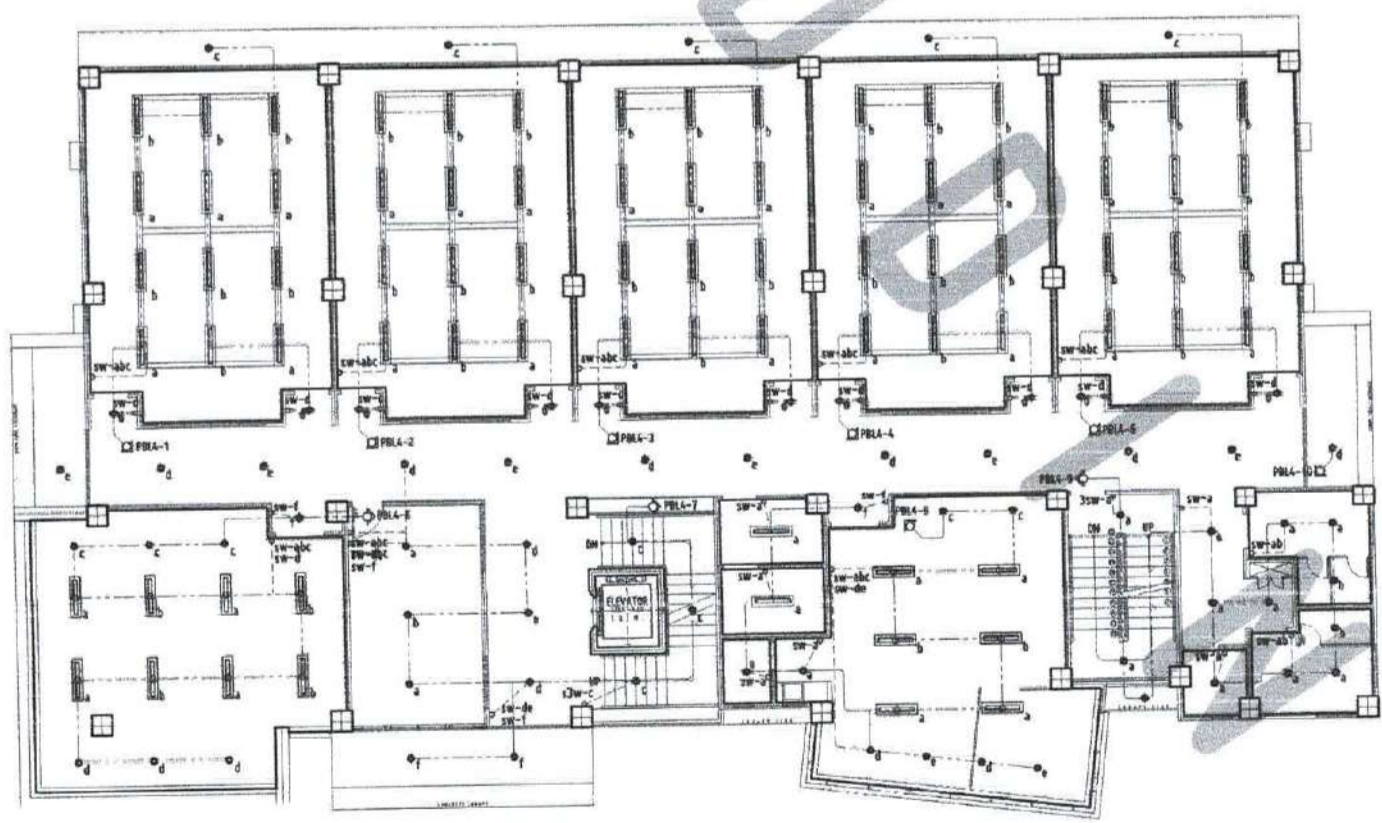


- LEGEND:
- 12 WATTS LED P/N LIGHT
  - 10W LED RECESSED CYCLING PRINTED LIGHT
  - 10W LED LIGHT WITH INDUSTRIAL HOUSING AND SUPPORT
  - 1-32W T8 LED FLUORESCENT LIGHT PRINTED TYPE WITH INDUSTRIAL HOUSING AND SUPPORT
  - 1-32W T8 LED FLUORESCENT LIGHT RECESSED TYPE WITH INDUSTRIAL HOUSING AND SUPPORT

