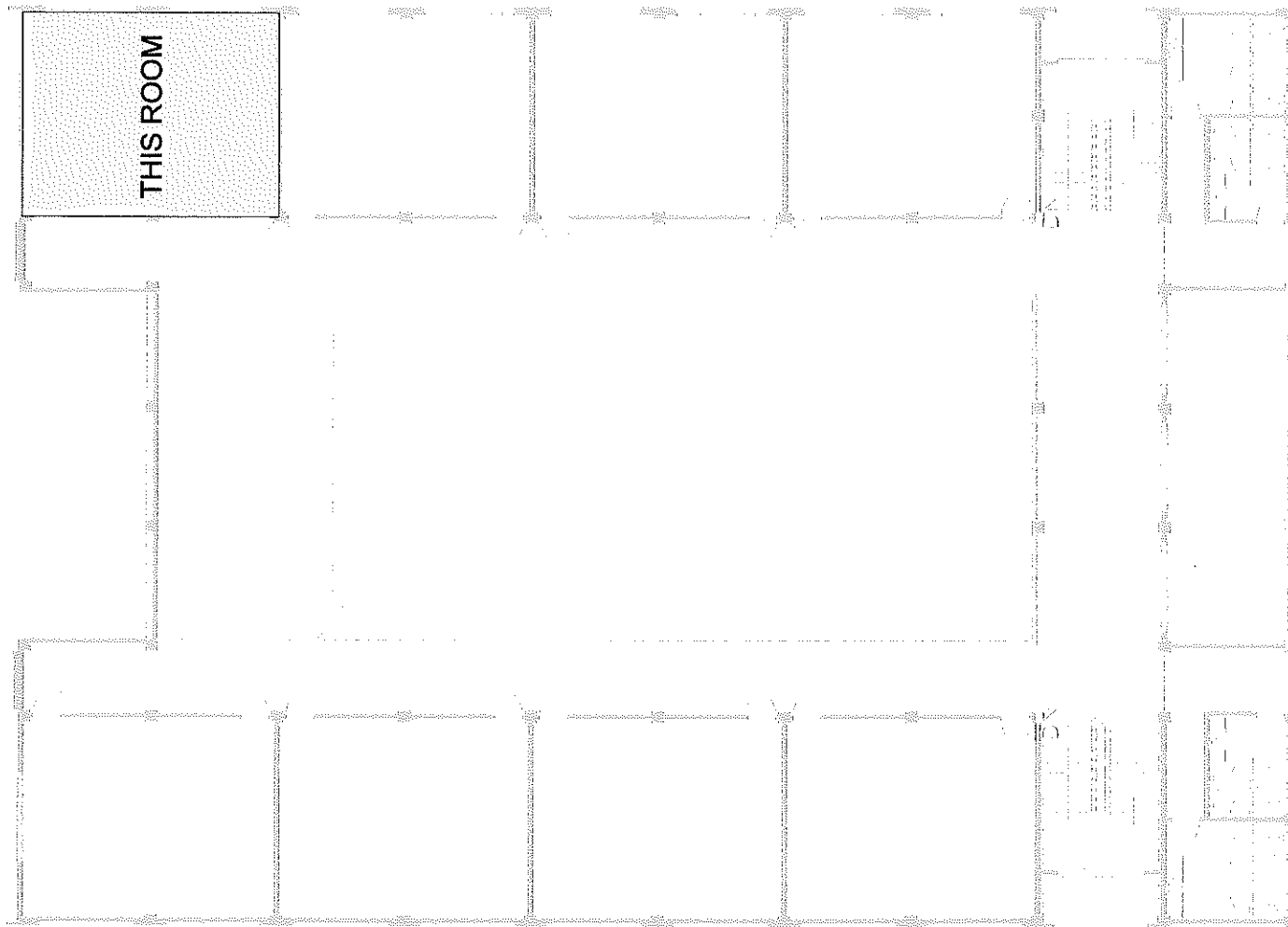
LEGEND / SYMBOL





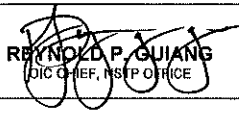
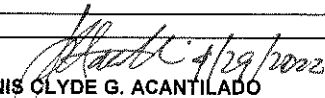



