



Republic of the Philippines  
**BULACAN AGRICULTURAL STATE COLLEGE**  
**Office of Bids and Awards Committee**  
Pinaod, San Ildefonso, Bulacan, Philippines 3010

October 27, 2022

**Bid Bulletin No. 3**  
**REPLY TO QUERIES AND CLARIFICATIONS BY BIDDERS**

<b>Name of Project:</b>	<b>2022-06-INFRA: Construction of Solar Powered Four Storey 20 Classroom Academic Building (Phase 1)</b>
<b>ABC: Php25,000,000.00</b>	

This Bid Bulletin No. 3 is issued to modify or amend items in the Bidding Documents for the above cited project and to address queries/ clarifications sent by bidders through e-mail in compliance with Section 22.5.1 of the 2016 Revised IRR of RA 9184. This shall form an integral part of the said Bidding Documents.

**I. Reply to Clarifications sent by Bidder through E-mail**

**A. Plumbing Works**

For Item 1. Which is to be used: PPR Pipe 20mm (BOQ) or PVC Pipe 25mm (Plan)?  
*Please use PPR Pipe 20mm as per written in the BOQ.*

For Items 2-7. Please allow us to provide you an updated Plumbing Plans on this matter.

For Item 8. Specification on the type of waterproofing to be used will depend on the winning contractor, the use of Torch-Applied Membrane, Adhesive-Type Membrane, and the likes can be proposed and subject for approval of the Supervising engineer.

**B. Ceiling Finishes**

Please see attached files.

**C. Wall Finishes**

It is included in the Bill of Quantities and is specified to be concrete plastered on both side with paint finish.

**D. Tile Works**

For the classroom, please use the 60cm x 60cm Glazed Tiles. For the hallway, please use the 60cm x 60cm Unglazed Tiles.  
For the toilet, please use 30cm x 30cm Unglazed Tiles for both floor and wall.



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**E. Sanitary Works/Fittings**

For Item 1 and 2. Please note that we included “other consumables and miscellaneous” for some items that was not indicated on the Bill of Quantities but stated in the Technical Specifications.

For Item 3. Please see attached Plumbing Plan.

**F. Electrical Works**

For Item 1&3. Service Entrance Set includes Main Feeder Line. For Item 2. It will only cover Ground to Second Floor.

For Item 4. It is estimated to be about 15m from existing Meralco Post.

For Item 5. It is indicated in the Electrical Plans under file Sheet E-01, E-02 and E-05.

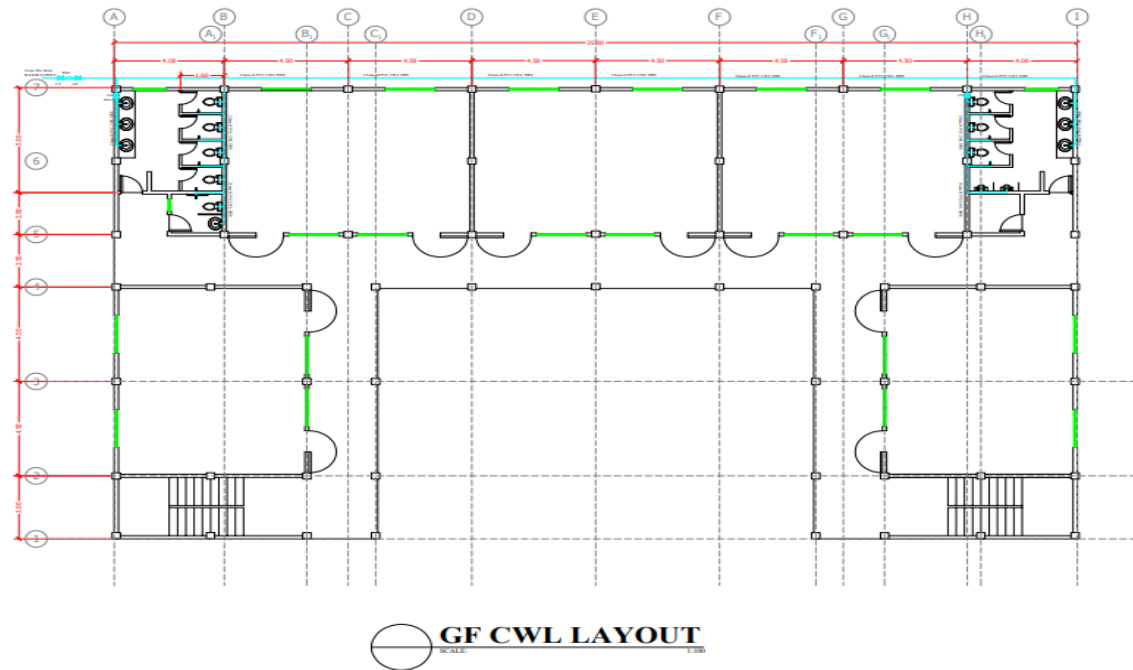
For the guidance and information of all concerned.


