

INSTALLATION OF AUTOMATIC GUIDE-WAY TRANSIT (AGT) IN BPSU MAIN CAMPUS

BATAAN PENINSULA STATE UNIVERSITY (MAIN CAMPUS), BALANGA CITY, BATAAN

STRUCTURAL ENGINEER

MASTER PLUMBER/SANITARY ENGINEER

PROFESSIONAL ELECTRICAL ENGINEER

PROFESSIONAL MECHANICAL ENGINEER

REVISION

NO. DESCRIPTION DATE

AR. ROXETTE S. UMEREZ

ARCHITECT 1, BPSU TWG

JASON ANTHONY BANZON

ENGR. ALFREDO D. VALENTOS

DR. EDMUNDO C. TUNGOL VICE PRESIDENT ADMIN. & FINANCE

DR. GREGORIO J. RODIS

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CKT NO.	LOAD DESCR	RIPTION	VA	VOLT	AMP	-	UIT BRE		SERVICE	GROUND	CONDUIT
02000 0000000	5.80090 4.3203000	970 WASH 761	0.000	2 5-45-35	8 Polices	AT	AF	P	WIRE, THHN	WIRE, THHN	MM, DIA
1	LIGHTING AND CONTROLS		1000	230	4.35	20	50	2	2-3.5sq.mm		
2	5 HP ACU FAN		5800	230	25.22	30	50	2	2-3.5sq.mm		
3	5 HP ACU COMPRESSOR		5800	230	25.22	30	50	2	2-3.5sq.mm		
4	SPARE		1000	230	4.35	20	50	2	2-3.5sq.mm		
	TOTAL		13600	230	59.13						
BUS RATING:		COMPUTATION:  It = (59.14) 100% DF + (25.22) 25% DF +  USE:  FEEDER SIZE: 2-22 sq.mm TH  MAIN BREAKER: 70 AT, 100 AF,	IHN	) V, 2₽					MAIN KAIC: BRANCH KAIC: CONNECTED LOAE DEMAND FACTOR BRAND: FABRICATOR:		

#### DCPP PANEL SCHEDULE

CKT NO.	LOAD DESCR	RIPTION	VA	VOLT	AMP	CIRC	JIT BRE	AKER	SERVICE WIRE, THHN	GROUND WIRE, THHN	CONDUIT MM, DIA
1	10 KW INVETER		10000	650	15.38	30	60	2	2-3.5sq.mm		
2	SPARE FOR INVERTER		5000	650	7.69	20	60	2	2-3.5sq.mm		
3	40HP INDUCTION MOTOR WITH VFD	CONTROL - FRONT BOGIE	45000	650	69.23	75	100	2	2-22.0sq.mm		
4	40HP INDUCTION MOTOR WITH VFD	CONTROL - REAR BOGIE	45000	650	69.23	75	100	2	2-22.0sq.mm		
	TOTAL		13600	650	161.54						
BUS RATING		COMPUTATION: It = (161.53) 100% DF + (69.23) 25% DF USE: FEEDER SIZE: 2-80 sq.mm TF IN 32mm/8 RS MAIN BREAKER: 200 AT, 200 AI INDUSTRIAL D	IHN C PER WIRE F, 15 KAIC, 65						MAIN KAIC: BRANCH KAIC: CONNECTED LOAD: DEMAND FACTOR: BRAND: FABRICATOR:	15KAIC 10KAIC 105000 VA 100 %	

### SERVICE LOAD SCHEDULE

							CIRC	UIT BRE	AKER	SERVICE WIRE.	GROUND	CONDUIT
CKT NO.	LOAD DESCR	RIPTION		VA	VOLT	AMP	AT	AF	Р	THHN	WIRE, THHN	MM, DIA
1	SPACE			-	460	-	-		-	-	-	-
2	300 KVA SPACE TRANSFORMER – REG	CTIFIER SETUP		287540	460	373.45	500	500	3	2X3-125sq.mm	2X1-30sq.mm	2x65
3	SPACE			-	460	-	-	-	-	-	-	-
4	10 KVA PP PANEL TRANSFORMER,T1			6732	450	14.63	30	40	2	2-8.0sq.mm	1-3.5sq.mm	20
	TOTAL			304272	450	388.06						
ENCLOSUE: MOUNTING: AMPERES: - BUS RATING:	FLUSHED MOUNTED  VOLTS: 460 V	MAIN BREAKER:	388.06 A 2X3-125 sq.mr IN 2X65mmø 500 AT, 500 A INDUSTRIALT	RMC F, 460 V, 3P	30 sq.mm <sup>*</sup>	ГНW				MAIN KAIC: BRANCH KAIC: CONNECTED LOAD: DEMAND FACTOR: BRAND: FABRICATOR:	304272 VA 100 % 	

# F-DCPP LOAD SCHEDULE

CKT NO	LOAD DESCE	RIPTION	VA	VOLT	AMP	CIRC	UIT BRE	AKER	SERVICE WIRE,	GROUND	CONDUIT
CKTNO	LOAD DESCR	AIFTION	VA	VOLI	AIVIP	AT	AF	Р	THHN	WIRE, THHN	MM, DIA
1	F-ACCP		1500	650	2.3	10	100	2	2x2.0sq.mm		20
2	60 HP THREE - PHASE INDUCTION M	OTOR - BOGIE 1	67500	650	105	160	250	2	2x50.0sq.mm	8	32
3	60 HP THREE - PHASE INDUCTION M	OTOR – BOGIE 2	67500	650	105	160	250	2	2x50.0sq.mm	*	32
4	10 HP THREE – PHASE INDUCTION M	OTOR - ACU	6732	650	19	40	100	2	2-5.5sq.mm	-	20
MOUNTING AMPERES: BUS RATIN	NEMA 1 CABINET ENCLOSURE  VOLTS: 650 VDC	COMPUTATION: It = [231.3] 100% DF = 231.3 A USE: FEEDER SIZE: 2-125 sq.mm 1 IN 50mmØ IM MAIN BREAKER: 400 AT, 400 A	C	50 VDC					MAIN KAIC: BRANCH KAIC: CONNECTED LOAD: DEMAND FACTOR: BRAND: FABRICATOR:	148770 VA 100 % 	

## F-ACPP LOAD SCHEDULE

CKT NO.	LOAD DESCI	PIDTION	VA	VOLT	AMP	CIRC	JIT BRE	AKER	SERVICE WIRE,	GROUND	CONDUIT
CKT NO.	LOAD DESCI	AIF HON	YA	VOLI	AIVIF	AT	AF	Р	THHN	WIRE, THHN	MM, DIA
1	MAIN CONTROLLER POWER + LIGHT	NG	1500	230	6.6	20	50	2	2x2.0sq.mm	-	20
2	SPARE		8	230		20	50	2	-		-
	VOLTS: 230 VAC	COMPUTATION: It = (6.5) 100% DF = 6.5 A USE: FEEDER SIZE: 2-3.5 sq.mm T IN 20mmØ IM MAIN BREAKER: 30 AT, 100 AF, INDUSTRIAL T	IC ,25 KAIC, 230	) V, 2P					MAIN KAIC: BRANCH KAIC: CONNECTED LOAD: DEMAND FACTOR: BRAND: FABRICATOR:	1500 VA	