E  
2 1

**THIRD FLOOR PLAN (LIGHTING AND SWITCHING LAYOUT)  
-for future development**  
SCALE: 1:100 MTS

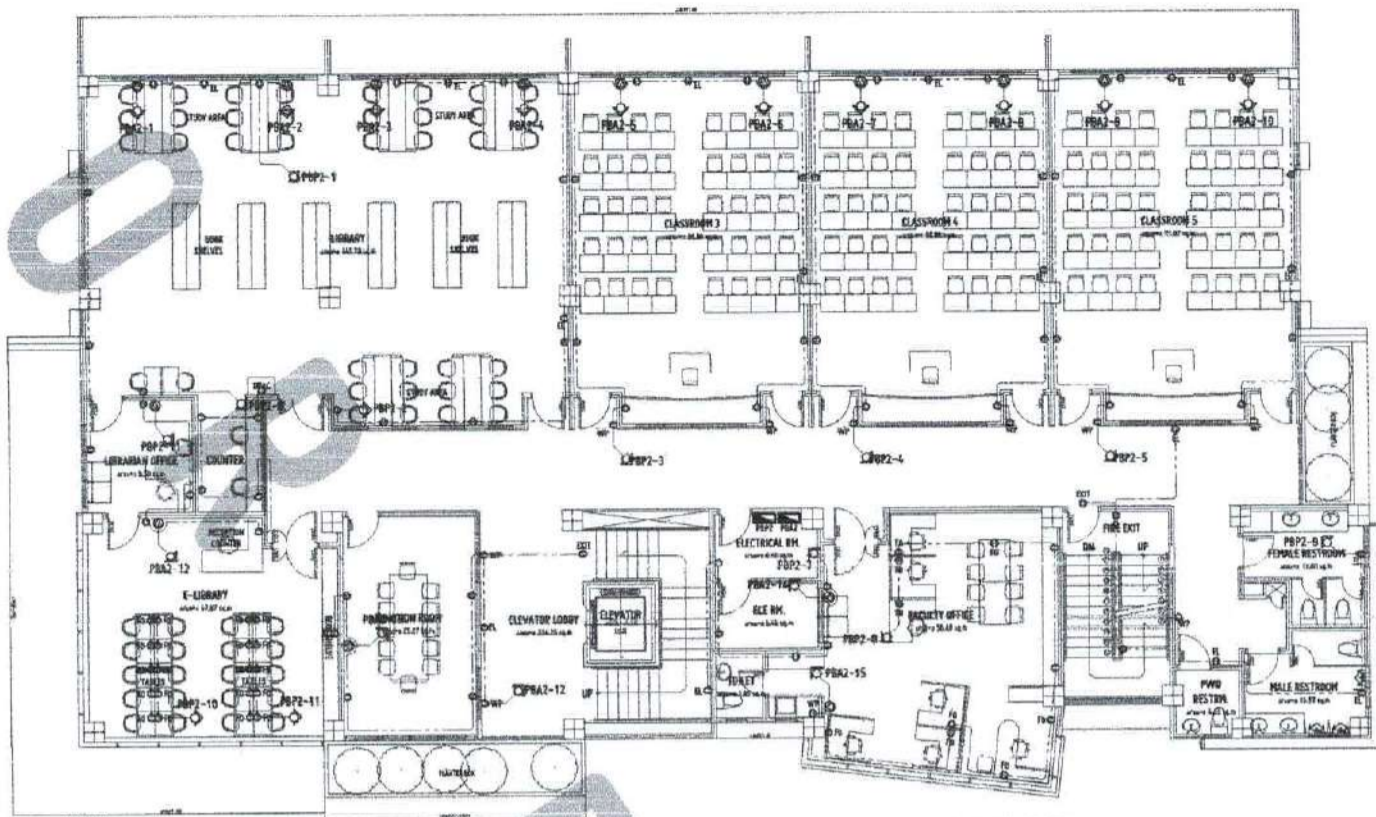


- LEGEND:
- 12 WATTS LED P/N LIGHT
  - 10W LED RECESSED CYCLING PRINTED LIGHT
  - 10W LED LIGHT WITH INDUSTRIAL HOUSING AND SUPPORT
  - 1-32W T8 LED FLUORESCENT LIGHT PRINTED TYPE WITH INDUSTRIAL HOUSING AND SUPPORT
  - 1-32W T8 LED FLUORESCENT LIGHT RECESSED TYPE WITH INDUSTRIAL HOUSING AND SUPPORT