  
**RONALD REAGAN T. ALONZO, Ph.D.**  
BAC Chairperson



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A. Plumbing Works

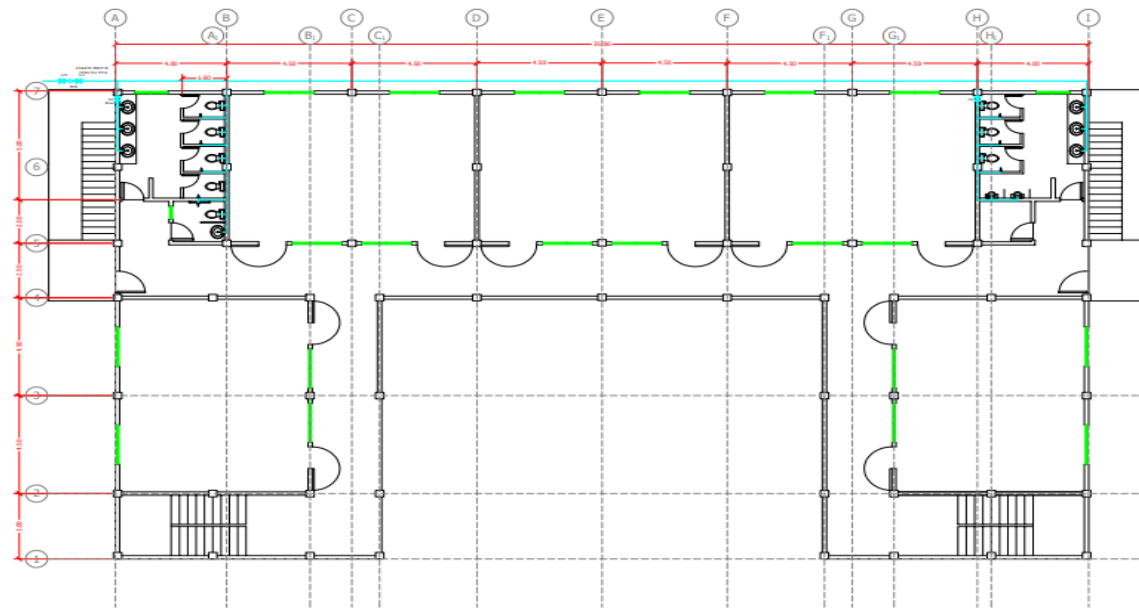


OWNER	PROJECT NO.	PROJECT TITLE	APPROVED BY	SHEET CONTENT	REVISIONS	PROJECT NO.	SHEET NO.
 <b>BULACAN AGRICULTURAL STATE COLLEGE</b>		PROPOSED CONSTRUCTION OF SOLAR POWERED 4-STOREY 20 CLASSROOMS ACADEMIC BLDG. PHASE 1	<u>JOHN EDWARD Y. CRUZ, PhD.</u> DIRECTOR - PLANNING & DEVELOPMENT	COLD WATER LINE LAYOUT	MARK DATE		P-02
ADDRESS: PINAOD, SAN ILDEFONSO, BULACAN	DES. NO. PDR. NO.	LOCATION: BRGY. PORLACION, SAN ILDEFONSO, BULACAN	<u>JAMESON H. TAN, EdD.</u> PRESIDENT				

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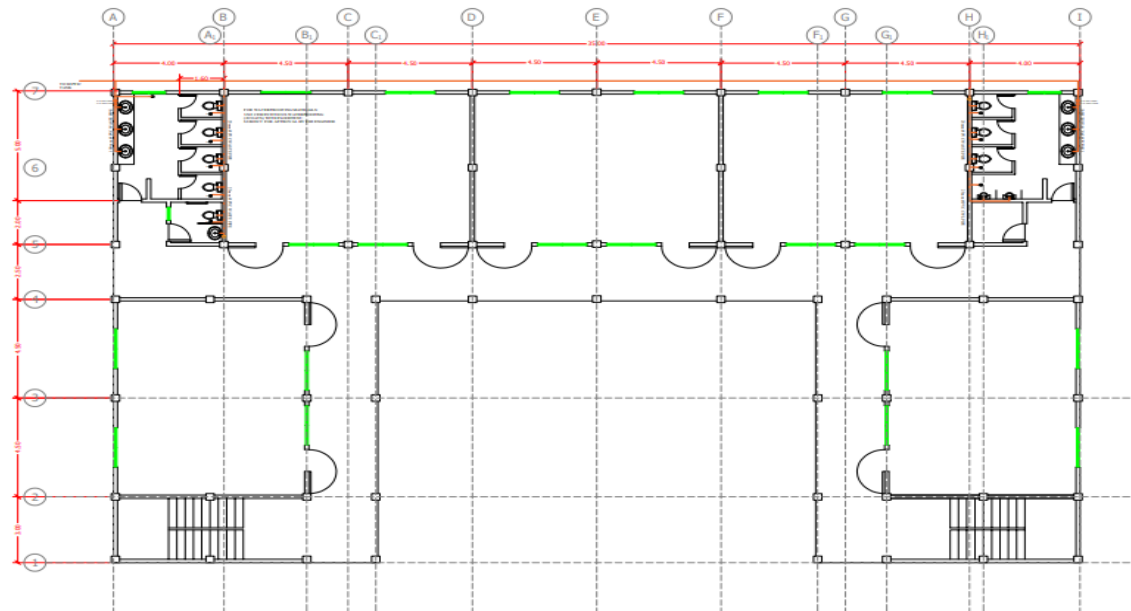
**2F-4F CWL LAYOUT**  
SCALE: 1/16" = 1'-0"