## R-ACPP LOAD SCHEDULE

CKT NO.	LOAD DESCE	IDTION	VA	VOLT	AMP	CIRCI	JIT BRE	AKER	SERVICE WIRE,	GROUND	CONDUIT
Citi No.	LOAD DESCI	ar IION		VOLI	AWI	AT	AF	P	THHN	WIRE, THHN	MM, DIA
1	MAIN CONTROLLER POWER + LIGHTI	NG	1500	230	6.6	20	50	2	2x2.0sq.mm	-	20
2	SPARE		-	230	-	20	50	2	-	-	-
400-1400-1400-1400-1400-1	VOLTS: <u>230 VAC</u>	COMPUTATION: IT = (6.5) 100% DF = 6.5 A USE: FEEDER SIZE: 2-3.5 sq.mm T IN 20mm@ IN MAIN BREAKER: 30 AT, 100 AF INDUSTRIAL T	C ,25 KAIC, 230	V, 2P					MAIN KAIC: BRANCH KAIC: CONNECTED LOAD: DEMAND FACTOR: BRAND: FABRICATOR:	1500 VA	

#### PP PANEL LOAD SCHEDULE

CKT NO.	LOAD DESCR	URTION	VA	VOLT	AMP	CIRC	UIT BRI	EAKER	SERVICE WIRE,	GROUND	CONDUIT
CKI NO.	LUAD DESCR	IPTION	VA	VOLI	AIVIP	AT	AF	Р	THHN	WIRE, THHN	MM, DIA
1	LIGHTIG		1512	230	6.57	15	50	2	2-3.5 sq.mm	1-3.5 sq.mm	20
2	SPLIT TYPE AIR CONDITIONER 1, 2HP	(ACCU1)	2760	230	12	30	50	2	2-5.5 sq.mm	1-3.5 sq.mm	20
3	4 - CONVENIENCE OUTLET + 1 EXHAL	JST FAN (FCU2)	1620	230	7.04	20	50	2	2-3.5 sq.mm	1-3.5 sq.mm	20
4	SPARE			230	H	30	50	2			-
5	SPARE		Ξ.	230	H	20	50	2			-
6	SPARE		н	230	H	20	50	2			=
	TOTAL		5892	230	19.4						
ENCLOSUE: MOUNTING: AMPERES: - BUS RATING:	POWER ROOM NEMA 1 FLUSHED MOUNTED VOLTS: 230 V - UXILIARY TRANSFORMER	COMPUTATION: It = (19.4) 100% DF = 19.4 USE: FEEDER SIZE: 2-8.0 sq.mm 1 IN 20mm 8R MAIN BREAKER: 40 AT, 100 AF INDUSTRIAL 1	ис , 230 V, 2P	sq.mm TH!	₩N				MAIN KAIC: BRANCH KAIC: CONNECTED LOAD: DEMAND FACTOR: BRAND: FABRICATOR:	5892 VA 100 %	

#### R-DCPP LOAD SCHEDULE

CKT NO.	LOAD DESCR	IDTION	VA	VOLT	AMP	CIRC	JIT BRE	AKER	SERVICE WIRE,	GROUND	CONDUIT
CKI NO.	EGAD DESCR	IF I ION	VA	VOLI	AIVIE	AT	AF	P	THHN	WIRE, THHN	MM, DIA
1	R-ACCP		1500	650	2.3	10	100	2	2x2.0sq.mm	-	20
2	60 HP THREE - PHASE INDUCTION MO	OTOR – BOGIE 1	67500	650	105	160	250	2	2x50.0sq.mm	-	32
3	60 HP THREE - PHASE INDUCTION MO	OTOR – BOGIE 2	67500	650	105	160	250	2	2x50.0sq.mm	-	32
4	10 HP THREE - PHASE INDUCTION M	OTOR - ACU	6732	650	19	40	100	2	2-5.5sq.mm	-	20
	VOLTS: 650 VDC	COMPUTATION: II = (231.3) 100% DF = 231.3 A USE: FEEDER SIZE: 2-125 sq.mm T IN 50mmØ IM MAIN BREAKER: 400 AT, 400 AI	С	50 VDC					MAIN KAIC: BRANCH KAIC; CONNECTED LOAD; DEMAND FACTOR: BRAND; FABRICATOR:	148770 YA 100 %	





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JASON ANTHONY BANZON

CAMPUS DIRECTOR

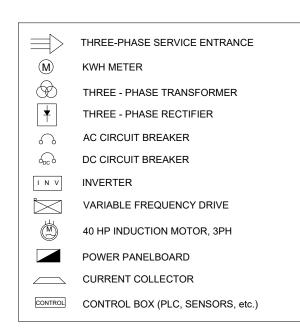
ENGR. ALFREDO D. VALENTOS

DIRECTOR OF PPES

DR. EDMUNDO C. TUNGOL VICE PRESIDENT ADMIN. & FINANCE

DR. GREGORIO J. RODIS

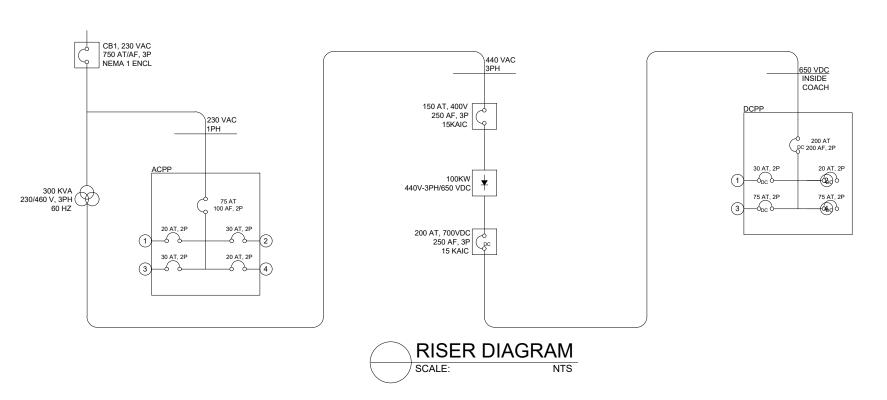
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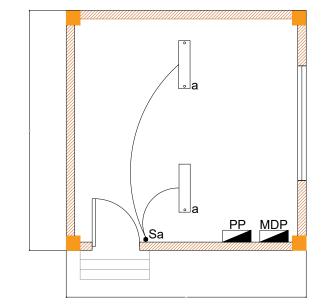


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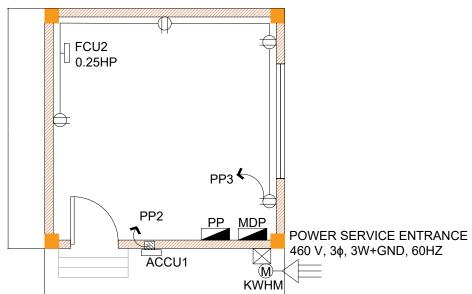
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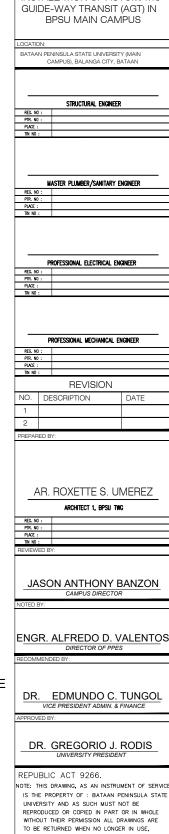












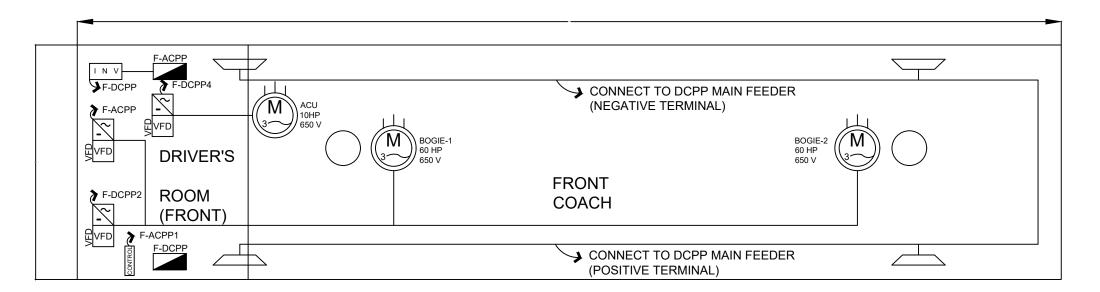
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INSTALLATION OF AUTOMATIC