PARTIAL FLOOR PLAN

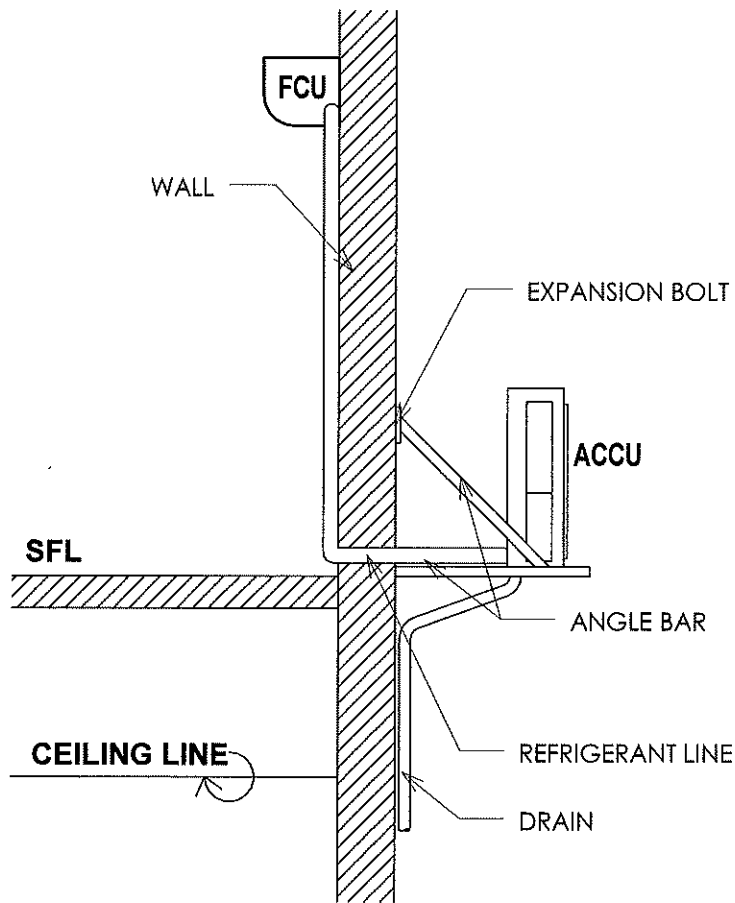
SCALE 1:100m

	DRAWN BY: BJAY A. BAYANG DRAFTSMAN I	PROJECT TITLE: PROVISION OF AIR-CONDITIONING UNIT AT STUDENT CENTER	CONFORME: REYNOLD P. GUIANG OJT CHIEF/NSTP OFFICE	SHEET CONTENT:	SHEET NO:
	PREPARED BY: DENNIS CLYDE G. ACANTILADO MECHANICAL ENGINEER	CHECKED/REVIEWED BY: AIDA V. CABANG ARCHITECT IV, CHIEF-PHYSICAL PLANNING SECTION	RECOMMENDING APPROVAL: ROMEO R. DULDULAO DIRECTOR, PPDO	APPROVED BY: SHIRLEY C. AGRUPIS UNIVERSITY PRESIDENT	

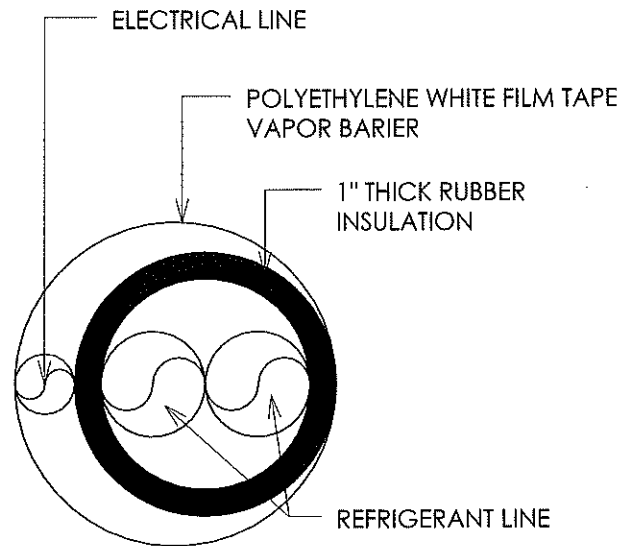


SECOND FLOOR KEY PLAN
SCALE 1:250m

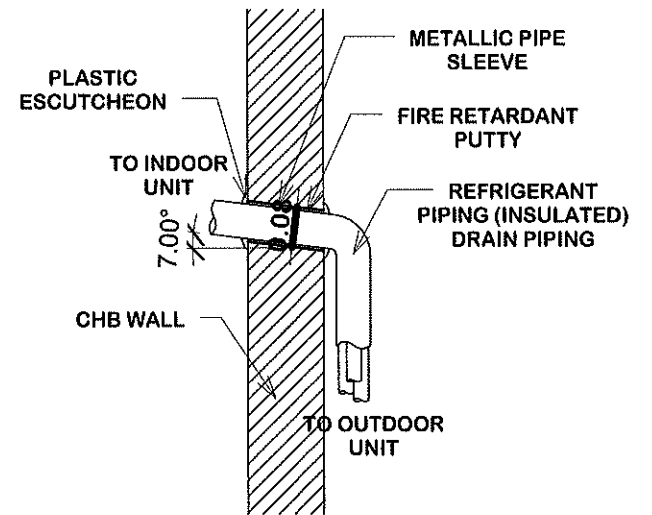
	DRAWN BY:  BJAY A. DAYANG DRAFTSMAN I	PROJECT TITLE: PROVISION OF AIR-CONDITIONING UNIT AT STUDENT CENTER	CONFORME:  REYNOLD P. GUIANG DIC CHIEF, NSFP OFFICE	SHEET CONTENT:	SHEET NO.:
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SIDE VIEW


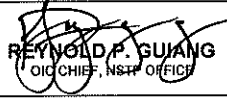
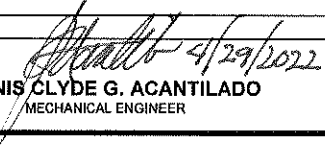
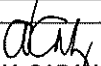

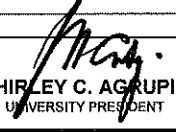


**REFRIGERANT LINE
DETAILS**



PIPE THROUGH WALL INSTALLATION

AIR-CONDITONING UNIT DETAIL

	DRAWN BY:	PROJECT TITLE:	CONFORME:	SHEET CONTENT:	SHEET NO.:
	BJAY A. DAYANG DRAFTSMAN I	PROVISION OF AIR-CONDITIONING UNIT AT STUDENT CENTER LOCATION: MMSU-STUDENT CENTER, CITY OF BATAV, ILOCOS NORTE	 REYNOLD P. GUIANG OIC CHIEF, NSTP OFFICE		
PREPARED BY:	CHECKED/REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED BY:		
 DENNIS CLYDE G. ACANTILADO MECHANICAL ENGINEER	 AIDA V. CABANG ARCHITECT IV, CHIEF-PHYSICAL PLANNING SECTION	 ROMEO R. DULDULAO DIRECTOR, PPDO	 SHIRLEY C. AGRUPIS UNIVERSITY PRESIDENT		