OWNER	PROJECT NO.	PROJECT TITLE	APPROVED BY	SHEET CONTENT	REVISIONS	PROJECT NO.	SHEET NO.
<b>BULACAN AGRICULTURAL STATE COLLEGE</b> ADDRESS: PINAOD, SAN ILDEFONSO, BULACAN	PROJECT NO.: DATE:	<b>PROPOSED CONSTRUCTION OF SOLAR POWERED 4-STORY 20 CLASSROOMS ACADEMIC BLDG. PHASE 1</b> LOCATION: BROY, PORLACION, SAN ILDEFONSO, BULACAN	<b>JOHN EDWARD Y. CRUZ, PhD</b> DIRECTOR - PLANNING & DEVELOPMENT  <b>JAMESON H. TAN, EdD</b> PRESIDENT	<b>COLD WATER LINE LAYOUT</b>	MARK:    DATE:	<b>P-03</b>	
					DESIGNED BY:		
					DATE:		
					CHECKED BY:		


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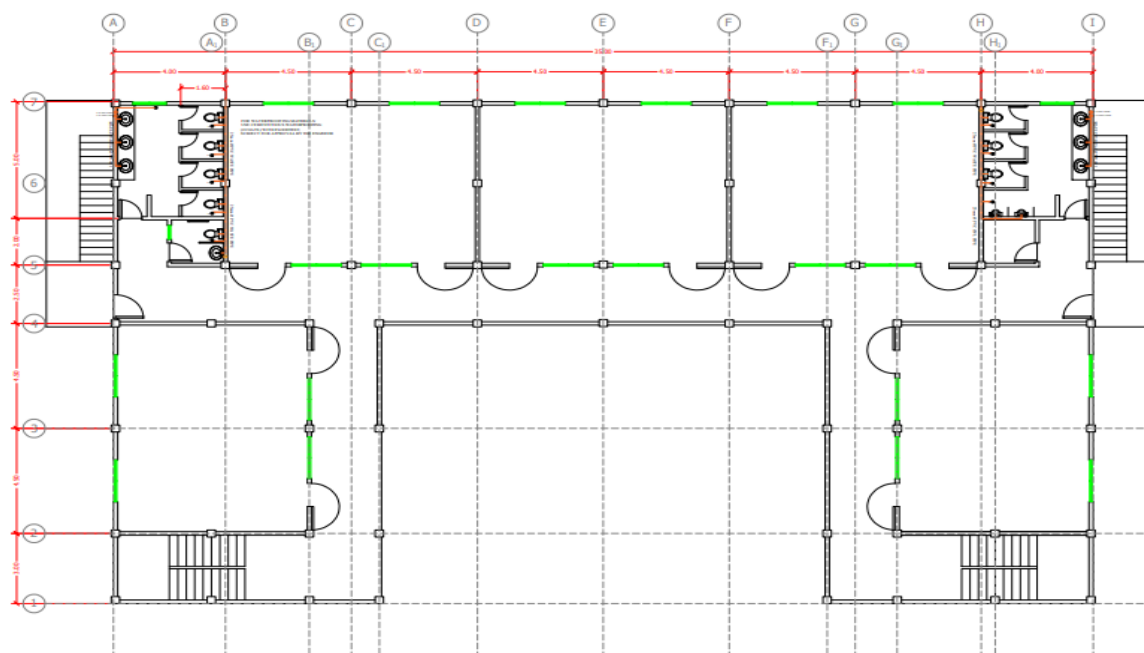
 **GROUND FLOOR PLAN**  
SCALE 1:100


OWNER	PROJECT NO.	PROJECT TITLE	APPROVED BY	SHEET CONTENT	REVISIONS	PROJECT NO.	SHEET NO.
 <b>BULACAN AGRICULTURAL STATE COLLEGE</b>		PROPOSED CONSTRUCTION OF SOLAR POWERED 4-STOREY 20 CLASSROOMS ACADEMIC BLDG. PHASE 1	<u>JOHN EDWARD Y. CRUZ, PhD.</u> DIRECTOR - PLANNING & DEVELOPMENT	SEWERAGE LINE LAYOUT	MARK DATE		<b>P-04</b>
ADDRESS: PINAOD, SAN ILDEFONSO, BULACAN	REC. NO. FILE NO.	LOCATION: BRGY. POBLACION, SAN ILDEFONSO, BULACAN	<u>JAMESON H. TAN, EdD.</u> PRESIDENT				