E  
2 2

**FOURTH FLOOR PLAN (LIGHTING AND SWITCHING LAYOUT)-for future development**  
SCALE: 1:100 MTS



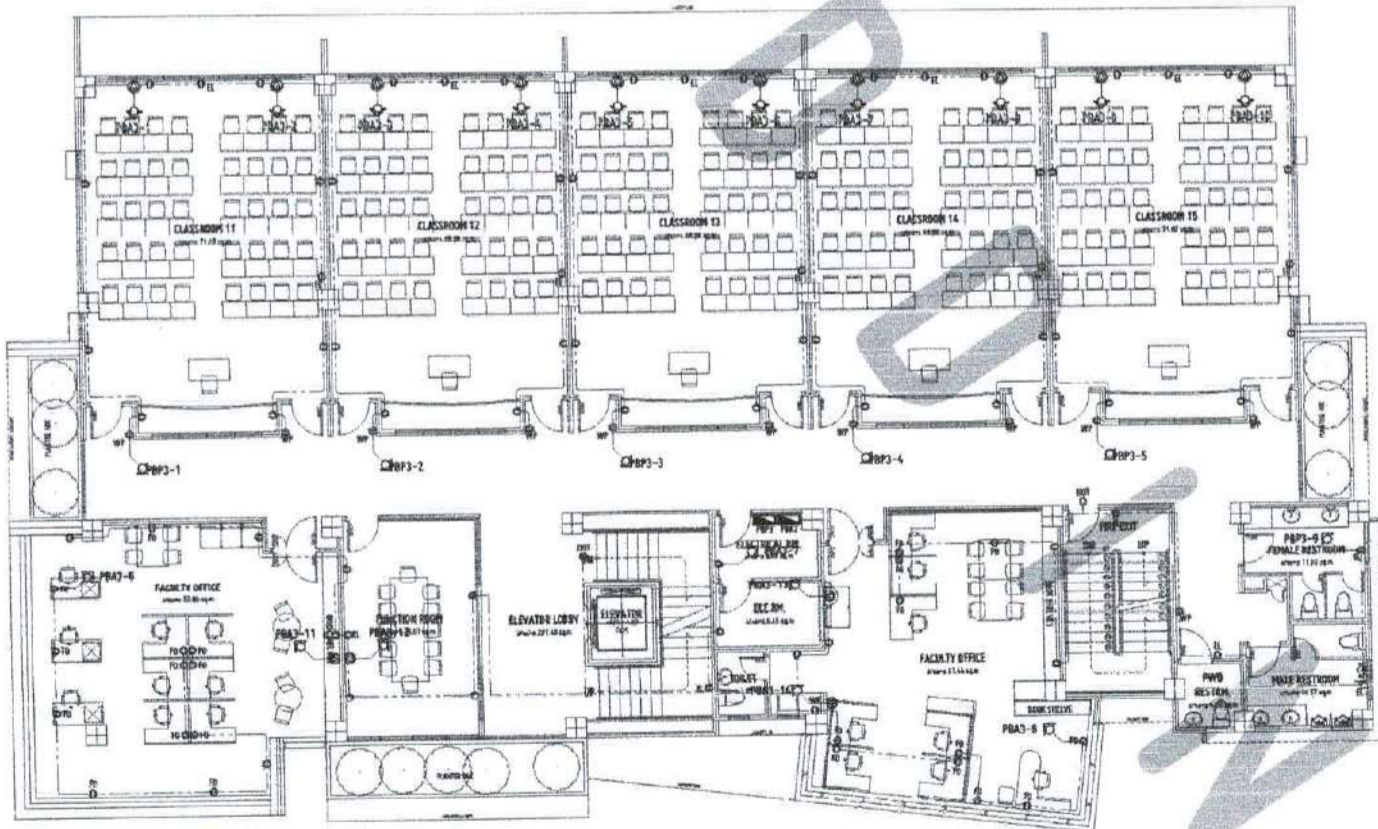


**SECOND FLOOR PLAN (POWER LAYOUT)**

-for future development

SCALE: 1:100 MTS

- LEGEND:
- DUPLEX CONDUITLESS OUTLET
  - EMERGENCY OUTLET
  - EXIT OUTLET
  - FLOOR CONDUITLESS OUTLET WITH SAFETY SWITCHER
  - AIR CONDITIONING UNIT
  - ACU
  - WEATHERPROOF OUTLET
  - PANEL BOARD