BATAAN PENINSULA STATE UNIVERSITY
TECHNICAL WORKING GROUP FOR INFRASTRUCTURE
OAPTOL COMPOUND, BROY, TENEUERO, CITY OF BANNAA, BATAN,

#### NOTE: REAR COACH IS A MIRROR IMAGE OF FRONT COACH









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## ACPP PANEL SCHEDULE

CKT NO.	LOAD DESCRIPTION		VA	VOLT	AMP	CIRC	UIT BRI	AKER	SERVICE	GROUND	CONDUIT
CKI NO.	LOAD DESCI	UFITON	1/1	VOLI	LIVIE	AT	AF	P	WIRE, THHN	WIRE, THHN	MM, DIA
1	LIGHTING AND CONTROLS		1000	230	4.35	20	50	2	2-3.5sq.mm		
2	5 HP ACU FAN		5800	230	25.22	30	50	2	2-3.5sq.mm		
3	5 HP ACU COMPRESSOR		5800	230	25.22	30	50	2	2-3.5sq.mm		
4	SPARE		1000	230	4.35	20	50	2	2-3.5sq.mm		
	TOTAL		13600	230	59.13						
BUS RATING:		COMPUTATION: IT = (59.14) 100% DF + (25.22) 25% DF: USE: FEEDER SIZE: 2-22 sq.mm Th. MAIN SPEAKED: 70.17.100 AE	HN	N 20					MAIN KAIC: BRANCH KAIC: CONNECTED LOAE DEMAND FACTOR BRAND: FABRICATOR:		

#### DCPP PANEL SCHEDULE

CKT NO.	LOAD DESCRIPTION		VA	VOLT	AMP	CIRC	OLIBRI	EAKEK	SERVICE WIRE,	GROUND	CONDO
CKT NO.	LOAD DESCR	RIPTION	VA	VOLI	AIVIP	AT	AF	Р	THHN	WIRE, THHN	MM, DIA
1	10 KW INVETER		10000	550	15.38	30	60	2	2-3.5sq.mm		
2	SPARE FOR INVERTER		5000	650	7.69	20	60	2	2-3.5sq.mm		
3	40HP INDUCTION MOTOR WITH VFD	CONTROL – FRONT BOGIE	45000	550	69.23	75	100	2	2-22.0sq.mm		
4	40HP INDUCTION MOTOR WITH VFD	CONTROL - REAR BOGIE	45000	650	69.23	75	100	2	2-22.0sq.mm		
	TOTAL		13600	650	161.54						
LOCATION: _ ENCLOSUE: _ MOUNTING: AMPERES: _ BUS RATING: FED FROM: T		IN 32m MAIN BREAKER: 200 AT,	25% DF = 178.85 A mm THHN mØ RSC PER WIRE 200 AF, 15 KAIC, 6 RIAI DC TYPF (200	,					MAIN KAIC: BRANCH KAIC: CONNECTED LOAD: DEMAND FACTOR: BRAND: FABRICATOR:	15KAIC 10KAIC 105000 VA 100 %	



INSTALLATION OF AUTOMATIC GUIDE-WAY TRANSIT (AGT) IN BPSU MAIN CAMPUS BATAAN PENINSULA STATE UNIVERSITY (MAIN CAMPUS), BALANGA CITY, BATAAN STRUCTURAL ENGINEER MASTER PLUMBER/SANITARY ENGINEER PROFESSIONAL ELECTRICAL ENGINEER PROFESSIONAL MECHANICAL ENGINEER REVISION NO. DESCRIPTION DATE

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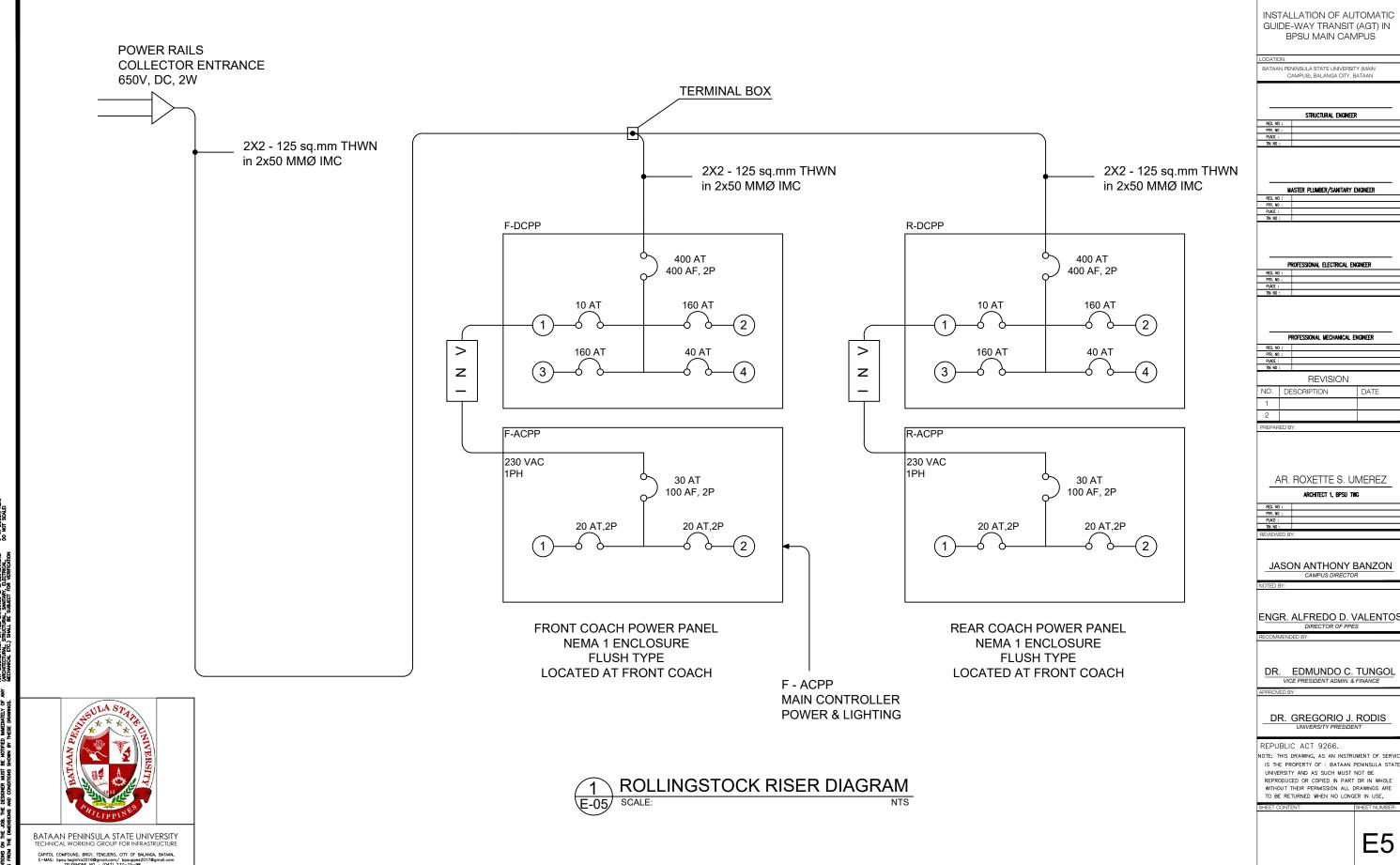
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UNIVERSITY PRESIDENT