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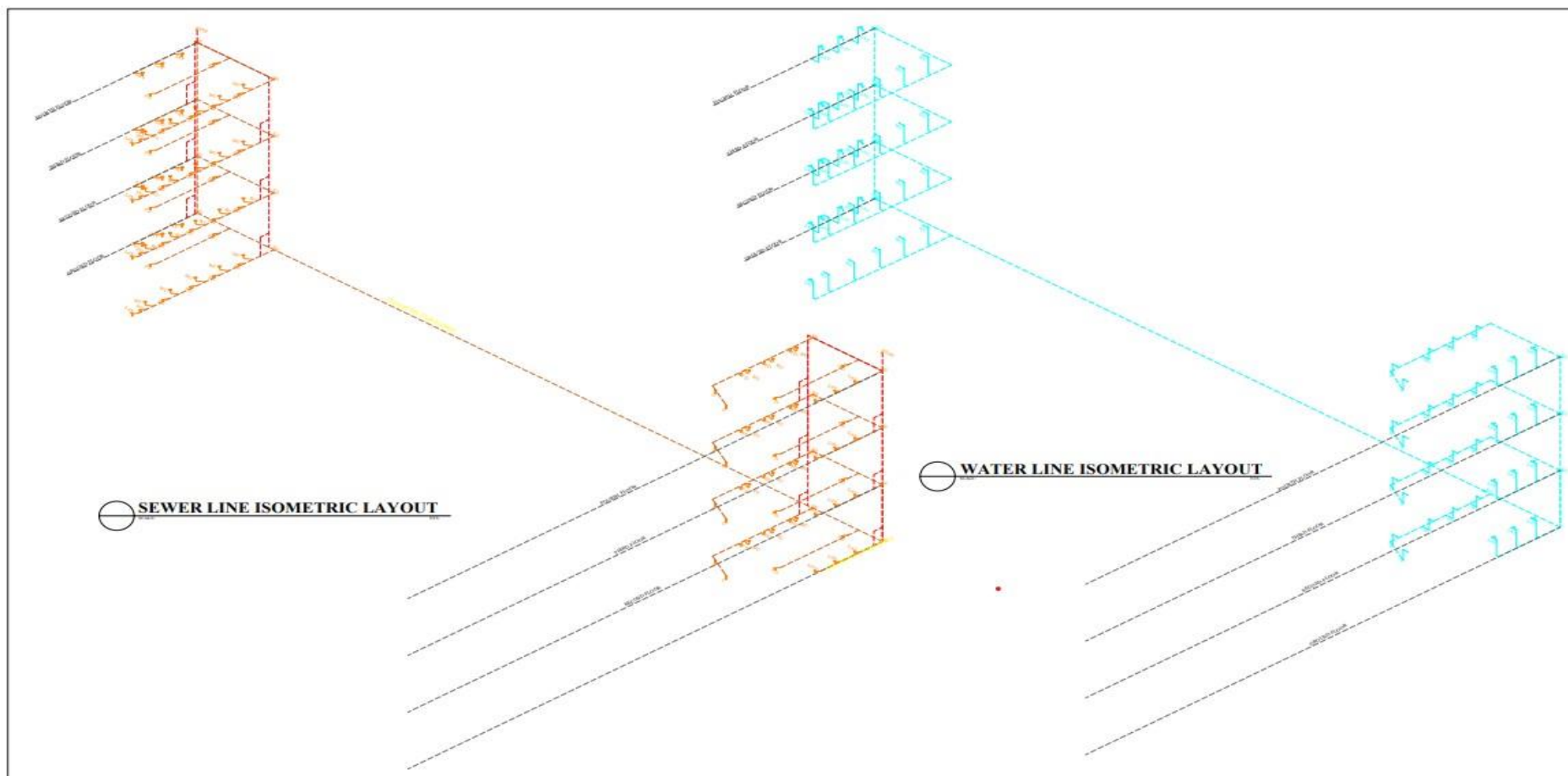
 **SECOND TO FOURTH FLOOR PLAN**  
SCALE: 1:200


	<b>OWNER</b> <b>BULACAN AGRICULTURAL STATE COLLEGE</b> <b>ADDRESS</b> PINAOD, SAN ILDEFONSO, BULACAN	REC. NO. _____ DATE _____	<b>PROJECT TITLE</b> PROPOSED CONSTRUCTION OF SOLAR POWERED 4-STORY 20 CLASSROOMS ACADEMIC BLDG. PHASE 1 <b>LOCATION</b> : BROY, POBLACION, SAN ILDEFONSO, BULACAN	<b>APPROVED BY</b> <u>JOHN EDWARD Y. CRUZ, PhD.</u> DIRECTOR - PLANNING & DEVELOPMENT  <u>JAMESON H. TAN, EdD.</u> PRESIDENT	<b>SHEET CONTENT</b> SEWERAGE LINE LAYOUT	<b>REVISIONS</b>		<b>PROJECT NO.</b>	<b>SHEET NO.</b> <b>P-05</b>
						MARK	DATE		