**THIRD FLOOR PLAN (POWER LAYOUT)**

-for future development

SCALE: 1:100 MTS

- LEGEND:
- DUPLEX CONDUITLESS OUTLET
  - EMERGENCY OUTLET
  - EXIT OUTLET
  - FLOOR CONDUITLESS OUTLET WITH SAFETY SWITCHER
  - AIR CONDITIONING UNIT
  - ACU
  - WEATHERPROOF OUTLET
  - PANEL BOARD



REPUBLIC OF THE PHILIPPINES  
 UNIVERSITY OF SCIENCE AND TECHNOLOGY OF SOUTHERN PHILIPPINES  
 COLLEGE OF ENGINEERING  
 INFRASTRUCTURE PLANNING AND FACILITY DEVELOPMENT UNIT  
 CLAYTON RD. BUTUAN, BUTUAN CITY, COMPOST VALLEY, DAVAO REGION VIII  
 TELEPHONE: 8108121-21-48-49 / 8108121-1739-482-1739 | FAX: 8108121-4849  
 WEBSITE: www.ustip.edu.ph

PROFESSIONAL ELECTRICAL ENGINEER  
 PROJECT NO.:  
 SHEET NO.:  
 DATE:  
 PLACE:

PROJECT LOCATION  
 OWNER

PROPOSED 21ST CENTURY 5 STOREY CLASSROOM BUILDING  
 USTP WILAMENA CAMPUS, INSANGI, ORIENTAL MINDANAO  
 UNIVERSITY OF SCIENCE AND TECHNOLOGY OF SOUTHERN PHILIPPINES