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DOUBT, ASKI

ICY ON ALL DRAWINGS & SPECIFICATIONS LESTRUCTURAL, SANITARY, ELECTRICAL, C.) SHALL BE SUBJECT FOR VERHOATION

SHALL HAVE PRECEDENCE OVER SCALED AND BE RESPONSIBLE FOR ALL DIMENSIONS

: N DIMENSIONS ON THESE DRAWINGS SHALL HAN SIONS, CONTRACTORS SHALL VERIFY AND BE RE 2.WIRING METHOD SHALL BE AS FOLLOWS:

a.	. MAIN SERVICE ENTRANCE	RIGID STEEL CONDUIT (PVC)
	. RACEWAYS FOR POWER	,
c.	RACEWAYS FOR LIGHTING	POLYVNYL CHLORIDE (PVC)
d	RACEWAYS FOR AUXILIARY SYSTEM	POLYVNYL CHLORIDE (PVC)

- 3. MINIMUM SIZE OF WIRE AND CONDUIT SHALL BE 3.5 mm  $^2$  THHN AND 15MM ( $^4_2$ ") NOMINAL DIA. RESPECTIVELY. UNLESS OTHERWISE SPECIFIED ON PLANS.
- 4. NO BRANCH CIRCUIT WIRING IN LIGHTING AND POWER SHALL HAVE A LOAD MORE THAN 8-% OF ITS
- 5. LIGHT CONTROL SWITCHES SHALL BE RATED 16 AMPERES 230 Vac.
- 6. UNLESS OTHERWISE SPECIFIED PULLBOXES OR JUNCTION BOXES SHALL BE PROVIDED WHENEVER REQUIRED AND NECESSARY, ALTHOUGH SUCH BOXES ARE NOT INDICATED ON PLANS.
- 7. FOR EACH SPARE CIRCUIT PANELBOARD, PROVIDE AN EMPTY CONDUIT 20 MM  $\binom{3}{4}$ ") DIA. TERMINATING TO A COVERED SQUARED BOX.
- 8. ALL MATERIALS AND EQUIPMENT TO BE USED SHALL BE BRAND NEW AND OF APPROVED TYPE FOR BOTH LOCATION AND PURPOSES
- 9. ALL METAL FRAMES SHALL BE PROPERLY AND ADEQUATELY GROUNDED. GROUND WIRE SHALL BE PROVIDED ON ALL EQUIPMENT FEEDER.
- 10. MOUNTING HEIGHTS SHALL BE AS FOLLOWS:

a. LIGHT SWITHCES		1.40m ABOVE FLOOR FINISH (A.F.F)
b. RECEPTACLES		0.30m A.F.F.
c. TELEPHONE OUTLETS		0.30m A.F.F.
d. PANELBOARDS		1.80m A.F.F.
ALL MOUNT HEIGHTS ARE SUBJECT	FOR ARCHITECTURAL APP	PROVAL PRIOR TO
INSTALLATION INCLUDING THE LOC	ATIONS OF ALL ELECTRICA	L FIXTURES.\

- 11. THERE SHALL BE ONLY ONE POWER SUPPLY TO THE PROPOSED POWER ROOM UNIT SERVICE LINE SHALL BE 460 Volts, THREE PHASE, 60 HZ.
- 12. ALL 30 AMPERES CIRCUIT HOMERUN TO PANELBOARDS MORE THAN 30 METERS IN LENGTH SHALL BE  $5.5 \text{mm}^2$  THHN (#10 AWG), UNLESS OTHERWISE SPECIFIED ON PLANS.
- 13. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE PROPER IDENTIFICATION AND LABELING OF ALL CIRCUIT BREAKER, EACH PANEL WILL BE PROVIDED WITH A TYPE WRITTEN CIRCUIT DIRECTORY.
- 14. THE DRAWING AND SPECIFICATIONS ARE INTENDED TO PRESENT A GENERAL LAYOUT AND BROAD OUTLINE AND DESCRIPTION OF THE PROJECT AND NOT NECESSARY INDICATED, DESCRIBED ACTUAL LOCATION LEVELS AND DISTANCES OF EQUIPMENT, THE CONTRACTOR IS HEREBY REQUIRED TO MAKE ADJUSTMENT AT THE JOBSITE AS LOCATIONS, LEVELS AND DISTANCES ARE GOVERNED BY ACTUAL FIELD CONDITIONS.
- 15. NO REVISION IN THE DESIGN SHALL BE DONE WITHOUT THE PRIOR KNOWLEDGE AND APPROVAL OF THE DESIGNED AND THE OWNER, ANY SUCH REVISION DONE WITHOUT THE APPROVAL SHALL CAUSE RESPONSIBILITY OF THE DESIGNER TO CEASED AS A WHOLE.
- 16. ALL WEATHER EXPOSED INSTALLATION USE WEATHERPROOF TYPE MATERIALS, ESPECIALLY WEATHERPROOF CONVENIENCE OUTLET, CAST-BOXES, AND JUNCTION BOXES.
- 17. PROVIDE SUFFICIENT FLEXIBLE METALLIC CONDUIT FROM JUNCTION BOX TO LIGHTING BOX TO LIGHTING AND AUXILIARY FEATURES. MICA TUBING CAN BE USED EXCEPT LIMIT IT TO 150mm LENGTH ONLY.

- 18. PROVIDE APPROVED TYPE HANGERS AND SUPPORTS WITH ANTI-CORROSION PAINT FOR CONDUITS.
- 19. ALL WIRES SHALL BE CODED: L1 BLACK, L2 RED, L3 YELLOW, GROUNDED GREEN, CONTROL WIRE BLUE OR AS REQUIRED BY THE BUILDING ADMINISTRATION.
- 20. PROVIDE WIRE NUT AT ALL SPLICING EXCEPT USE SOLDERLESS CONNECTOR FOR 8.0 sq.mm WIRE SIZE OR LARGER.
- 21. CONDUCT INSULATION RESISTANCE TEST PRIOR FOR TERMINATION OF DEVICES AS WELL AS OTHER NECESSARY FLECTRICAL TESTING STANDARDS
- 22. CONTRACTOR SHALL SUBMIT TWO (2) SETS OF AS-BUILT PLANS TO THE OWNER AND IT MUST BE SIGNED AND SEALED BY THEIR RESPECTIVE DULY LICENSED ELECTRICAL ENGINEER REQUIRED BY THE ELECTRICAL ENGINEERING LAW
- 23. ALL ELECTRICAL WORKS SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER.



36W TUBULAR FLUORESCENT LAMP (FL)

Sa

23W COMPACT FLUORESCENT OUTDOOR LAMP (OL)
SWITCH ONE GANG, TOSHIBA OR PANASONIC BRAND

SWITCH TWO GANG, TOSHIBA OR PANASONIC BRAND

DUPLEX CONVENIENCE OUTLET, GROUNDING TYPE TOSHIBA OR PANASONIC BRAND

DUPLEX CONVENIENCE OUTLET, G

DUPLEX CONVENIENCE OUTLET, GROUNDING TYPE WEATHER PROOF, TOSHIBA OR PANASONIC BRAND

(M) KWHR SERVICE METER

ACU AIR-COOLED CONDENSING UNIT

FCU FAN COIL UNIT

LIGHTING CIRCUIT RUN

C.O CIRCUIT RUN

AUXILIARY CIRCUIT RUN

CKT. NO CIRCUIT HOMERUN TO PANEL

CIRCL

CIRCUIT BREAKER, BOLT - ON TYPE

CIRCUIT BREAKER, BOLT - ON TYPE NEMA 3R ENCLOSURE









PROJECT TITLE:

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OCATION:

BATAAN PENINSULA STATE UNIVERSITY (MAIN CAMPUS), BALANGA CITY, BATAAN

STRUCTURAL ENGNEER

RES. NO:

PR. NO:

PR.