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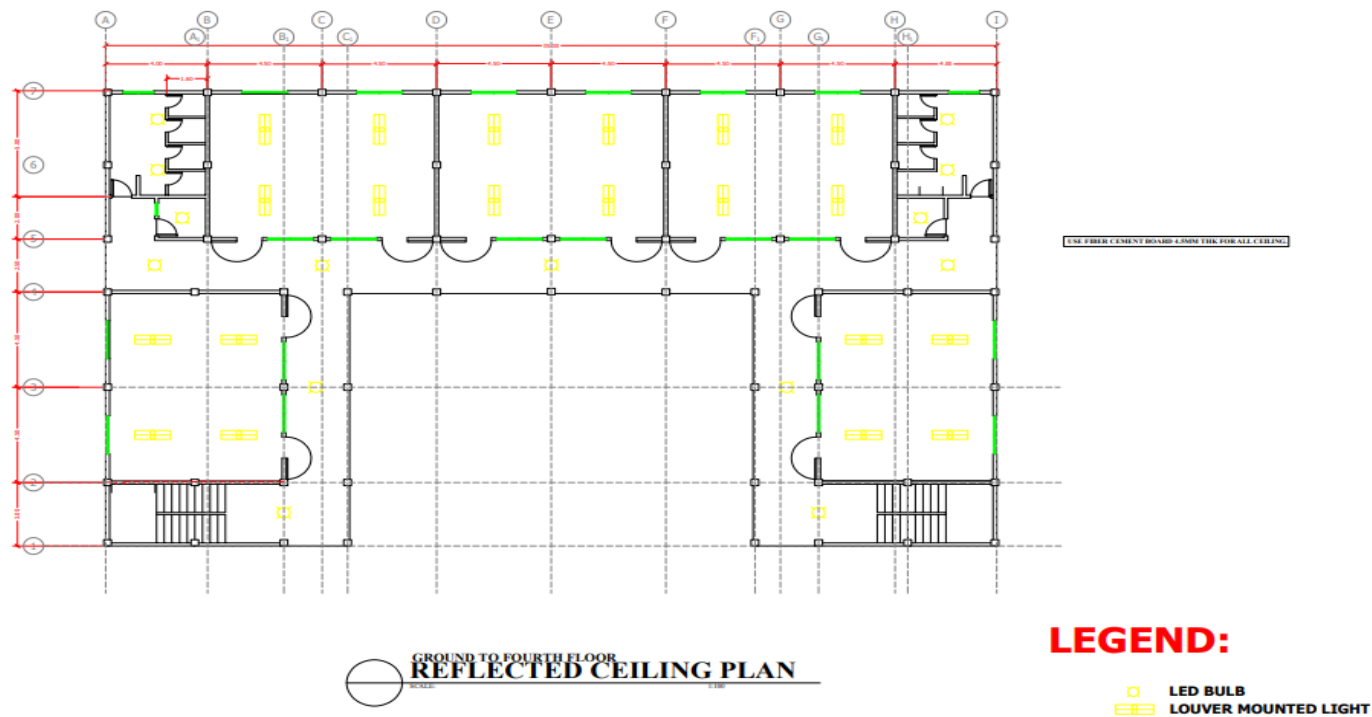
	OWNER	FIG. NO. :	PROJECT TITLE	APPROVED BY	SHEET CONTENT	REVISIONS		PROJECT NO.	SHEET NO.
	BULACAN AGRICULTURAL STATE COLLEGE	DNK. NO. : DES. NO. :	PROPOSED CONSTRUCTION OF SOLAR POWERED 4-STORY 20 CLASSROOMS ACADEMIC BLDG. PHASE 1	JOHN EDWARD Y. CRUZ, PhD. DIRECTOR - PLANNING & DEVELOPMENT	SEWERAGE LINE LAYOUT WATER LINE LAYOUT	DATE		DRAWN BY:	P-06
						DATE		DESIGNED BY:	
						DATE		CHECKED BY:	
						DATE			
ADDRESS: PINAOD, SAN ILDEFONSO, BULACAN		LOCATION: BIRGY-JOBLAGAN, SAN ILDEFONSO, BULACAN	JAMESON H. TAN, EdD. PRESIDENT						

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## Ceiling Finishes



OWNER	DESIGNED BY:	PROJECT TITLE	APPROVED BY	SHEET CONTENT	REVISIONS	PROJECT NO.	SHEET NO.
BULACAN AGRICULTURAL STATE COLLEGE	Civil Engineer	PROPOSED CONSTRUCTION OF SOLAR POWERED 4-STOREY 20 CLASSROOMS ACADEMIC BLDG. PHASE 1	JOHN EDWARD Y. CRUZ, Ph.D. DIRECTOR - PLANNING & DEVELOPMENT	REFLECTED CEILING PLAN	MARK DATE	DRAWN BY: DESIGNED BY: DATE: CHECKED BY:	A-09
ADDRESS: PINAOD, SAN ILDEFONSO, BULACAN	DATE SUBMITTED: DATE REVISION: DATE NO. 1:	LOCATION: BNGY. PORLACION, SAN ILDEFONSO, BULACAN	JAMESON H. TAN, EdD. PRESIDENT				