RECOMMENDED BY:  
 M. FERNANDO A. BORDA  
 DIRECTOR, USTP

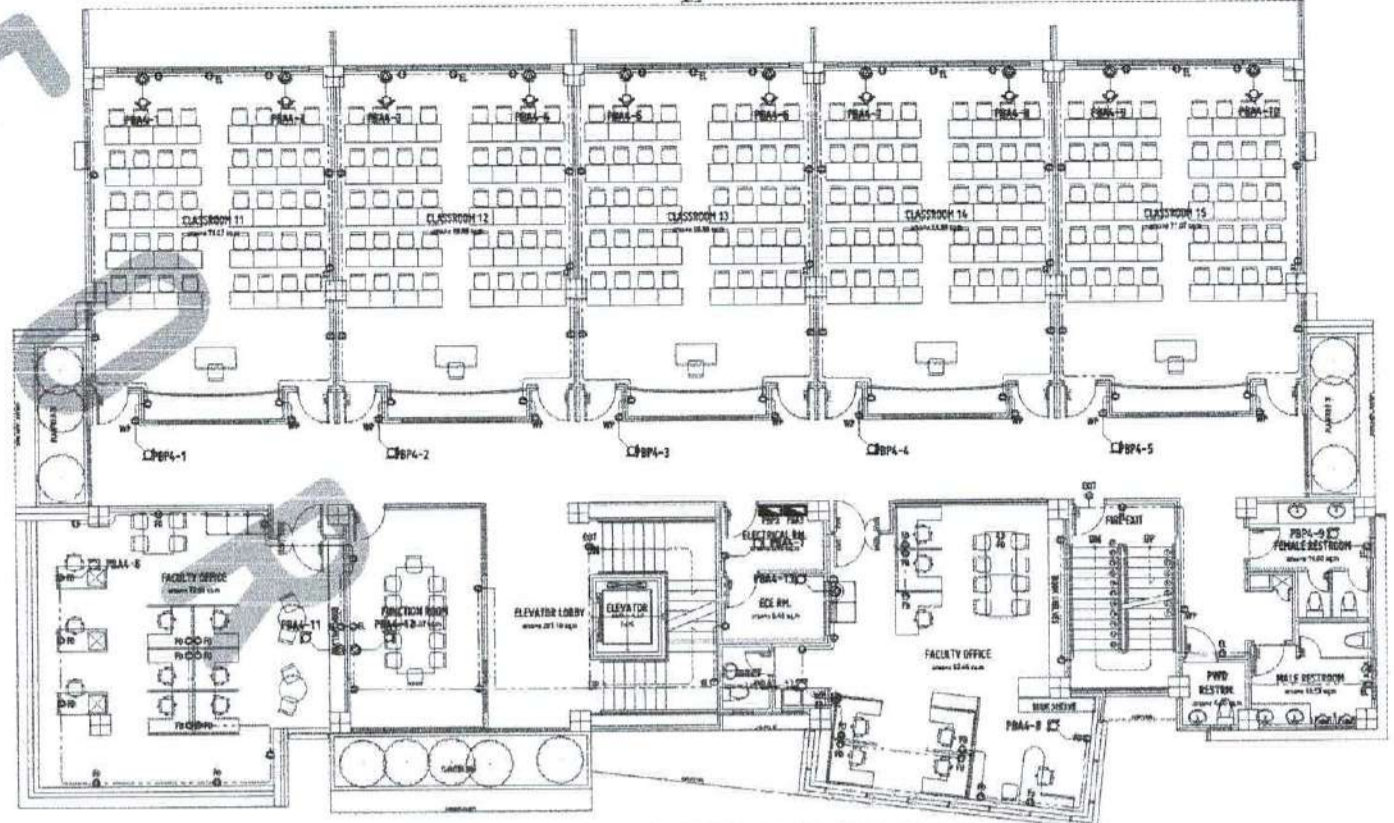
APPROVED BY:  
 DR. AMPARIONO B. CULTURA II  
 PRESIDENT, USTP SYSTEM

APPROVED BY:  
 DR. AMPARIONO B. CULTURA II  
 PRESIDENT, USTP SYSTEM

SHEET CONTENTS:  
 1. GENERAL NOTES  
 2. ELECTRICAL LAYOUT  
 3. LIGHTING LAYOUT

DATE: 08/11/2023  
 TIME: 10:00 AM

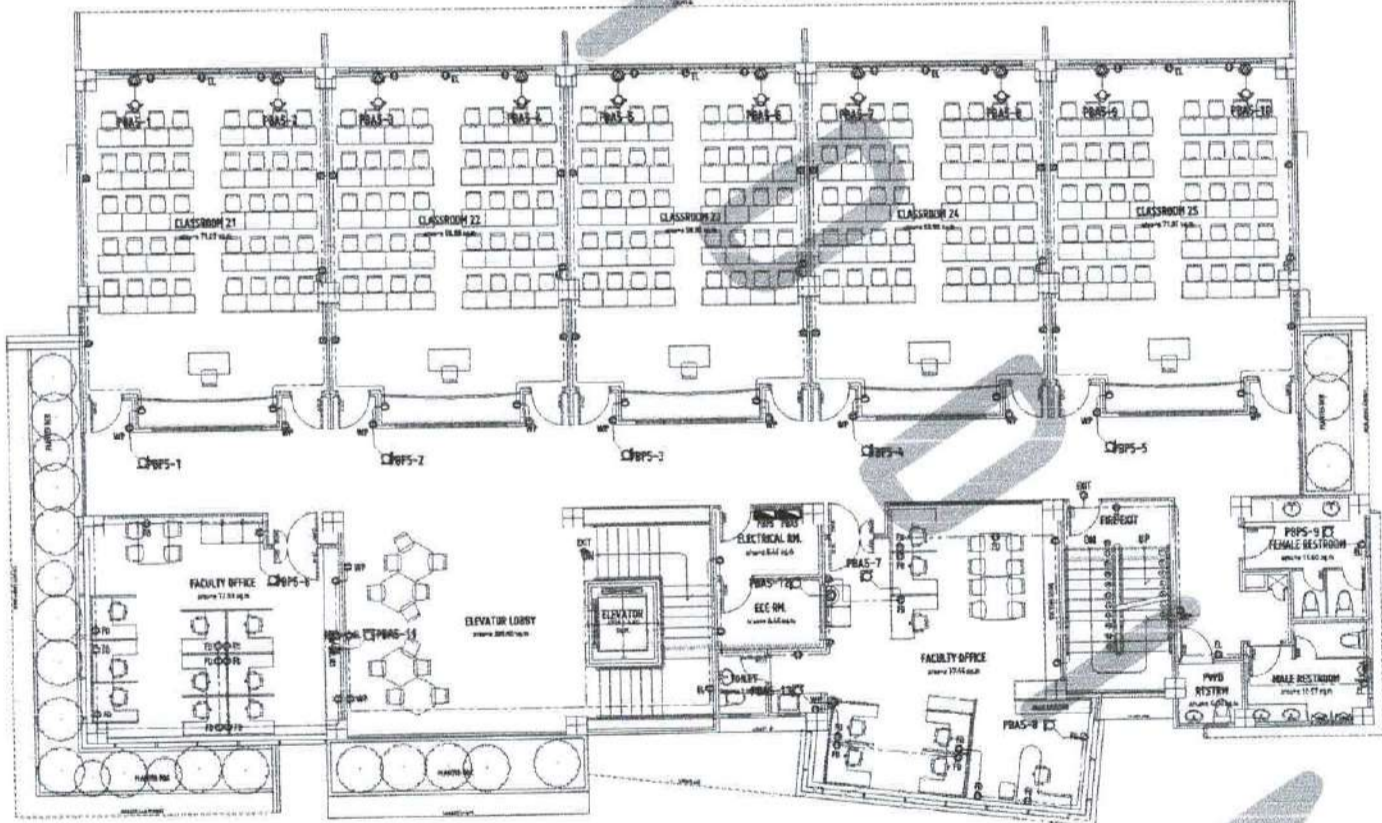
**E5**



**FOURTH FLOOR PLAN (POWER LAYOUT)**  
 -for future development  
 SCALE: 1:100 MTS

- LEGEND:
- DUPLEX CONVENIENCE OUTLET
  - EMERGENCY OUTLET
  - EXIT OUTLET
  - FLOOR CONVENIENCE OUTLET WITH SAFETY SHUTTER