PROFESSIONAL MECHANICAL ENGINEER

PROFESSIONAL MECHANICAL ENGINEER

PRES. NO:
PROFE SIONAL MECHANICAL ENGINEER

RES. NO:
PROFE SIONAL MECHANICAL ENGINEER

REVISION

NO. DESCRIPTION DATE

1
2
PREPARED BY:

AR. ROXETTE S. UMEREZ

ARCHITECT 1. BPSU TWG

ARCHITECT 1, BPSU TW

PER. NO:
PLUCE:
TIN NO:
REVIEWED BY:

JASON ANTHONY BANZON

NOTED BY:

ENGR. ALFREDO D. VALENTOS

RECOMMENDED B

DR. EDMUNDO C. TUNGOL

VICE PRESIDENT ADMIN. & FINANCE

APPROVED

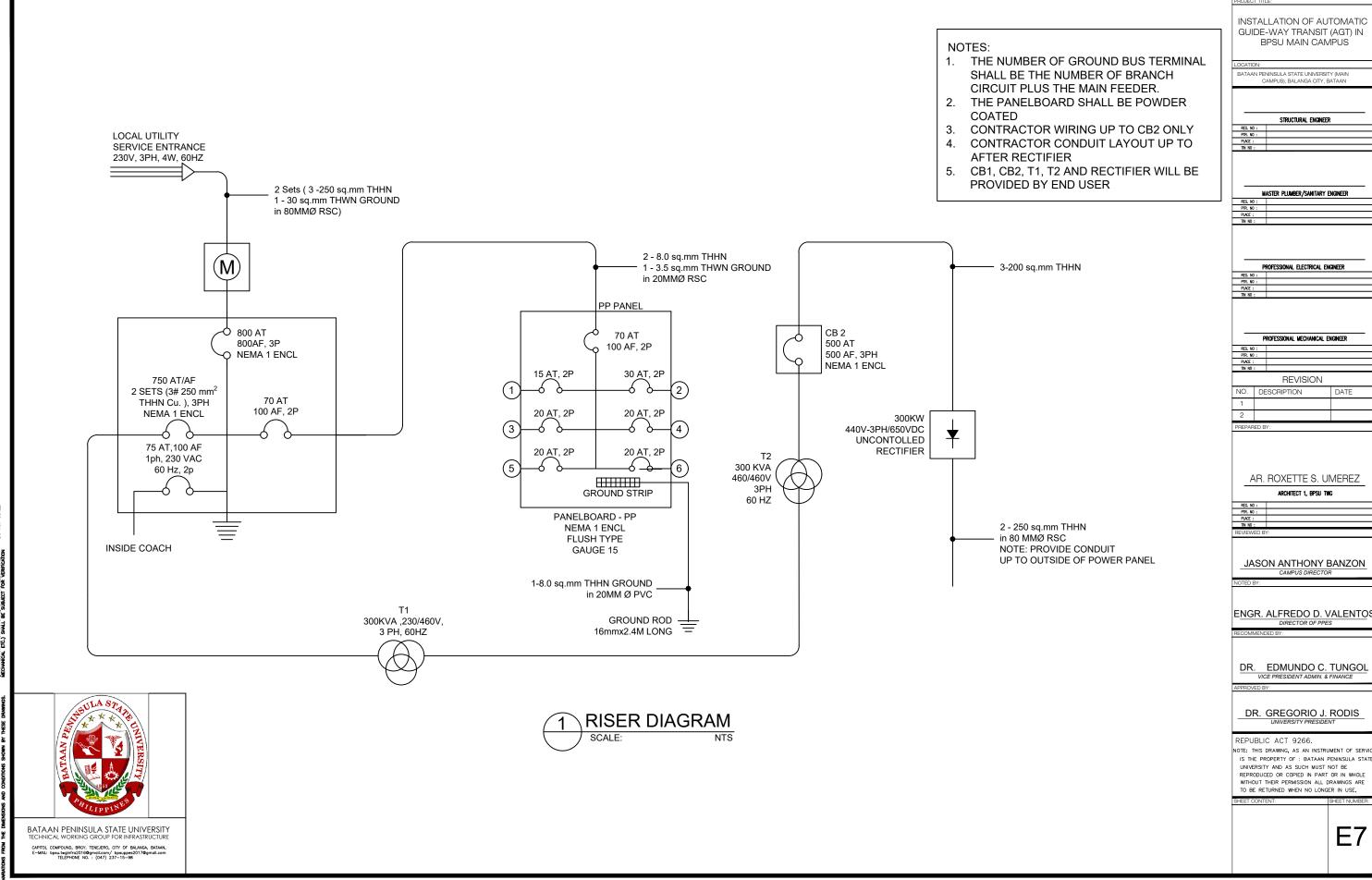
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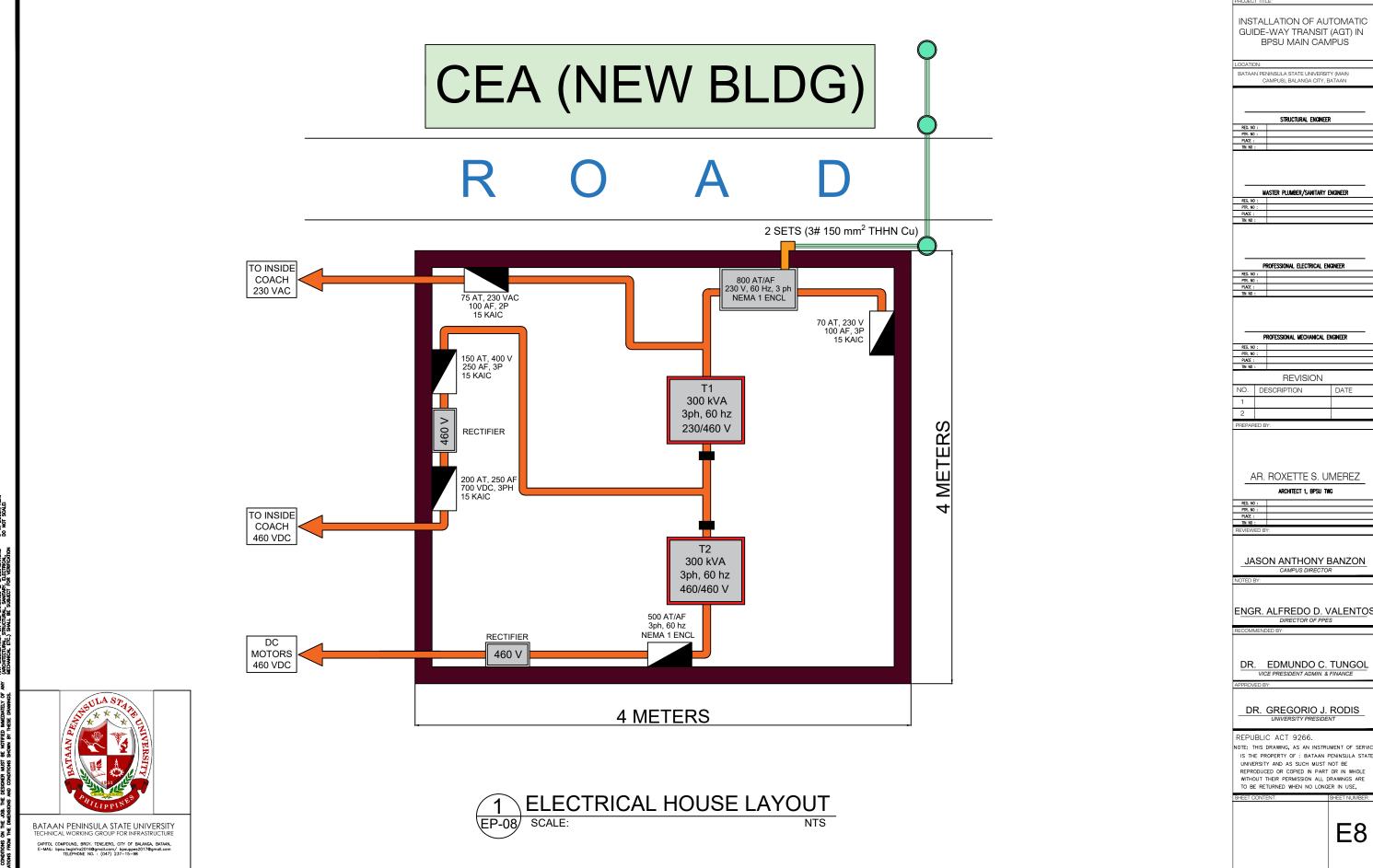
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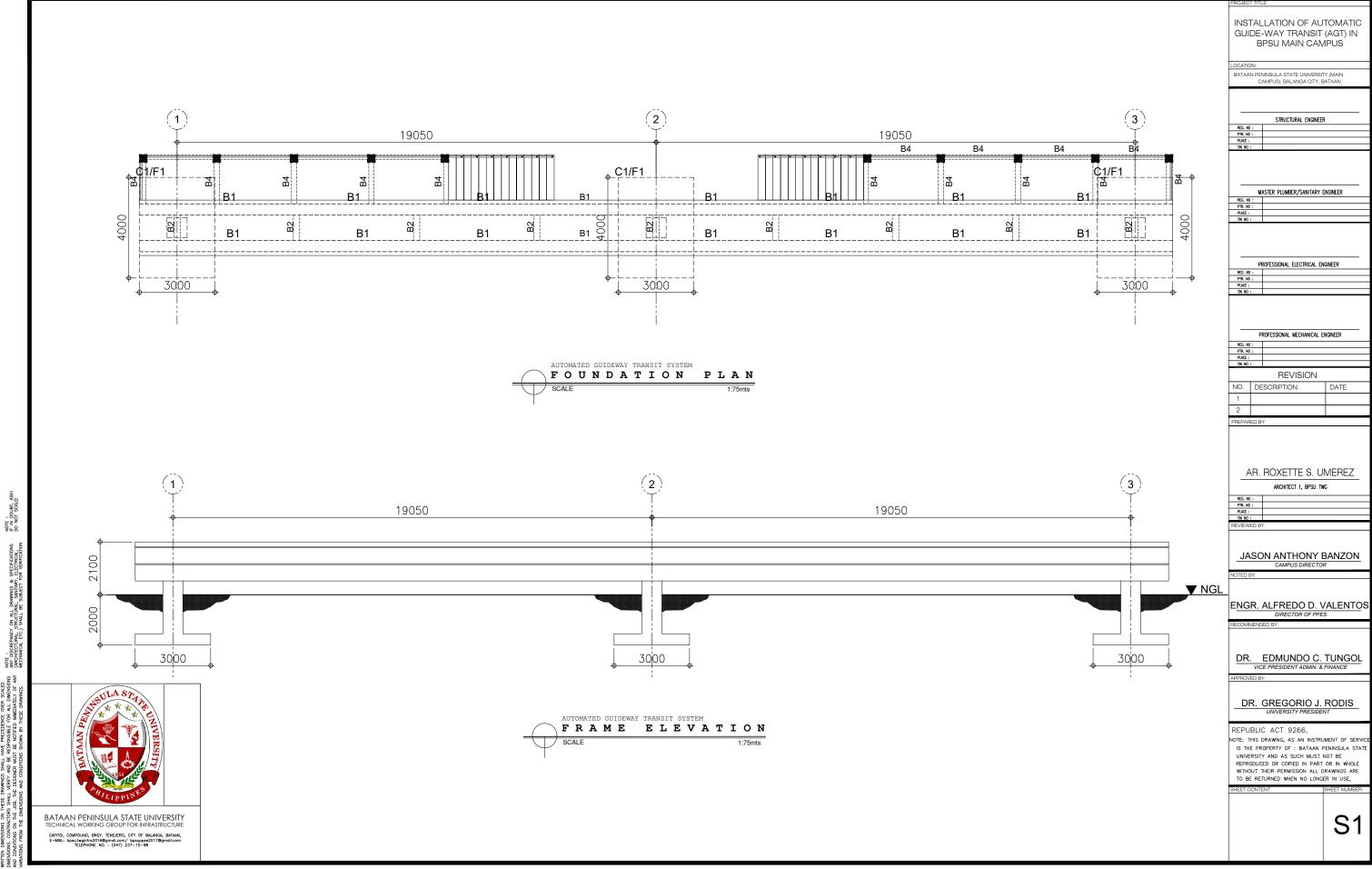
REPUBLIC ACT 926