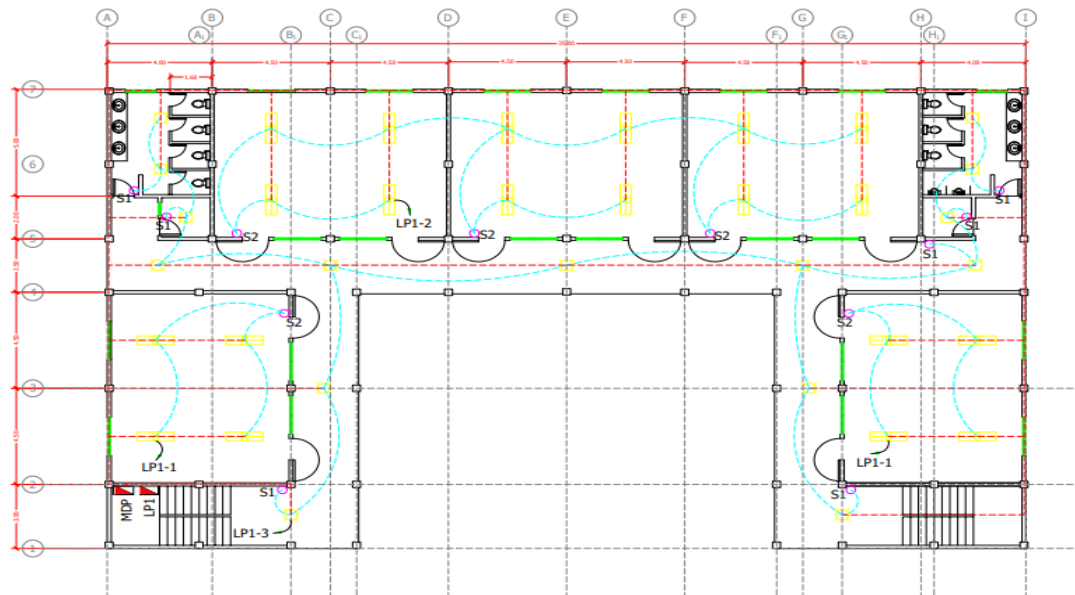
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Electrical Works



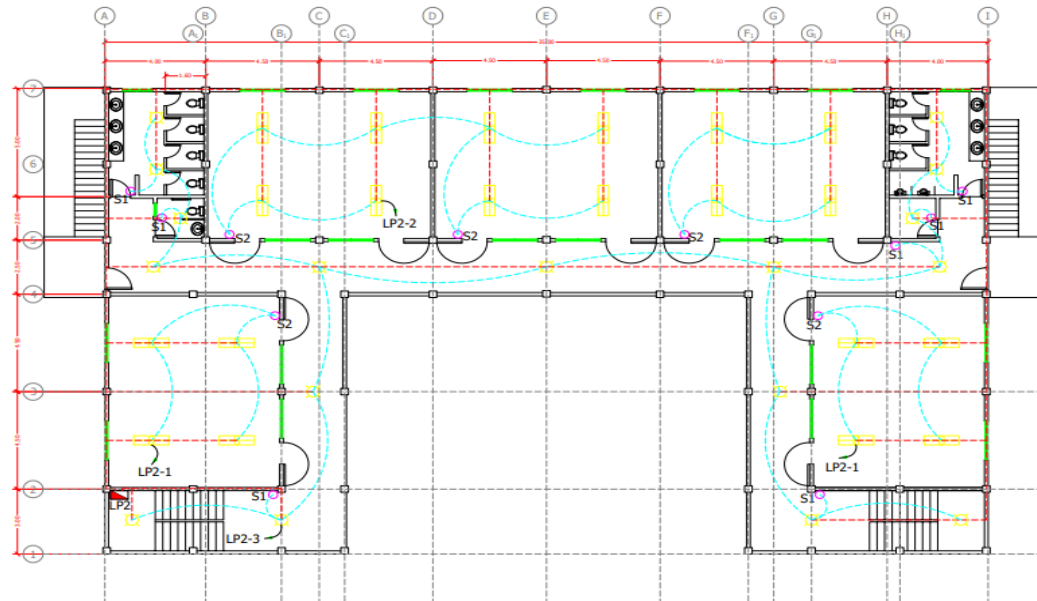
 **GROUND FLOOR PLAN**  
SCALE: 1/80


	OWNER	DESIGNED BY:	PROJECT TITLE	APPROVED BY	SHEET CONTENT	REVISIONS		PROJECT NO.	SHEET NO.
	BULACAN AGRICULTURAL STATE COLLEGE	CIVIL ENGINEER	PROPOSED CONSTRUCTION OF SOLAR POWERED 4-STOREY 20 CLASSROOMS ACADEMIC BLDG. PHASE 1	JOHN EDWARD Y. CRUZ, Ph.D. DIRECTOR - PLANNING & DEVELOPMENT	LITING LAYOUT	MARK	DATE	DRAWN BY:	E-01
	ADDRESS: PINAOD, SAN ILDEFONSO, BULACAN	DATE: _____	LOCATION: BRGY. POBLACION, SAN ILDEFONSO, BULACAN	JAMESON H. TAN, EdD. PRESIDENT				DESIGNED BY:	
		DATE: _____						DATE:	
		DATE: _____						CHECKED BY:	


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 **SECOND TO FOURTH FLOOR PLAN**  
SCALE: 1/100

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	BULACAN AGRICULTURAL STATE COLLEGE	CIVIL ENGINEER	PROPOSED CONSTRUCTION OF SOLAR POWERED 4-STORY 20 CLASSROOMS ACADEMIC BLDG. PHASE 1	JOHN EDWARD Y. CRUZ, PhD. DIRECTOR - PLANNING & DEVELOPMENT	LIGHTING LAYOUT	MARK	DATE	DRAWN BY:	E-02
						DESIGNED BY:			
						CHECKED BY:			
ADDRESS: PINAOD, SAN ILDEFONSO, BULACAN	DES. NO. 1 REV. NO. 1	DATE ISSUED: 10/10/2019	LOCATION: BRGY. POBLACION, SAN ILDEFONSO, BULACAN	JAMESON H. TAN, EdD. PRESIDENT					

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**GENERAL NOTES :**

ALL ELECTRICAL INSTALLATIONS SHALL BE DONE IN WORKMANLIKE MANNER AND IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE (P.E.C.), NATIONAL BUILDING CODE OF THE PHILIPPINES, THE RULES & REGULATIONS OF BULACAN & THE REQUIREMENTS OF THE POWER COMPANY.

GROUNDING SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE. ALL NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT FRAMES OR ENCLOSURES SHALL BE CONNECTED TO EQUIPMENT GROUNDING SYSTEM WIRE WITH SOFT DRAWN COPPER WIRE & SUITABLE TERMINAL LUGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK AMONG THE VARIOUS TRADES AS NECESSARY TO AVOID CONFLICTS AND TO INSURE THE INSTALLATION OF ALL WORKS WITHIN THE AVAILABLE SPACE MINIMUM SIZE OF WIRE TO BE USED FOR POWER AND LIGHTING SHALL BE 2.0mm

LAYOUT SHOWN ON THE PLANS ARE DIAGRAMATIC AND SHALL WHEN NECESSARY BE ALTERED IN THE FIELD TO SUIT CONDITIONS AND LOCATION.

PULL BOXES SHALL BE PROVIDED WHENEVER NECESSARY TO FACILITATE WIRE PULLING EVEN IF THESE ARE NOT INDICATED ON PLANS.

ALL ELECTRICAL MATERIALS TO BE USED SHALL BE NEW & APPROVED TYPE FOR THE LOCATION AND PURPOSES.

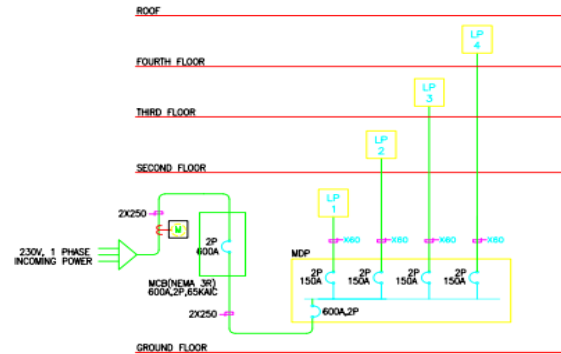
ALL WORKS SHALL BE DONE BY EXPERIENCED ELECTRICIANS AND UNDER SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER.

CONDUCT INSULATION TEST ON ALL WIRINGS, FIXTURES AND DEVICES INSTALLED AND COMPLETED BEFORE APPLYING POWER. SUBMIT RECORDED MEASUREMENTS OF INSULATION TEST OF SERVICE ENTRANCE, FEEDERS AND BRANCH CIRCUIT TESTED.

REFER TO ELECTRICAL SPECIFICATIONS FOR SPECIFIC INFORMATIONS.

**LEGEND:**

- LED BULB
- LOUVER MOUNTED LIGHT
- CONVENIENCE OUTLET
- PANEL BOX
- AIR CONDITION OUTLET
- SWITCH
- S1 SINGLE SWITCH
- S2 2 GANG SWITCH
- OUTLET LINE
- LIGHTING LINE
- SWITCH LINE



**POWER RISER DIAGRAM**  
SCALE: 1:500 PMS

WIRING SCHEDULE SYMBOL	NO. OF SETS	PHASE CONDUCTOR MM. SQ.	GROUND CONDUCTOR MM. SQ.	CONDUIT SIZE MM DIA.
XLS-5	1	2-3.5 THWN	3-5 THWN	20
XBL-0	1	2-8.0 THWN	5-5 THWN	20
XSL-4	1	2-16 THWN	8-0 THWN	20
XBL-0	1	2-40 THWN	16 THWN	50
2XZS-0	1	3-250 THWN	30 THWN	80

MAIN: 600A/2000AF 2P, 250V, 10KAIC MCCB WITH SOLID GROUND BUS.									
FEEDER NO.	LOAD SERVED	VOLTS	VA LOAD	AMP LOAD	CIRCUIT BREAKER	AT	AF	P	WIRES/CONDUITS
1	LP1	230	33480	145.57	80	200	2	2	2-60MM2 THWN & 1-30MM2 THWN (G) IN 50MM DIA. PVC.
2	LP2	230	34300	148.26	80	200	2	2	2-60MM2 THWN & 1-30MM2 THWN (G) IN 50MM DIA. PVC.
3	LP3	230	34300	148.26	80	200	2	2	2-60MM2 THWN & 1-30MM2 THWN (G) IN 50MM DIA. PVC.
4	LP4	230	34300	148.26	80	200	2	2	2-60MM2 THWN & 1-30MM2 THWN (G) IN 50MM DIA. PVC.
5	SPACE								
6	SPACE								
7	SPACE								
TOTAL			135780	582.05					

ROOM LOAD + CAFE LOAD

FULL LOAD CURRENT AT 80% DEM. FACTOR:

$I_{FL} = (590.35) \times 0.80 = 472.28 \text{ A}$

USE: 2 SETS OF 3-200MM2 THWN & 1-30MM2 THWN (G) EACH SET IN 80MM DIA. PVC.

LP2 (TYPICAL TO LP3 & LP4) (FLUSH MOUNTED - NEMA 3R) MAIN: 150A/2000AF 2P, 250V, 10KAIC MCCB WITH SOLID GROUND BUS.									
CKT. NO.	OUTLETS L.O. C.O.	OTHER LOADS	VOLTS	VA LOAD	AMP LOAD	CIRCUIT BREAKER	AT	AF	P
1	10		230	3350	4.35	20	100	2	2
2	11		230	3350	4.35	20	100	2	2
3	12		230	3350	4.35	20	100	2	2
4	13		230	3350	4.35	20	100	2	2
5	14		230	3350	4.35	20	100	2	2
6	15		230	3350	4.35	20	100	2	2
7	16		230	3350	4.35	20	100	2	2
8	17		230	3350	4.35	20	100	2	2
9	18		230	3350	4.35	20	100	2	2
10	19		230	3350	4.35	20	100	2	2
11	20		230	3350	4.35	20	100	2	2
12	21		230	3350	4.35	20	100	2	2
13	22		230	3350	4.35	20	100	2	2
14	23		230	3350	4.35	20	100	2	2
15	24		230	3350	4.35	20	100	2	2
16	25		230	3350	4.35	20	100	2	2
17	26		230	3350	4.35	20	100	2	2
18	27		230	3350	4.35	20	100	2	2
19	28		230	3350	4.35	20	100	2	2
20	29		230	3350	4.35	20	100	2	2
TOTAL				34300	148.26				

FULL LOAD CURRENT AT 80% DEM. FACTOR:

$I_{FL} = (148.260 \text{ A}) \times 0.80 = 118.608 \text{ A}$

USE: 2-60MM2 THWN AND 1-30MM2 THWN (G) IN 50MM DIA. PVC.

LP1 (FLUSH MOUNTED - NEMA 3R) MAIN: 150A/2000AF 2P, 250V, 10KAIC MCCB WITH SOLID GROUND BUS.									
CKT. NO.	OUTLETS L.O. C.O.	OTHER LOADS	VOLTS	VA LOAD	AMP LOAD	CIRCUIT BREAKER	AT	AF	P
1	30		230	3350	4.35	20	100	2	2
2	31		230	3350	4.35	20	100	2	2
3	32		230	3350	4.35	20	100	2	2
4	33		230	3350	4.35	20	100	2	2
5	34		230	3350	4.35	20	100	2	2
6	35		230	3350	4.35	20	100	2	2
7	36		230	3350	4.35	20	100	2	2
8	37		230	3350	4.35	20	100	2	2
9	38		230	3350	4.35	20	100	2	2
10	39		230	3350	4.35	20	100	2	2
11	40		230	3350	4.35	20	100	2	2
12	41		230	3350	4.35	20	100	2	2
13	42		230	3350	4.35	20	100	2	2
14	43		230	3350	4.35	20	100	2	2
15	44		230	3350	4.35	20	100	2	2
16	45		230	3350	4.35	20	100	2	2
17	46		230	3350	4.35	20	100	2	2
18	47		230	3350	4.35	20	100	2	2
19	48		230	3350	4.35	20	100	2	2
20	49		230	3350	4.35	20	100	2	2
21	50		230	3350	4.35	20	100	2	2
TOTAL				34300	148.26				

FULL LOAD CURRENT AT 80% DEM. FACTOR:

$I_{FL} = (145.570 \text{ A}) \times 0.80 = 116.456 \text{ A}$

USE: 2-60MM2 THWN AND 1-30MM2 THWN (G) IN 50MM DIA. PVC.

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BULACAN AGRICULTURAL STATE COLLEGE	CIVIL ENGINEER	PROPOSED CONSTRUCTION OF SOLAR POWERED 4-STORY 20 CLASSROOMS ACADEMIC BLDG. PHASE 1	JOHN EDWARD Y. CRUZ, PhD DIRECTOR - PLANNING & DEVELOPMENT	GENERAL NOTES LEGEND POWER RISER DIAGRAM	MARK DATE	DESIGNED BY: CHECKED BY:	E-05
ADDRESS: PINAOD, SAN ILDEFONSO, BULACAN	PREP. NO.: FILE NO.: DATE ISSUED: BY:	LOCATION: BAY-Poblacion, San Ildefonso, Bulacan	JAMESON H. TAN, EdD. PRESIDENT				

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