  - AIR CONDITIONING UNIT
  - WEATHERPROOF OUTLET
  - PANEL BOARD

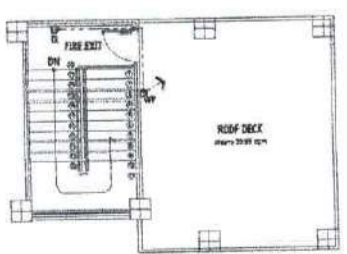
E 5 1



**FIFTH FLOOR PLAN (POWER LAYOUT)**  
 -for future development  
 SCALE: 1:100 MTS

- LEGEND:
- DUPLEX CONVENIENCE OUTLET
  - EMERGENCY OUTLET
  - EXIT OUTLET
  - FLOOR CONVENIENCE OUTLET WITH SAFETY SHUTTER
  - AIR CONDITIONING UNIT
  - WEATHERPROOF OUTLET
  - PANEL BOARD

E 5 2



**ROOF DECK PLAN (POWER LAYOUT)**  
 -for future development  
 SCALE: 1:100 MTS

E 5 3

APPROVED BY:  
 DR. AMPARIONO B. CULTURA II  
 PRESIDENT, USTP SYSTEM  
 OFFICE OF THE BUILDING OFFICIAL  
 WILAMENA, MINSANGI ORIENTAL

APPROVED BY:

| CIRCUIT NO. | CIRCUIT TYPE | 2-WIRE - GROUND     |                         | 3-WIRE - GROUND     |                         | 4-WIRE - GROUND     |                         | 5-WIRE - GROUND     |                         |
|-------------|--------------|---------------------|-------------------------|---------------------|-------------------------|---------------------|-------------------------|---------------------|-------------------------|
|             |              | WIRE                | SIZE (mm <sup>2</sup> ) | WIRE                | SIZE (mm <sup>2</sup> ) | WIRE                | SIZE (mm <sup>2</sup> ) | WIRE                | SIZE (mm <sup>2</sup> ) |
| 1           | 3P           | ACU-1-02 FACILITY   | 2.0                     | ACU-1-02 FACILITY   | 2.0                     | ACU-1-02 FACILITY   | 2.0                     | ACU-1-02 FACILITY   | 2.0                     |
| 2           | 3P           | ACU-1-03 NEURALINKS | 2.0                     | ACU-1-03 NEURALINKS | 2.0                     | ACU-1-03 NEURALINKS | 2.0                     | ACU-1-03 NEURALINKS | 2.0                     |
| 3           | 3P           | ACU-1-04 NEURALINKS | 2.0                     | ACU-1-04 NEURALINKS | 2.0                     | ACU-1-04 NEURALINKS | 2.0                     | ACU-1-04 NEURALINKS | 2.0                     |
| 4           | 3P           | ACU-1-05 NEURALINKS | 2.0                     | ACU-1-05 NEURALINKS | 2.0                     | ACU-1-05 NEURALINKS | 2.0                     | ACU-1-05 NEURALINKS | 2.0                     |
| 5           | 3P           | ACU-1-06 NEURALINKS | 2.0                     | ACU-1-06 NEURALINKS | 2.0                     | ACU-1-06 NEURALINKS | 2.0                     | ACU-1-06 NEURALINKS | 2.0                     |
| 6           | 3P           | ACU-1-07 NEURALINKS | 2.0                     | ACU-1-07 NEURALINKS | 2.0                     | ACU-1-07 NEURALINKS | 2.0                     | ACU-1-07 NEURALINKS | 2.0                     |
| 7           | 3P           | ACU-1-08 NEURALINKS | 2.0                     | ACU-1-08 NEURALINKS | 2.0                     | ACU-1-08 NEURALINKS | 2.0                     | ACU-1-08 NEURALINKS | 2.0                     |
| 8           | 3P           | ACU-1-09 NEURALINKS | 2.0                     | ACU-1-09 NEURALINKS | 2.0                     | ACU-1-09 NEURALINKS | 2.0                     | ACU-1-09 NEURALINKS | 2.0                     |
| 9           | 3P           | ACU-1-10 NEURALINKS | 2.0                     | ACU-1-10 NEURALINKS | 2.0                     | ACU-1-10 NEURALINKS | 2.0                     | ACU-1-10 NEURALINKS | 2.0                     |
| 10          | 3P           | ACU-1-11 NEURALINKS | 2.0                     | ACU-1-11 NEURALINKS | 2.0                     | ACU-1-11 NEURALINKS | 2.0                     | ACU-1-11 NEURALINKS | 2.0                     |
| 11          | 3P           | ACU-1-12 NEURALINKS | 2.0                     | ACU-1-12 NEURALINKS | 2.0                     | ACU-1-12 NEURALINKS | 2.0                     | ACU-1-12 NEURALINKS | 2.0                     |
| 12          | 3P           | ACU-1-13 NEURALINKS | 2.0                     | ACU-1-13 NEURALINKS | 2.0                     | ACU-1-13 NEURALINKS | 2.0                     | ACU-1-13 NEURALINKS | 2.0                     |
| 13          | 3P           | ACU-1-14 NEURALINKS | 2.0                     | ACU-1-14 NEURALINKS | 2.0                     | ACU-1-14 NEURALINKS | 2.0                     | ACU-1-14 NEURALINKS | 2.0                     |
| TOTAL       |              |                     | 19.23                   |                     | 19.23                   |                     | 19.23                   |                     | 19.23                   |

| PROJECT ADDRESS | 21ST CENTURY CLASSROOM 5-STOREY<br>USTP Villaverde, HIKMAH ORIENTAL | DATE        | 17-JUN-22    |
|-----------------|---|-------------|--------------|
| PHASE           | MEG-PHASE 1   | FEEDER      | THRU/THWN    |
| LOCATION        | SECOND FLOOR  | NO. OF SETS | CONDUIT TYPE |
| CIRCUIT NO.     | CIRCUIT TYPE  | THRU/THWN   | CONDUIT TYPE |
| 1               | 3P  | Y           | 3            |
| 2               | 3P  | Y           | 3            |
| 3               | 3P  | Y           | 3            |
| 4               | 3P  | Y           | 3            |
| 5               | 3P  | Y           | 3            |
| 6               | 3P  | Y           | 3            |
| 7               | 3P  | Y           | 3            |
| 8               | 3P  | Y           | 3            |
| 9               | 3P  | Y           | 3            |
| 10              | 3P  | Y           | 3            |
| 11              | 3P  | Y           | 3            |
| 12              | 3P  | Y           | 3            |
| 13              | 3P  | Y           | 3            |
| TOTAL           |   |             | 19.23        |