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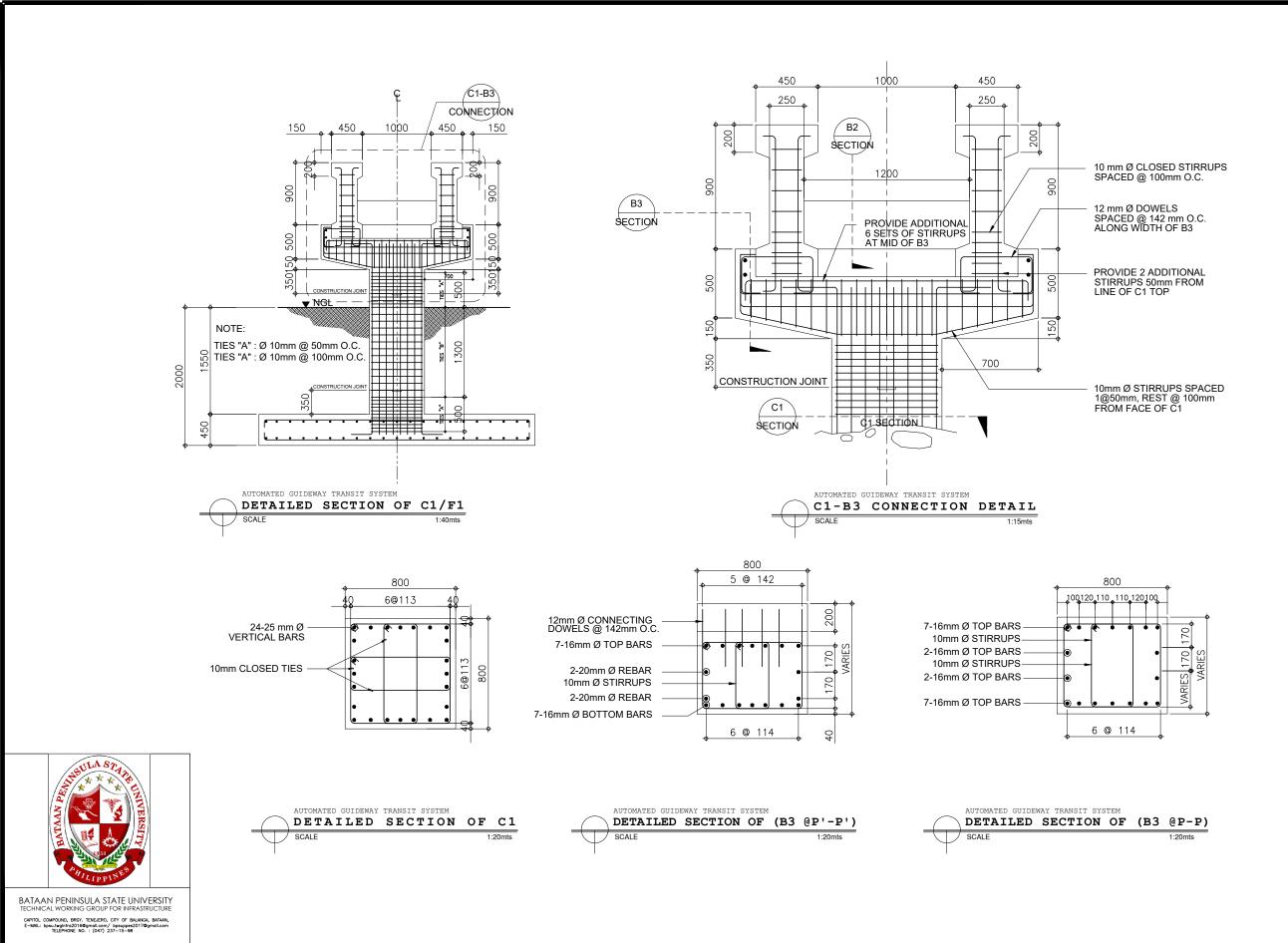












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JASON ANTHONY BANZON

NOTED BY:

ENGR. ALFREDO D. VALENTOS

RECOMMENDED B

DR. EDMUNDO C. TUNGOL

APPROVED E

DR. GREGORIO J. RODIS

UNIVERSITY PRESIDENT

REPUBLIC ACT 9266.

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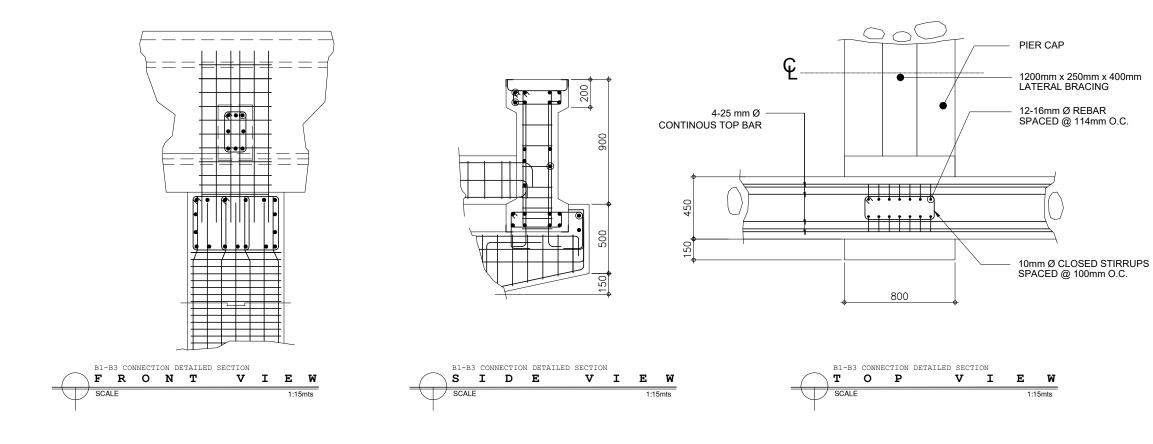
**S**2

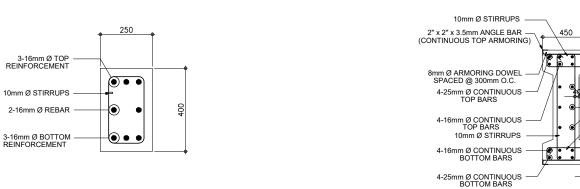
















2-16mm Ø CONTINUOUS

2" x 2" x 3.5mm ANGLE BAR (BOTTOM ARMORING) CUT EVERY CLEAR SPAN

10mm Ø STIRRUPS

INSTALLATION OF AUTOMATIC GUIDE-WAY TRANSIT (AGT) IN BPSU MAIN CAMPUS BATAAN PENINSULA STATE UNIVERSITY (MAIN CAMPUS), BALANGA CITY, BATAAN STRUCTURAL ENGINEER MASTER PLUMBER/SANITARY ENGINEER PROFESSIONAL ELECTRICAL ENGINEER PROFESSIONAL MECHANICAL ENGINEER REVISION NO. DESCRIPTION DATE AR. ROXETTE S. UMEREZ ARCHITECT 1, BPSU TWG JASON ANTHONY BANZON ENGR. ALFREDO D. VALENTOS

DR. EDMUNDO C. TUNGOL

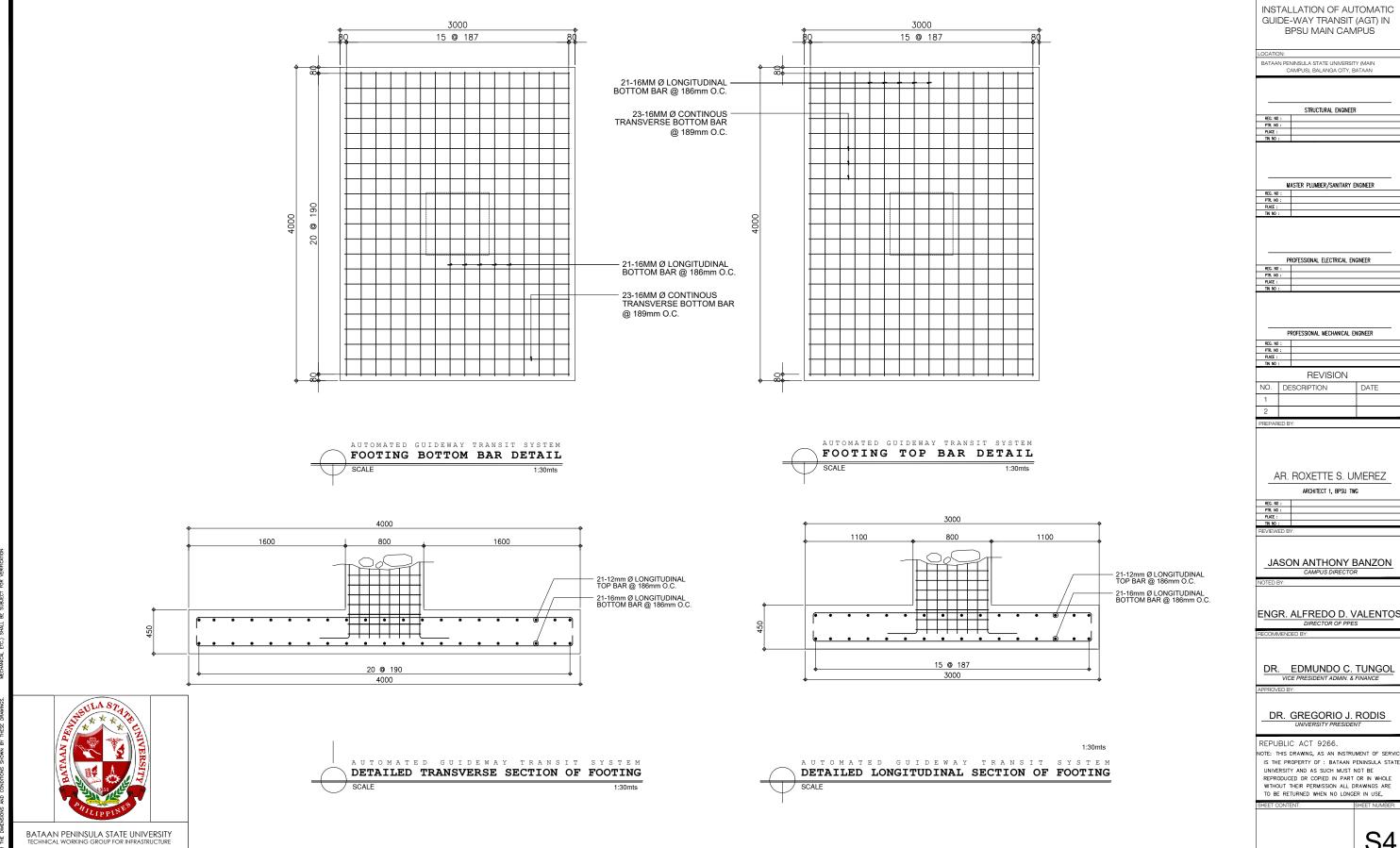
DR. GREGORIO J. RODIS

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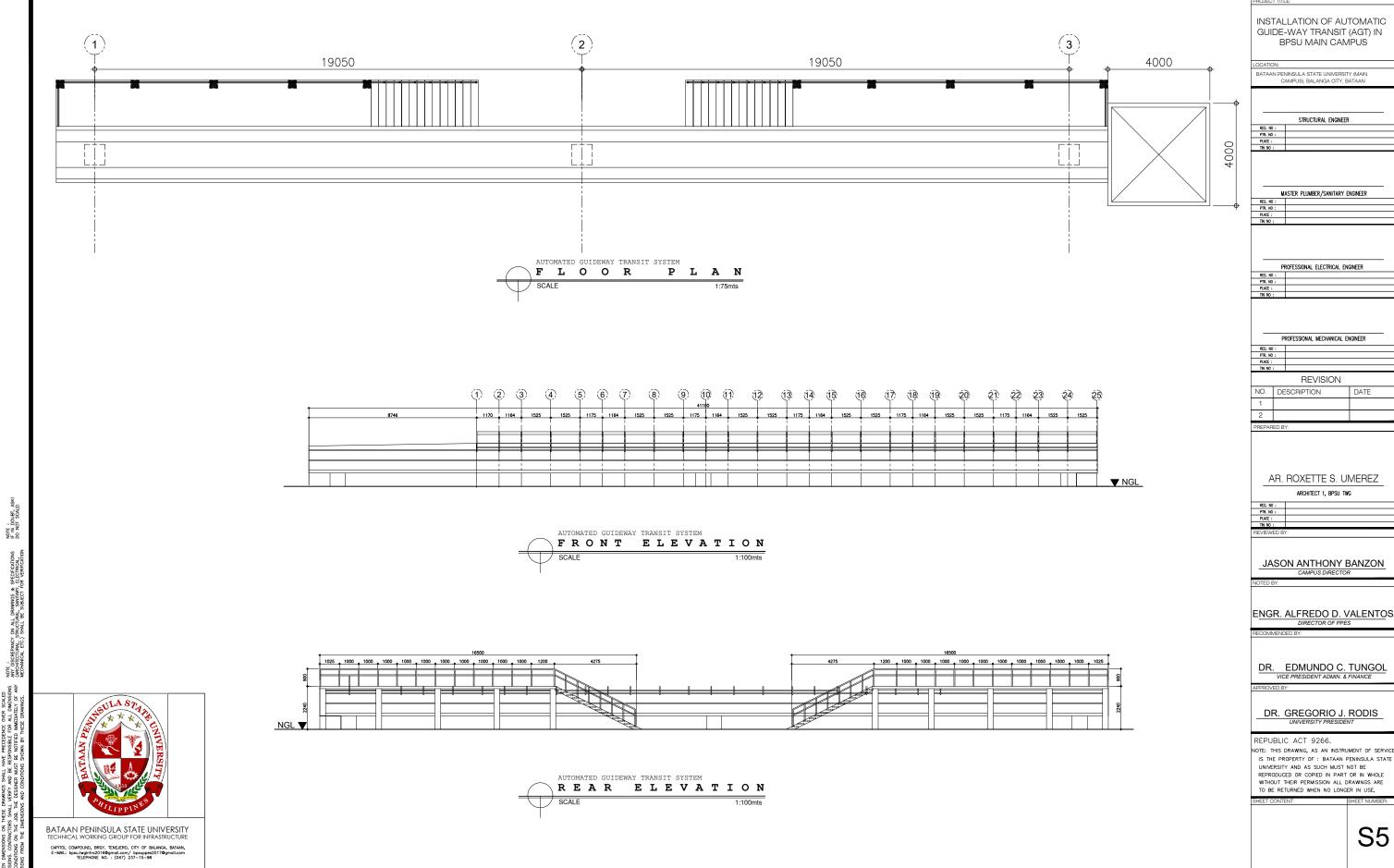
**S**3



NOTE :
ANY DISCREPANCY
(ARCHITECTURAL, S

**S4** 

DATE







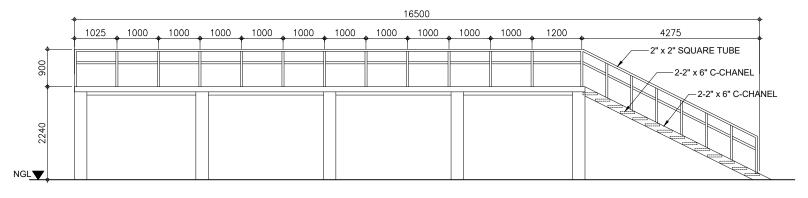
2"x6" TUBULAR BAR

AUTOMATED GUIDEWAY TRANSIT SYSTEM

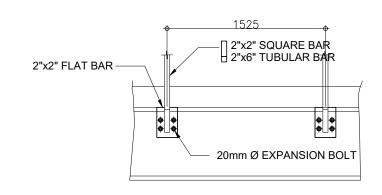
CONNECTION DETAIL OF TUBULAR BAR

2"x2" SQUARE BAR 2"x2" FLAT BAR

20mm Ø EXPANSION BOLT







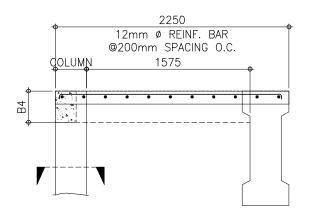




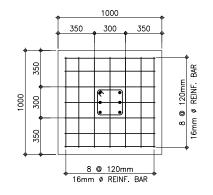
6-16mm REINF. BAR 5 @ 50mm SPACING 5 @ 100mm SPACING

REST @ 200mm SPACING

300







FO	OTI	NG DE	TAIL
SCALE			1:20 mts

INSTALLATION OF AUTOMATIC GUIDE-WAY TRANSIT (AGT) IN

BPSU MAIN CAMPUS

BATAAN PENINSULA STATE UNIVERSITY (MAIN CAMPUS), BALANGA CITY, BATAAN

STRUCTURAL ENGINEER

MASTER PLUMBER/SANITARY ENGINEER

PROFESSIONAL ELECTRICAL ENGINEER

PROFESSIONAL MECHANICAL ENGINEER

REVISION

NO. DESCRIPTION DATE

AR. ROXETTE S. UMEREZ

ARCHITECT 1, BPSU TWG

JASON ANTHONY BANZON

ENGR. ALFREDO D. VALENTOS

DR. EDMUNDO C. TUNGOL

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**S6**