| DESCRIPTION     | DEMAND FACTOR | DEMAND | DEMAND | DEMAND | DEMAND | DEMAND | DEMAND | DEMAND | DEMAND |
|-----------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|
| AVG PF          | W             | KVA    | AMPS   | AMPS   | AMPS   | AMPS   | AMPS   | AMPS   | AMPS   |
| BIGGEST MOTOR   | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |
| LIGHTS          | 0.8           | 12.40  | 1.00   | 12.40  | 25.00  | 36.91  |        |        |        |
| C.O.            | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| HEATING MACHINE | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| RANGE           | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| COFFEE SHIFTER  | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| WASH MACHINE    | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| AIRCON          | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| MOTOR (CONT)    | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| MOTOR (CONT)    | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| OTHERS 1        | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| OTHERS 2        | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| OTHERS 3        | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| TOTAL           |               | 44.75  | 3P     | 320    | 19.23  | 19.23  |        |        |        |

| PROJECT ADDRESS | 21ST CENTURY CLASSROOM 5-STOREY<br>USTP Villaverde, HIKMAH ORIENTAL | DATE        | 17-JUN-22    |
|-----------------|---|-------------|--------------|
| PHASE           | MEG-PHASE 1   | FEEDER      | THRU/THWN    |
| LOCATION        | GROUND FLOOR  | NO. OF SETS | CONDUIT TYPE |
| CIRCUIT NO.     | CIRCUIT TYPE  | THRU/THWN   | CONDUIT TYPE |
| 1               | 3P  | Y           | 3            |
| 2               | 3P  | Y           | 3            |
| 3               | 3P  | Y           | 3            |
| TOTAL           |   |             | 19.23        |

| DESCRIPTION     | DEMAND FACTOR | DEMAND | DEMAND | DEMAND | DEMAND | DEMAND | DEMAND | DEMAND | DEMAND |
|-----------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|
| AVG PF          | W             | KVA    | AMPS   | AMPS   | AMPS   | AMPS   | AMPS   | AMPS   | AMPS   |
| BIGGEST MOTOR   | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| LIGHTS          | 0.8           | 12.40  | 1.00   | 12.40  | 25.00  | 36.91  |        |        |        |
| C.O.            | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| HEATING MACHINE | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| RANGE           | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| COFFEE SHIFTER  | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| WASH MACHINE    | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| AIRCON          | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| MOTOR (CONT)    | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| MOTOR (CONT)    | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| OTHERS 1        | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| OTHERS 2        | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| OTHERS 3        | 0.00          | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |        |        |        |
| TOTAL           |               | 44.75  | 3P     | 320    | 19.23  | 19.23  |        |        |        |

NOTE: GENERATOR REQUIREMENT: 3-50 KVA.



REPUBLIC OF THE PHILIPPINES  
UNIVERSITY OF SCIENCE AND TECHNOLOGY OF SOUTHERN PHILIPPINES  
INTEGRATED PLANNING AND FACILITY DEVELOPMENT UNIT  
CLAYTON A. BAYAN, CLAYTON A. BAYAN, CLAYTON A. BAYAN  
MORONG & CANTON 7-46-56 / MORONG 7-46-56 / MORONG 7-46-56  
MORONG 7-46-56 / MORONG 7-46-56 / MORONG 7-46-56

PROFESSIONAL ELECTRICAL ENGINEER  
PROJECT LOCATION  
OWNER

PROPOSED 21ST CENTURY 5 STOREY CLASSROOM BUILDING  
USTP VILLAVERDE CAMPUS, HIKMAH ORIENTAL  
UNIVERSITY OF SCIENCE AND TECHNOLOGY OF SOUTHERN PHILIPPINES

RECOMMENDING APPROVAL:  
ATTY. ERWIN B. BODOS  
DIRECTOR, USTP

RECOMMENDING APPROVAL:  
DR. AMERSON B. CULTURAL II  
PRESIDENT, USTP SYSTEM

APPROVED BY:  
DR. AMERSON B. CULTURAL II  
PRESIDENT, USTP SYSTEM

SHEET CONTENTS:  
DRAWN BY:  
LIST DRAWN:

