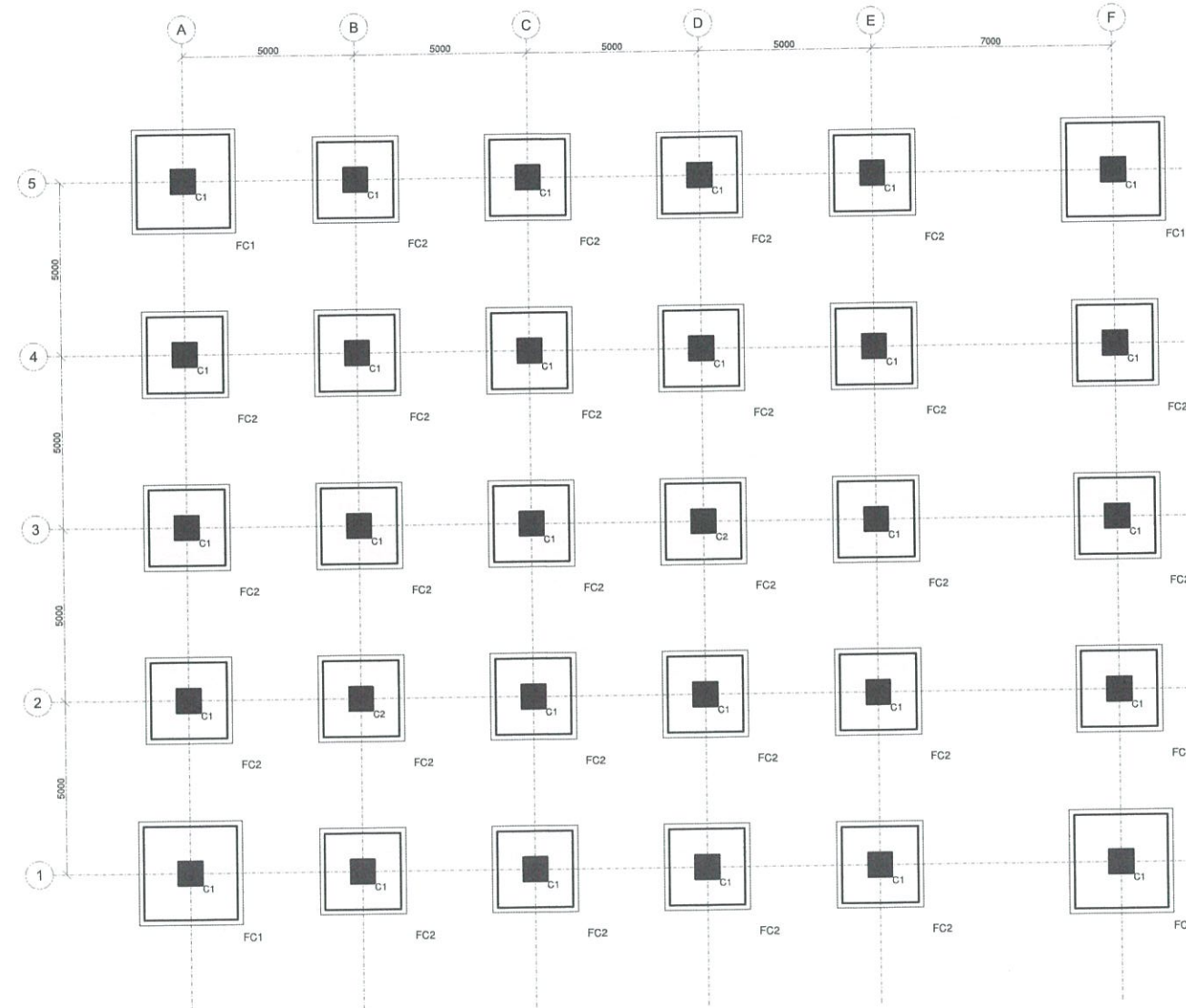




FOUNDATION PLAN
 SCALE: 1:200 MTS

**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**

PROJECT OWNER:



**TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**

MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City

PROJECT TITLE:

**PROPOSED TESDA RTC BATANGAS
INNOVATION CENTER**

LOCATION: P. HERRERA, ST., POBLACION 8006 BATANGAS CITY

CIVIL ENGINEER:

ENGR. ENRIQUE G. DELA TORRE
 PMU-SIPTVETS
 ENGINEERING SECTION

PROJECT MANAGER:

DIR. ENRICO C. BANARIO
 PMU-SIPTVETS

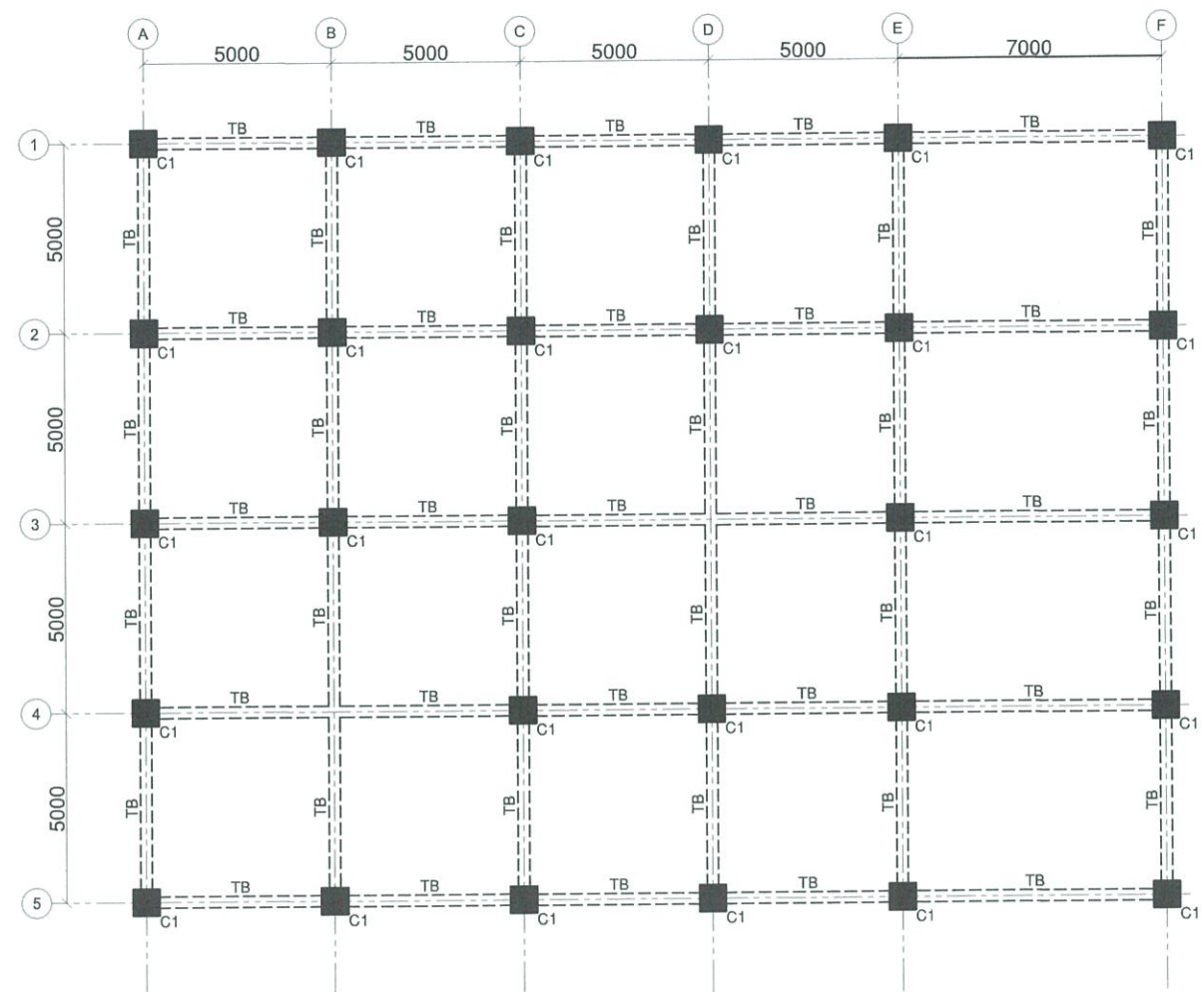
PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
 PMU-SIPTVETS
 SECRETARY, TESDA

SHEET CONTENTS:
FOOTING SCHEDULE

SHEET NO.

S-8




GROUND FLOOR FRAMING PLAN
 SCALE: 1:200 MTS

**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**

PROJECT OWNER:

**TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City

PROJECT TITLE:
**PROPOSED TESDA RTC BATANGAS
INNOVATION CENTER**
LOCATION: P. HERERA, ST., POBLACION 0006 BATANGAS CITY

CIVIL ENGINEER:

ENGR. ENRIQUE G. DELA TORRE
 PMU-SIPTVETS
 ENGINEERING SECTION

PROJECT MANAGER:

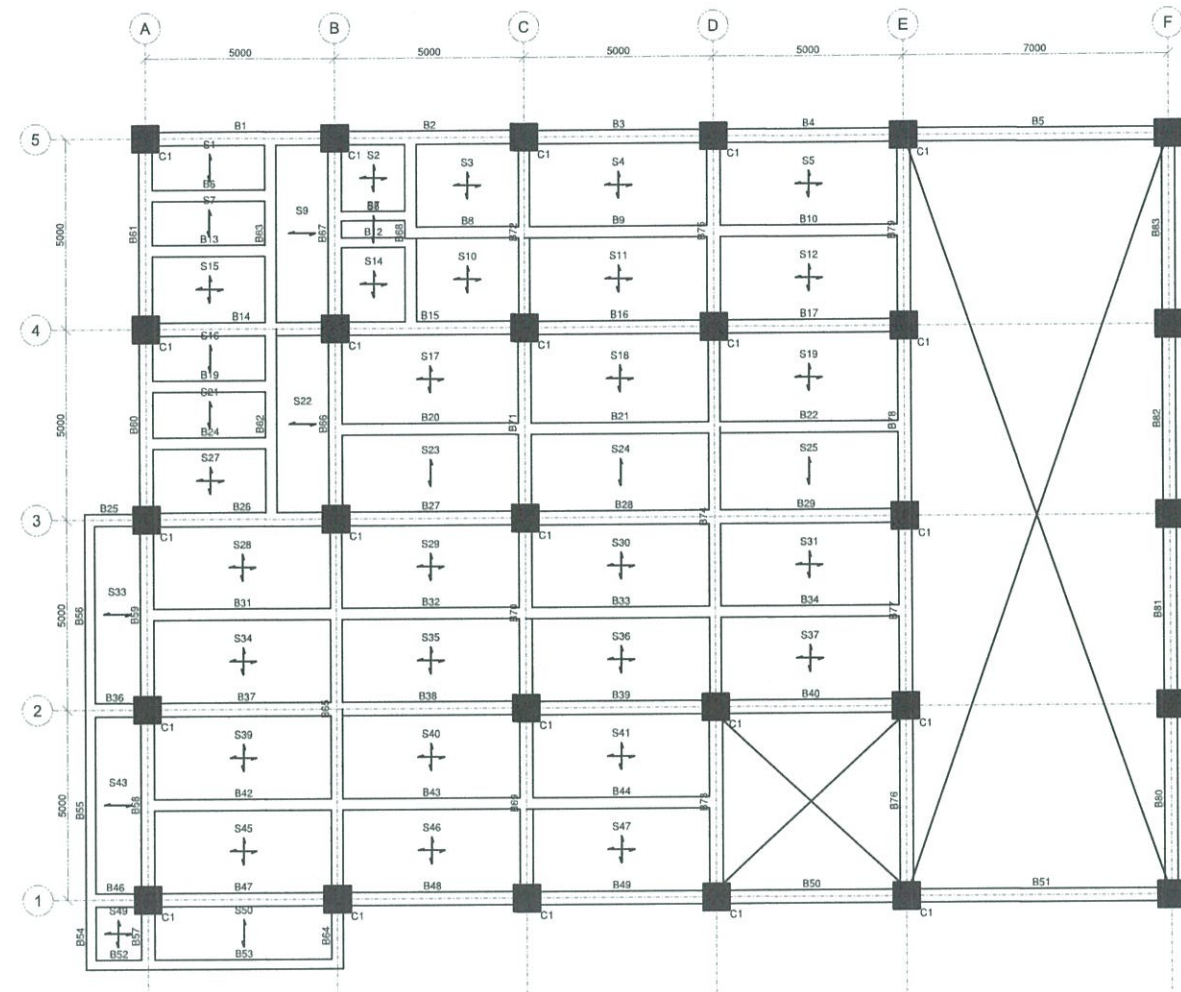
DIR. ENRIQUE C. BANARDO
 PMU-SIPTVETS

PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
 PMU-SIPTVETS
 SECRETARY, TESDA

SHEET CONTENTS:
 GROUND FLOOR FRAMING PLAN

SHEET NO.
S-9



SECOND FLOOR FRAMING PLAN
SCALE: 1:200 MTS

FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

PROJECT OWNER:



TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY

MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City

PROJECT TITLE:

PROPOSED TESDA RTC BATANGAS
INNOVATION CENTER

LOCATION: P. HERERA, ST., POBLACION 0098 BATANGAS CITY

CIVIL ENGINEER:

[Signature]
ENGR. ENRIQUE G. DELA TORRE
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

[Signature]
DIR. ENRICO G. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

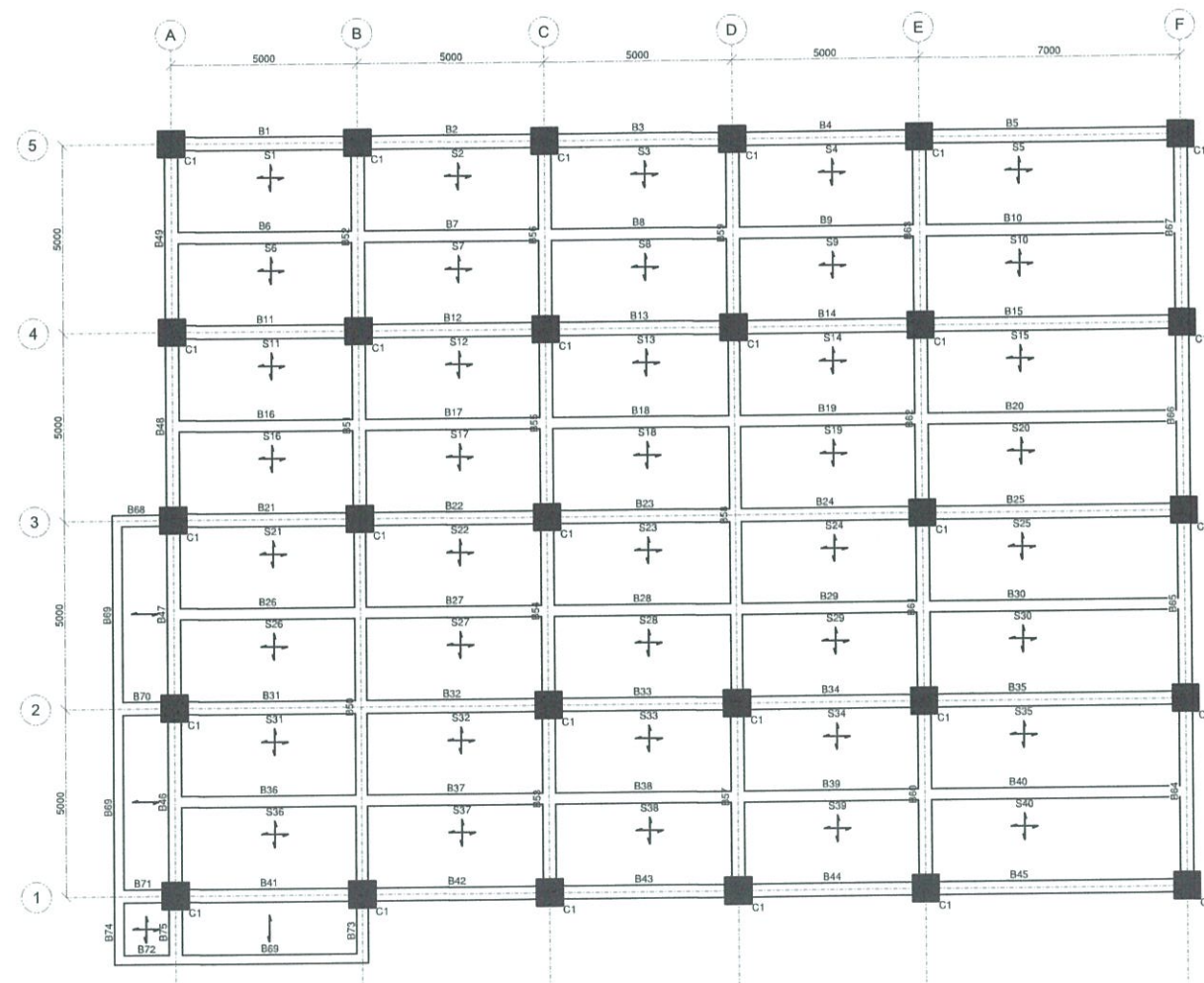
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SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

SHEET CONTENTS:

SECOND FLOOR FRAMING PLAN

SHEET NO.

S-10



ROOF DECK FLOOR FRAMING PLAN
SCALE: 1:200 MTS

FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

PROJECT OWNER:
 TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City

PROJECT TITLE:
PROPOSED TESDA RTC BATANGAS
INNOVATION CENTER
LOCATION: P. HERERA, ST., POBLACION 6008 BATANGAS CITY

CIVIL ENGINEER:

ENGR. ENRIQUE G. DELA TORRE
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

DIR. ENRIQUE C. BANARIO
PMU-SIPTVETS

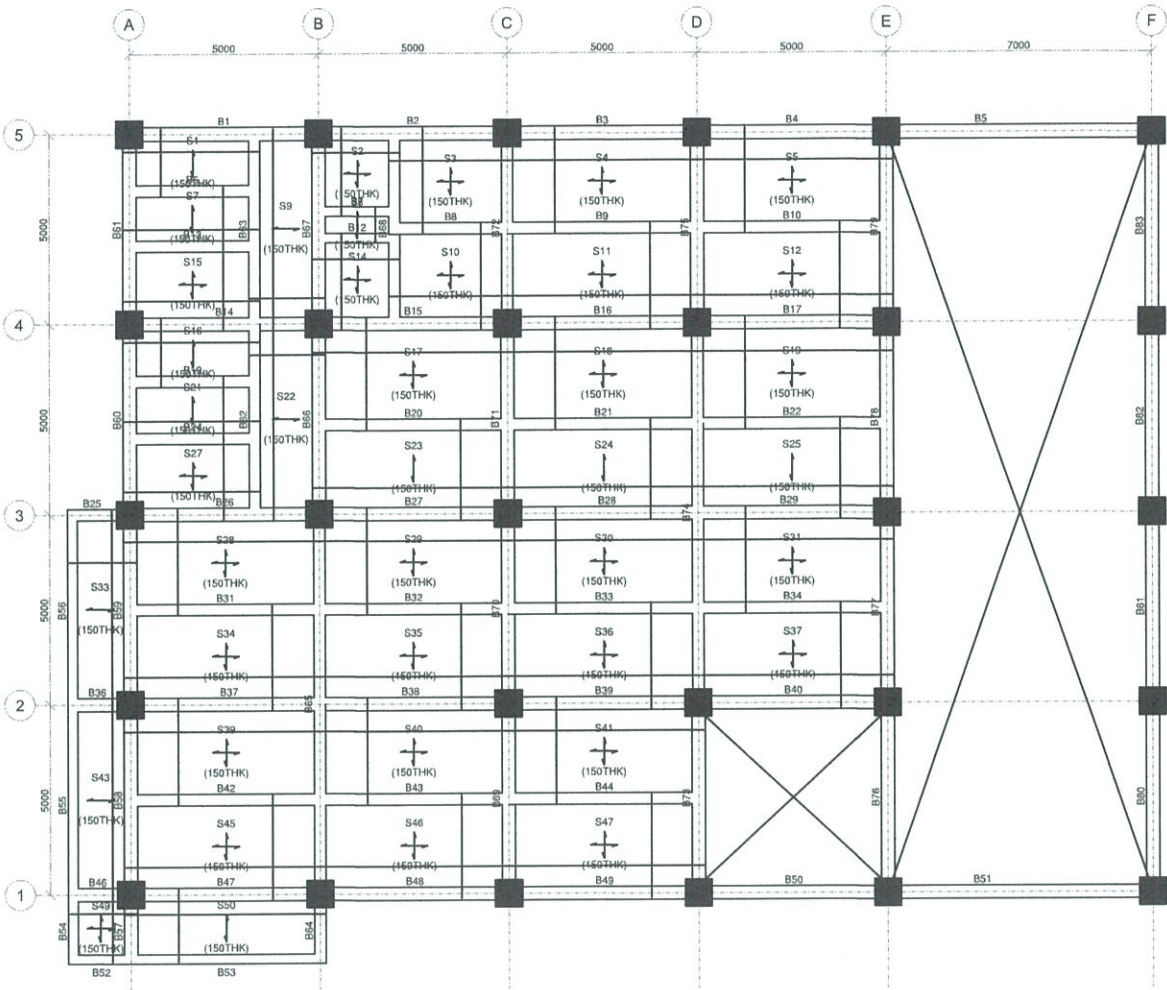
PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

SHEET CONTENTS:
ROOF DECK FLOOR FRAMING PLAN
SHEET NO.
S-11

SLAB SCHEDULE (C28 : FY275) (LEVEL : 5.6M)

SLAB MARKED	SLAB THICKNESS	BOTTOM REINFORCEMENT		TOP REINFORCEMENT				
		ALONG SHORT SPAN	ALONG LONG SPAN	OVER LONG SUPPORT		OVER SHORT SUPPORT		DISTRIBUTION
		FULL LENGTH	FULL LENGTH	CONTINUOUS SUPPORT	END SUPPORT	CONTINUOUS SUPPORT	END SUPPORT	
S1, S33, S43 S50	150	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	---	Ø12 @ 225 C/C	Ø12 @ 225 C/C
S2, S13, S15 S20, S27, S32 S38, S41	150	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	---	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C
S3, S4, S5, S6 S37, S46, S47 S49	150	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C
S7, S8, S9, S16 S21, S22, S23 S24, S25, S26	150	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	---	---	Ø12 @ 225 C/C	Ø12 @ 225 C/C
S10, S11, S12 S14, S17, S18 S19, S28, S29 S30, S31, S34 S35, S36, S39 S40, S45	150	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	---	Ø12 @ 225 C/C	---	Ø12 @ 225 C/C
S42	150	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	---	---	Ø12 @ 225 C/C	Ø12 @ 225 C/C
S48	150	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	---	Ø12 @ 225 C/C	Ø12 @ 225 C/C



FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

PROJECT OWNER:

TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road BLEX, Taguig City

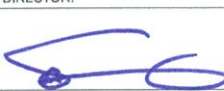
PROJECT TITLE:
PROPOSED TESDA RTC BATANGAS
INNOVATION CENTER
LOCATION: P. HERERA, ST., POBLACION 0006 BATANGAS CITY

CIVIL ENGINEER:

ENGR. ENRIQUE G. DELA TORRE
PMU-SIPTVETS
ENGINEERING SECTION

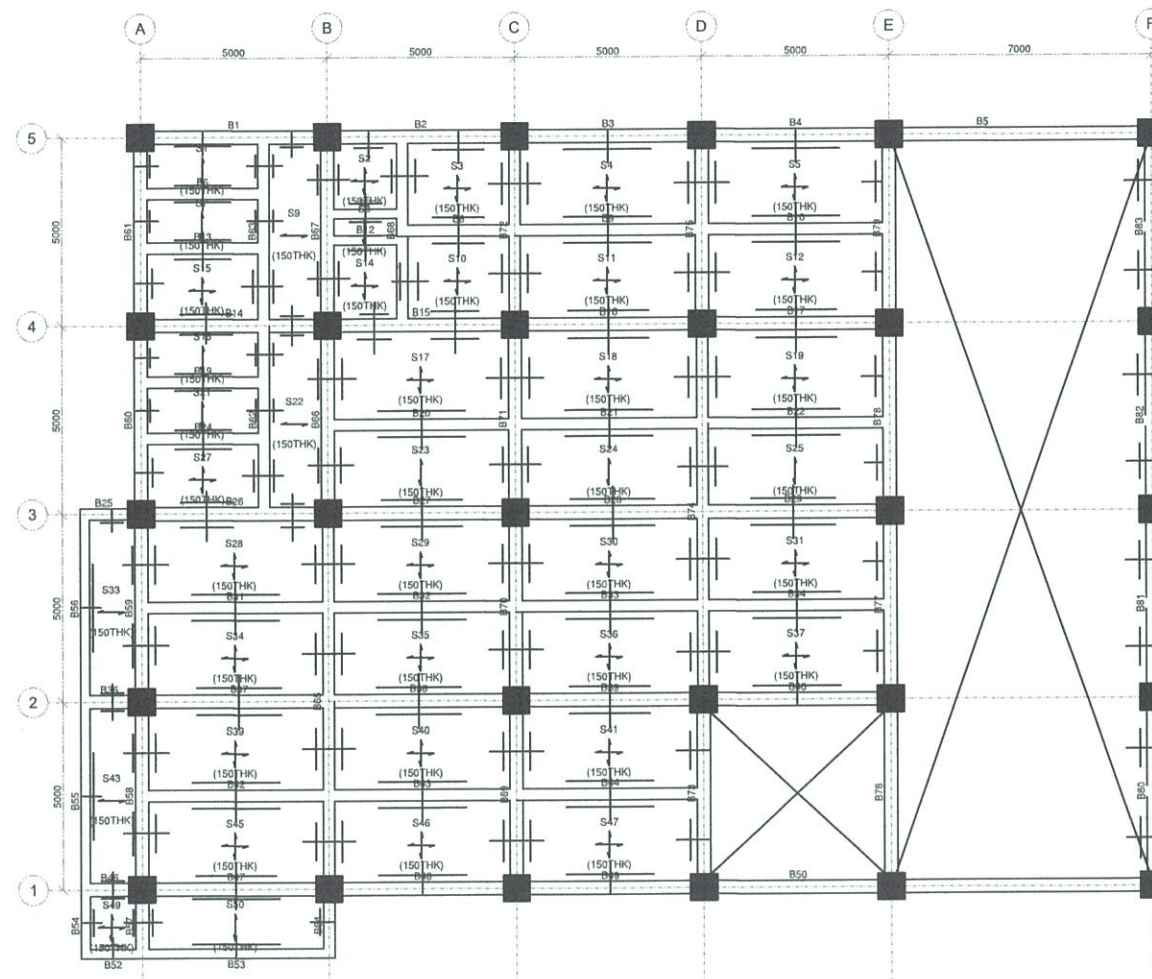
PROJECT MANAGER:

DIR. ENRICO C. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

SHEET CONTENTS:
SLAB SCHEDULE - 5.6M
BOTTOM REINFORCEMENT
LAYOUT - 5.6M

SHEET NO.
S-12



TOP REINFORCEMENT LAYOUT - 5.6 M
SCALE: 1:200 MTS

FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

PROJECT OWNER:



TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY

MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road BLDG. Taguig City

PROJECT TITLE:

PROPOSED TESDA RTC BATANGAS
INNOVATION CENTER

LOCATION: P. HERERA, ST., POBLACION 0008 BATANGAS CITY

CIVIL ENGINEER:

Engr. Enrique G. Dela Torre
ENGR. ENRIQUE G. DELA TORRE
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

Dir. Enrico C. Banario
DIR. ENRICO C. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

Sec. Suharto T. Mangudadatu
SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

SHEET CONTENTS:

TOP REINFORCEMENT LAYOUT
- 5.6M

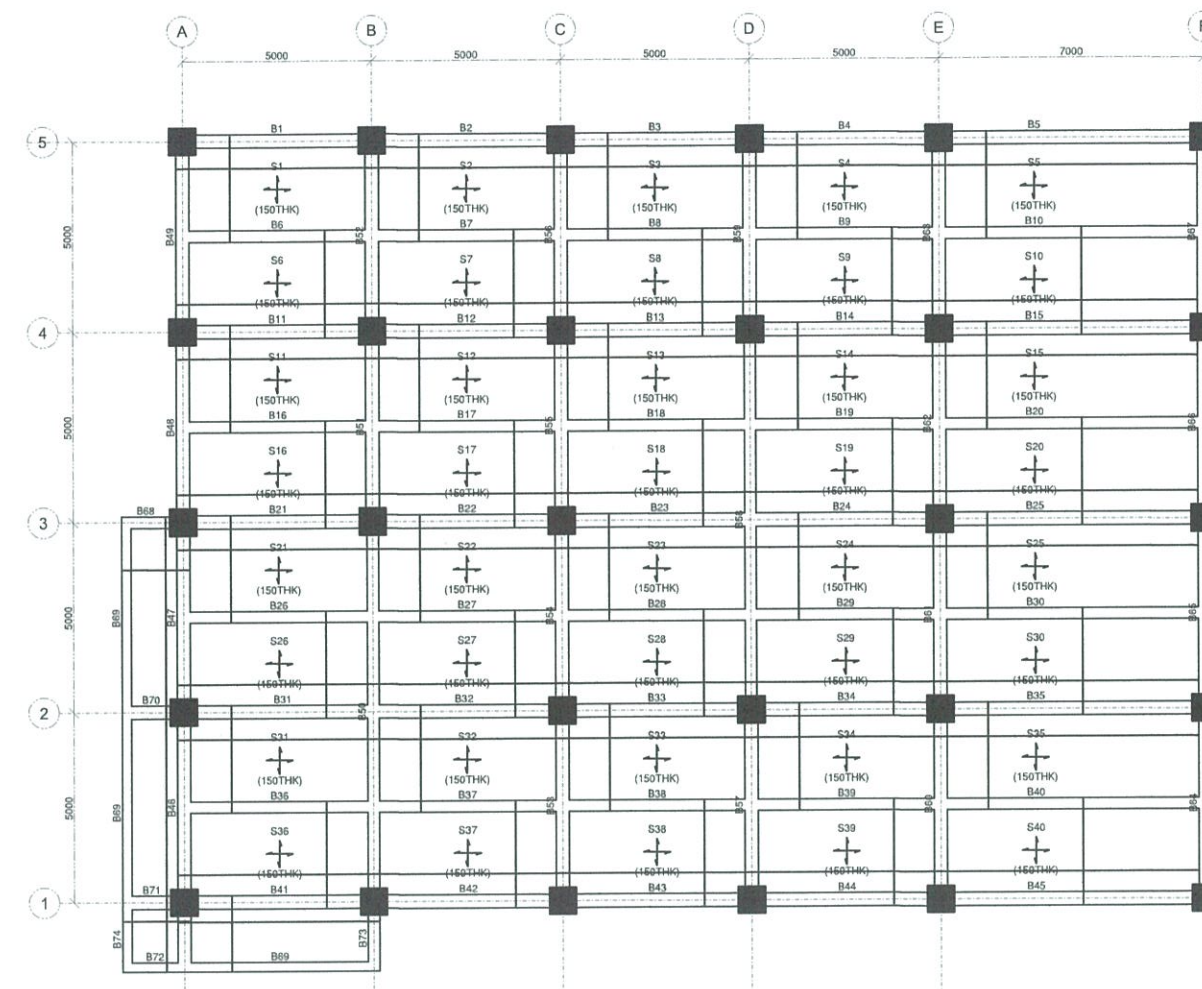
SHEET NO.

S-13

SLAB SCHEDULE (C28 : FY275) (LEVEL : 9.2M)

SLAB MARKED	SLAB THICKNESS	BOTTOM REINFORCEMENT		TOP REINFORCEMENT					
		ALONG SHORT SPAN	ALONG LONG SPAN	OVER LONG SUPPORT		OVER SHORT SUPPORT		DISTRIBUTION	
		FULL LENGTH	FULL LENGTH	CONTINUOUS SUPPORT	END SUPPORT	CONTINUOUS SUPPORT	END SUPPORT		
S1, S2, S3, S4 S5, S36, S37 S38, S39, S40	150	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	
S6, S10, S11 S15, S16, S20 S21, S25, S26 S30, S31, S35	150	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	---	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	
S7, S8, S9, S12 S13, S14, S17 S18, S19, S22 S23, S24, S27 S28, S29, S32 S33, S34	150	Ø12 @ 225 C/C	Ø12 @ 225 C/C	Ø12 @ 225 C/C	---	Ø12 @ 225 C/C	---	Ø12 @ 225 C/C	

SLAB SCHEDULE - 9.2 M
SCALE: NTS



BOTTOM REINFORCEMENT LAYOUT - 9.2 M
SCALE: 1:200 MTS

FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

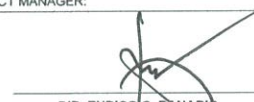
PROJECT OWNER:

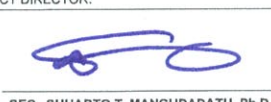
TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road BLEX, Taguig City.

PROJECT TITLE:
PROPOSED TESDA RTC BATANGAS
INNOVATION CENTER
LOCATION: P. HERERA, ST., POBLACION 0008 BATANGAS CITY

CIVIL ENGINEER:

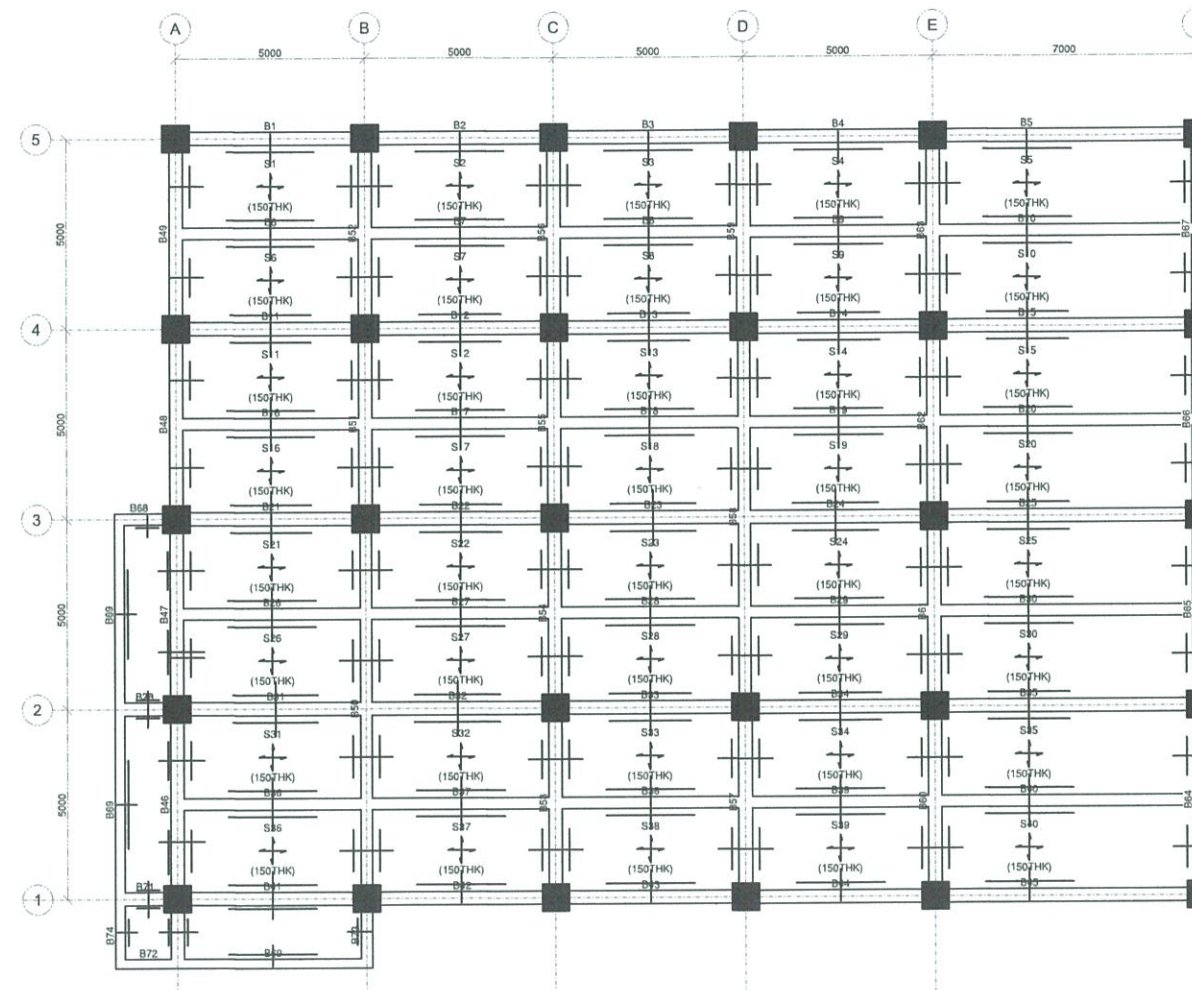
ENGR. ENRIQUE G. DELA TORRE
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

DIR. ENRICO C. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

SHEET CONTENTS:
SLAB SCHEDULE 9.2
BOTTOM REINFORCEMENT
LAYOUT - 9.2M

SHEET NO.
S-14



TOP REINFORCEMENT LAYOUT - 9.2 M
SCALE: 1:200 MTS

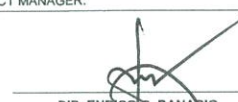
FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

PROJECT OWNER:
 TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City.

PROJECT TITLE:
**PROPOSED TESDA RTC BATANGAS
INNOVATION CENTER**
LOCATION: P. HERERA, ST., POBLACION 0006 BATANGAS CITY

CIVIL ENGINEER:

ENR. ENRIQUE G. DELA TORRE
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

DIR. ENRICO G. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

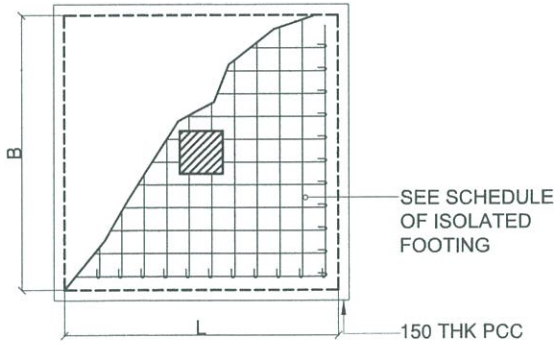
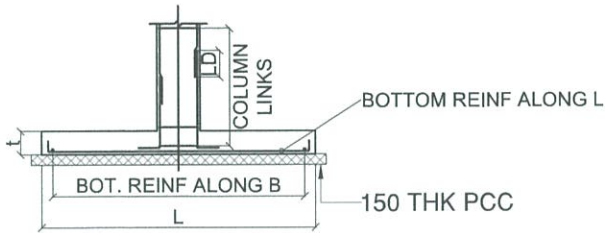
SHEET CONTENTS:
TOP REINFORCEMENT LAYOUT
- 9.2M

SHEET NO.
S-15

FOOTING SCHEDULE (C28:Fy414)

FOOTING NUMBERS	COLUMN NUMBERS	FOOTING TYPE	FOOTING DIMENSION			FOOTING REINFORCEMENT	
			L	B	D	BOTTOM	
						ALONG B	ALONG L
FC1	C1	Pad	3000	3000	350	#25@300 C/C	#25@300 C/C
FC2	C1,C2	Pad	2500	2500	350	#25@300 C/C	#25@300 C/C

FOOTING SCHEDULE
SCALE: NTS



ISOLATED FOOTING DETAIL
SCALE: NTS

5.6M TO 9.2M	C28 : Fy414 , COVER = 50MM CONFINING ZONE = 700 MM			
	Z1 MAIN LINK Ø12 @ 150	Z1 OTHERS Ø10 @ 150	Z2 LINKS Ø10 @ 150	
2.4M TO 5.6M	C28 : Fy414 , COVER = 50MM CONFINING ZONE = 700 MM			
	Z1 MAIN LINK Ø12 @ 150	Z1 OTHERS Ø10 @ 150	Z2 LINKS Ø10 @ 150	
0M TO 2.4M	C28 : Fy414 , COVER = 50MM CONFINING ZONE = 700 MM			
	Z1 MAIN LINK Ø12 @ 150	Z1 OTHERS Ø10 @ 150	Z2 LINKS Ø10 @ 150	
COLUMN MARKED		C1	C2	

COLUMN AND WALL SCHEDULE
(SCALE 1:25)
NOTES:
1. BE = BOUNDARY ELEMENT AS PER ACI 318M - 2014, PROVIDE CONFINING REINFORCEMENT ACROSS ENTIRE HEIGHT OF WALL IN THE BOUNDARY ELEMENT
2. Z1 = SPECIAL CONFINING ZONE AS PER ACI 318M - 2014, Z2 = REMAINING ZONES AS PER ACI 318M - 2014

COLUMN AND WALL SCHEDULE
SCALE: NTS

FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

PROJECT OWNER:
 TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City.

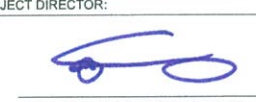
PROJECT TITLE:
PROPOSED TESDA RTC BATANGAS
INNOVATION CENTER
LOCATION: P.HERERA, ST., POBLACION 0008 BATANGAS CITY

CIVIL ENGINEER:

ENGR. ENRIQUE G. DELA TORRE
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

DIR. ENRICO S. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

SHEET CONTENTS:
ISOLATED FOOTING DETAIL
COLUMN SCHEDULE

SHEET NO.
S-16

BEAM SCHEDULE (C28:Fy414) (LEVEL: 2.4m)

BEAM NUMBERS	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			SHEAR STIRRUPS		
	B	D	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT
TB	300	500	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	11-2L-Ø10@105 C/C	10-2L-Ø10@215 C/C	11-2L-Ø10@105 C/C

BEAM SCHEDULE (C28:Fy414) (LEVEL: 5.6m)

BEAM NUMBERS	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			SHEAR STIRRUPS			SFR	REMARKS
	B	D	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT		
B1,B2,B58,B59,B60 B61,B66,B67,B73 B76,B78,B80,B81 B83	350	600	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	11-2L-Ø10@130 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@130 C/C	2-Ø16EF	-
B3,B4,B5,B47,B48 B49,B50,B51,B75 B77,B79,B82	350	600	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	11-2L-Ø10@130 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@130 C/C	-	-
B6,B13,B19,B24	300	500	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	8-2L-Ø10@165 C/C	6-2L-Ø10@165 C/C	8-2L-Ø10@165 C/C	-	-
B7,B12	250	300	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	7-2L-Ø10@100 C/C	5-2L-Ø10@100 C/C	7-2L-Ø10@100 C/C	-	-
B8	300	500	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	7-2L-Ø10@165 C/C	5-2L-Ø10@165 C/C	7-2L-Ø10@165 C/C	-	-
B9,B10,B11,B20 B21,B22,B23,B31 B32,B33,B34,B35 B42,B43,B44,B45 B62,B63	300	500	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	11-2L-Ø10@165 C/C	9-2L-Ø10@165 C/C	11-2L-Ø10@165 C/C	-	-
B14	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25	4-Ø25	4-Ø25	11-2L-Ø10@125 C/C	14-2L-Ø10@135 C/C	12-2L-Ø10@110 C/C	-	-
B15,B26	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25	4-Ø25	4-Ø25	11-2L-Ø10@130 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@130 C/C	2-Ø16EF	-
B16,B17,B18,B40 B41,B69,B70	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25	4-Ø25	4-Ø25	11-2L-Ø10@130 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@130 C/C	-	-
B25	300	500	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	4-2L-Ø10@165 C/C	2-2L-Ø10@165 C/C	4-2L-Ø10@165 C/C	1-Ø16EF	CANTILEVERED
B27	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25	4-Ø25	4-Ø25 + 2-Ø25	11-2L-Ø10@130 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@120 C/C	-	-
B28,B37	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25 + 2-Ø25	4-Ø25	4-Ø25	9-2L-Ø10@200 C/C	7-2L-Ø10@200 C/C	9-2L-Ø10@200 C/C	-	-
B29,B38	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25	4-Ø25	4-Ø25 + 2-Ø25	9-2L-Ø10@200 C/C	7-2L-Ø10@200 C/C	9-2L-Ø10@200 C/C	-	-
B30,B39	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25 + 2-Ø25	4-Ø25	4-Ø25	11-2L-Ø10@120 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@130 C/C	-	-
B36	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25 + 2-Ø25	4-Ø25 + 2-Ø25	4-Ø25 + 2-Ø25	3-2L-Ø10@200 C/C	1-2L-Ø10@200 C/C	3-2L-Ø10@200 C/C	2-Ø16EF	CANTILEVERED
B46	350	600	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-2L-Ø10@200 C/C	1-2L-Ø10@200 C/C	3-2L-Ø10@200 C/C	2-Ø16EF	CANTILEVERED
B52	250	300	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	6-2L-Ø10@100 C/C	4-2L-Ø10@100 C/C	6-2L-Ø10@100 C/C	1-Ø16EF	CANTILEVERED
B53,B55,B56	250	300	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	17-2L-Ø10@100 C/C	15-2L-Ø10@100 C/C	17-2L-Ø10@100 C/C	-	-
B54	250	300	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	6-2L-Ø10@100 C/C	4-2L-Ø10@100 C/C	6-2L-Ø10@100 C/C	1-Ø16EF	-
B57	350	600	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	4-2L-Ø10@200 C/C	2-2L-Ø10@200 C/C	4-2L-Ø10@200 C/C	2-Ø16EF	CANTILEVERED
B64	300	500	2-Ø25	2-Ø25	2-Ø25	3-Ø25 + 2-Ø25	3-Ø25 + 2-Ø25	3-Ø25 + 2-Ø25	4-2L-Ø10@165 C/C	2-2L-Ø10@165 C/C	4-2L-Ø10@165 C/C	1-Ø16EF	CANTILEVERED
B65	300	500	3-Ø25	2-Ø25	3-Ø25	3-Ø25 + 2-Ø25	3-Ø25	3-Ø25 + 2-Ø25	11-2L-Ø10@105 C/C	44-2L-Ø10@165 C/C	11-2L-Ø10@105 C/C	-	-
B68	300	500	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	11-2L-Ø10@165 C/C	9-2L-Ø10@165 C/C	11-2L-Ø10@165 C/C	1-Ø16EF	-
B71	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25	4-Ø25	4-Ø25	11-2L-Ø10@125 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@120 C/C	-	-
B72	300	500	2-Ø25	2-Ø25	2-Ø25	3-Ø25	3-Ø25	3-Ø25	11-2L-Ø10@105 C/C	13-2L-Ø10@165 C/C	11-2L-Ø10@105 C/C	-	-
B74	300	500	2-Ø25	2-Ø25	3-Ø25	3-Ø25 + 2-Ø25	3-Ø25	3-Ø25 + 2-Ø25	11-2L-Ø10@105 C/C	44-2L-Ø10@165 C/C	11-2L-Ø10@105 C/C	-	-

BEAM SCHEDULE (C28:Fy414) (LEVEL: 9.2m)

BEAM NUMBERS	SIZE		BOTTOM REINFORCEMENT			TOP REINFORCEMENT			SHEAR STIRRUPS			SFR	REMARKS
	B	D	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT	LEFT	MID SPAN	RIGHT		
B1,B2,B3,B4,B5 B11,B12,B13,B14 B15,B41,B42,B43 B44,B45,B51,B52 B53,B54,B55,B56 B57,B59,B60,B61 B62,B63	350	600	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	11-2L-Ø10@130 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@130 C/C	-	
B6,B8,B9,B10	300	500	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	11-2L-Ø10@165 C/C	9-2L-Ø10@165 C/C	11-2L-Ø10@165 C/C	-	
B7	300	500	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	9-2L-Ø10@215 C/C	7-2L-Ø10@215 C/C	9-2L-Ø10@215 C/C	-	
B16,B17,B20,B30 B38,B39,B40	300	500	2-Ø25	2-Ø25	2-Ø25	3-Ø25	3-Ø25	3-Ø25	11-2L-Ø10@165 C/C	9-2L-Ø10@165 C/C	11-2L-Ø10@165 C/C	1-Ø16EF	
B18,B19,B26,B27 B28,B29,B36,B37	300	500	2-Ø25	2-Ø25	2-Ø25	3-Ø25	3-Ø25	3-Ø25	11-2L-Ø10@165 C/C	9-2L-Ø10@165 C/C	11-2L-Ø10@165 C/C	-	
B21,B34,B35	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25	4-Ø25	4-Ø25	11-2L-Ø10@130 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@130 C/C	-	
B22	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25	4-Ø25	4-Ø25 + 2-Ø25	11-2L-Ø10@200 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@120 C/C	-	
B23	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25 + 2-Ø25	4-Ø25	4-Ø25	9-2L-Ø10@200 C/C	7-2L-Ø10@200 C/C	9-2L-Ø10@200 C/C	-	
B24	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25	4-Ø25	4-Ø25 + 2-Ø25	9-2L-Ø10@200 C/C	7-2L-Ø10@200 C/C	9-2L-Ø10@200 C/C	-	
B25,B33	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25 + 2-Ø25	4-Ø25	4-Ø25	11-2L-Ø10@120 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@130 C/C	-	
B31	350	600	4-Ø25	4-Ø25	4-Ø25	4-Ø25 + 2-Ø25	4-Ø25	4-Ø25	9-2L-Ø10@190 C/C	7-2L-Ø10@200 C/C	9-2L-Ø10@200 C/C	-	
B32	350	600	4-Ø25	4-Ø25	4-Ø25	4-Ø25	4-Ø25	4-Ø25 + 2-Ø25	9-2L-Ø10@200 C/C	7-2L-Ø10@200 C/C	10-2L-Ø10@185 C/C	-	
B46,B47,B48,B49 B64,B65,B66,B67	350	600	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	11-2L-Ø10@130 C/C	9-2L-Ø10@200 C/C	11-2L-Ø10@130 C/C	2-Ø16EF	
B50	300	500	3-Ø25	2-Ø25	3-Ø25	3-Ø25 + 2-Ø25	3-Ø25	3-Ø25 + 2-Ø25	11-2L-Ø10@105 C/C	47-2L-Ø10@155 C/C	11-2L-Ø10@105 C/C	-	
B58	300	500	2-Ø25	2-Ø25	3-Ø25	3-Ø25 + 2-Ø25	3-Ø25	3-Ø25 + 2-Ø25	11-2L-Ø10@105 C/C	44-2L-Ø10@165 C/C	11-2L-Ø10@105 C/C	-	
B68	300	500	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	4-2L-Ø10@165 C/C	2-2L-Ø10@165 C/C	4-2L-Ø10@165 C/C	1-Ø16EF	CANTILEVERED
B69	250	300	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	17-2L-Ø10@100 C/C	15-2L-Ø10@100 C/C	17-2L-Ø10@100 C/C	-	-
B70	350	600	3-Ø25	3-Ø25	3-Ø25	4-Ø25 + 2-Ø25	4-Ø25 + 2-Ø25	4-Ø25 + 2-Ø25	3-2L-Ø10@200 C/C	1-2L-Ø10@200 C/C	3-2L-Ø10@200 C/C	2-Ø16EF	CANTILEVERED
B71	350	600	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-2L-Ø10@200 C/C	1-2L-Ø10@200 C/C	3-2L-Ø10@200 C/C	2-Ø16EF	CANTILEVERED
B72	250	300	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	6-2L-Ø10@100 C/C	4-2L-Ø10@100 C/C	6-2L-Ø10@100 C/C	1-Ø16EF	
B73	300	500	2-Ø25	2-Ø25	2-Ø25	3-Ø25 + 2-Ø25	3-Ø25 + 2-Ø25	3-Ø25 + 2-Ø25	4-2L-Ø10@165 C/C	2-2L-Ø10@165 C/C	4-2L-Ø10@165 C/C	1-Ø16EF	
B74	250	300	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	2-Ø25	6-2L-Ø10@100 C/C	4-2L-Ø10@100 C/C	6-2L-Ø10@100 C/C	1-Ø16EF	-
B75	350	600	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	3-Ø25	4-2L-Ø10@200 C/C	2-2L-Ø10@200 C/C	4-2L-Ø10@200 C/C	2-Ø16EF	CANTILEVERED

BEAM SCHEDULE
SCALE: _____ NTS

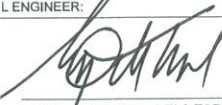
FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

PROJECT OWNER:

TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City.

PROJECT TITLE:

PROPOSED TESDA RTC BATANGAS
INNOVATION CENTER
LOCATION: P. HERRERA, ST. POBLACION 0006 BATANGAS CITY

CIVIL ENGINEER:

ENGR. ENRIQUE G. DELA TORRE
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

DIR. ENRICO C. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

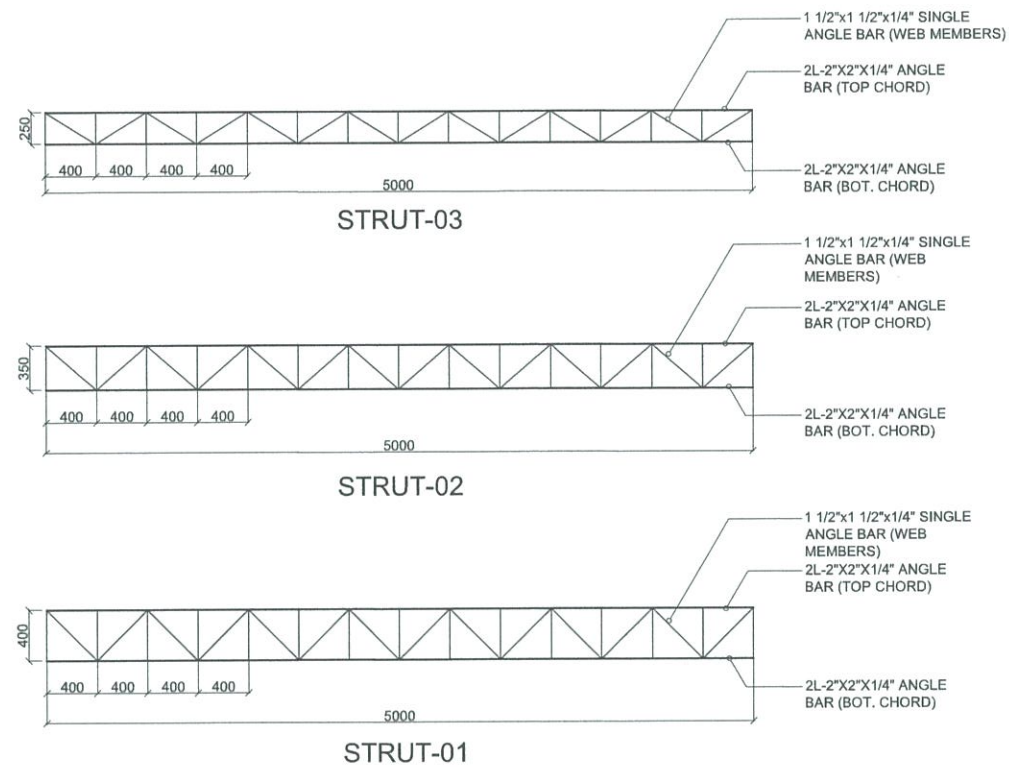
SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS
SECRETARY, TESDA

SHEET CONTENTS:

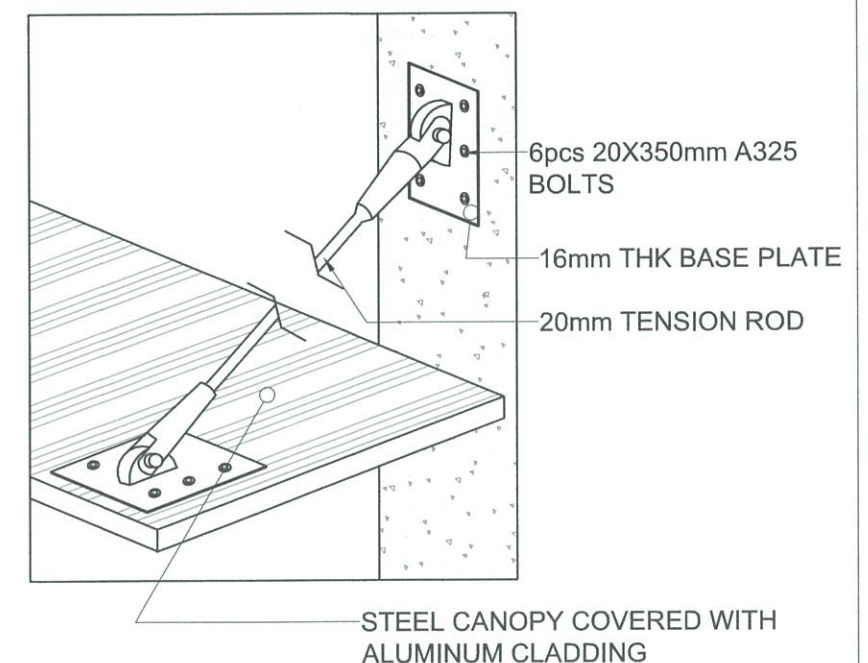
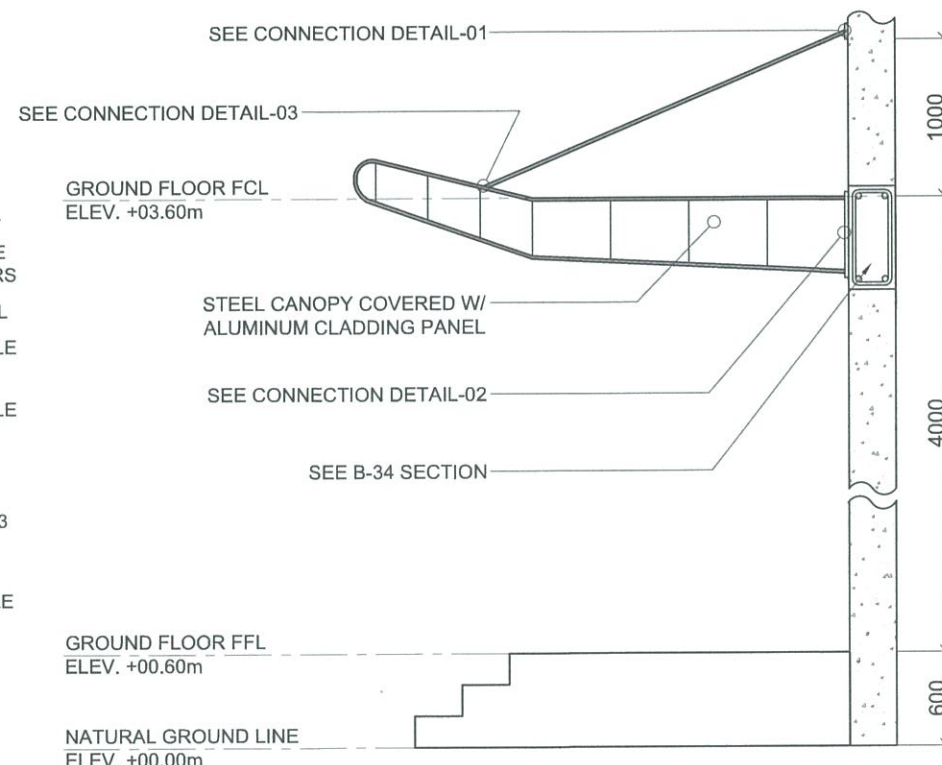
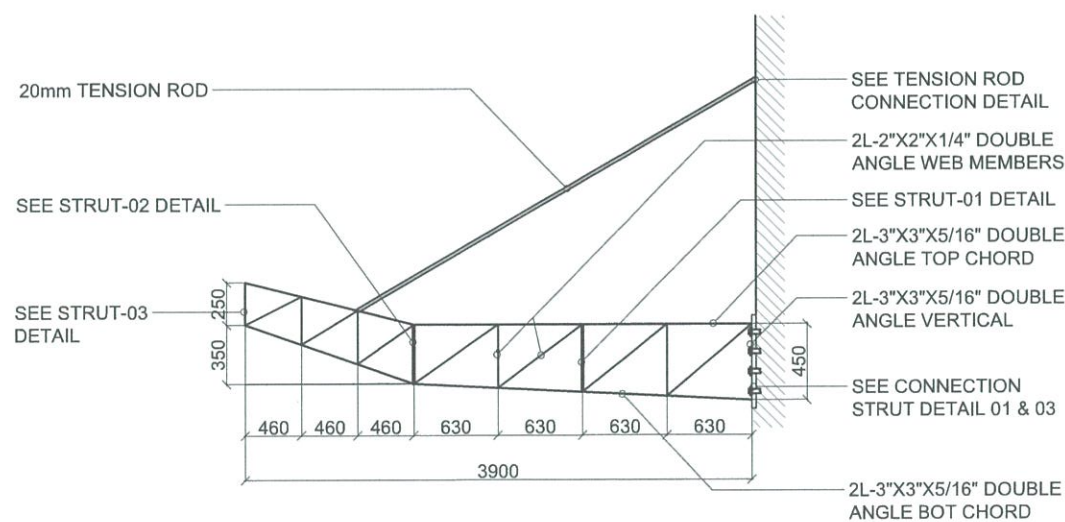
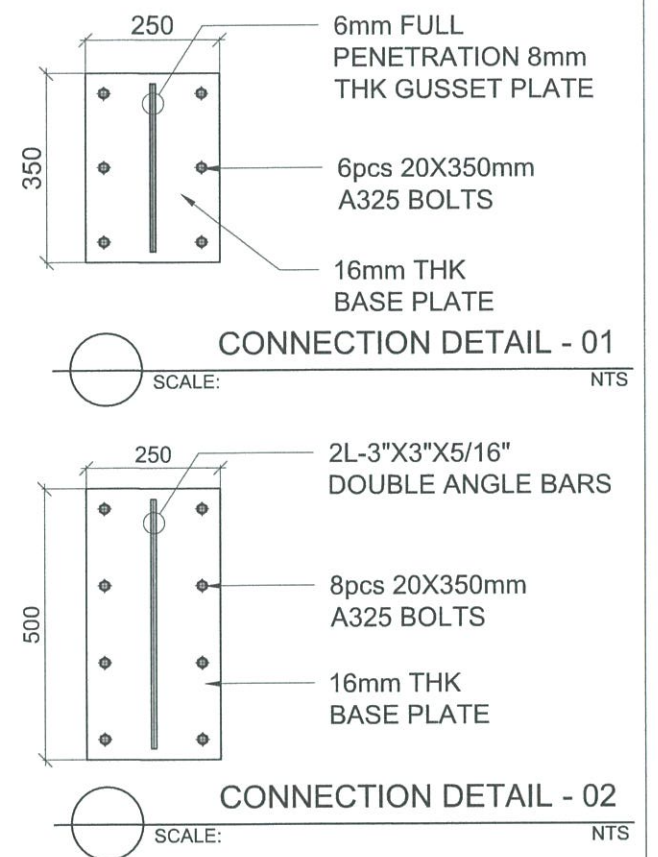
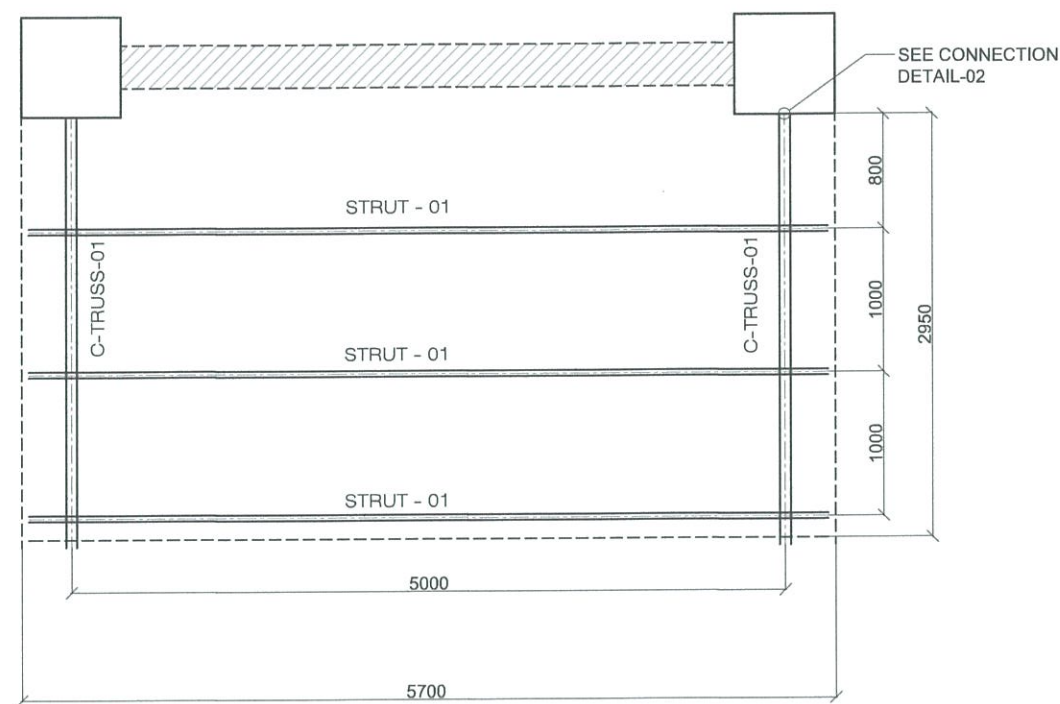
BEAM SCHEDULE

SHEET NO.

S-17



STRUT DETAIL
 SCALE: NTS



**FOR APPROVAL PLANS OF
 REGIONAL TVET INNOVATION
 CENTERS (RTICs) 2023**

PROJECT OWNER:
**TECHNICAL EDUCATION
 AND
 SKILLS DEVELOPMENT
 AUTHORITY**

PROJECT TITLE:
**PROPOSED TESDA RTC BATANGAS
 INNOVATION CENTER**

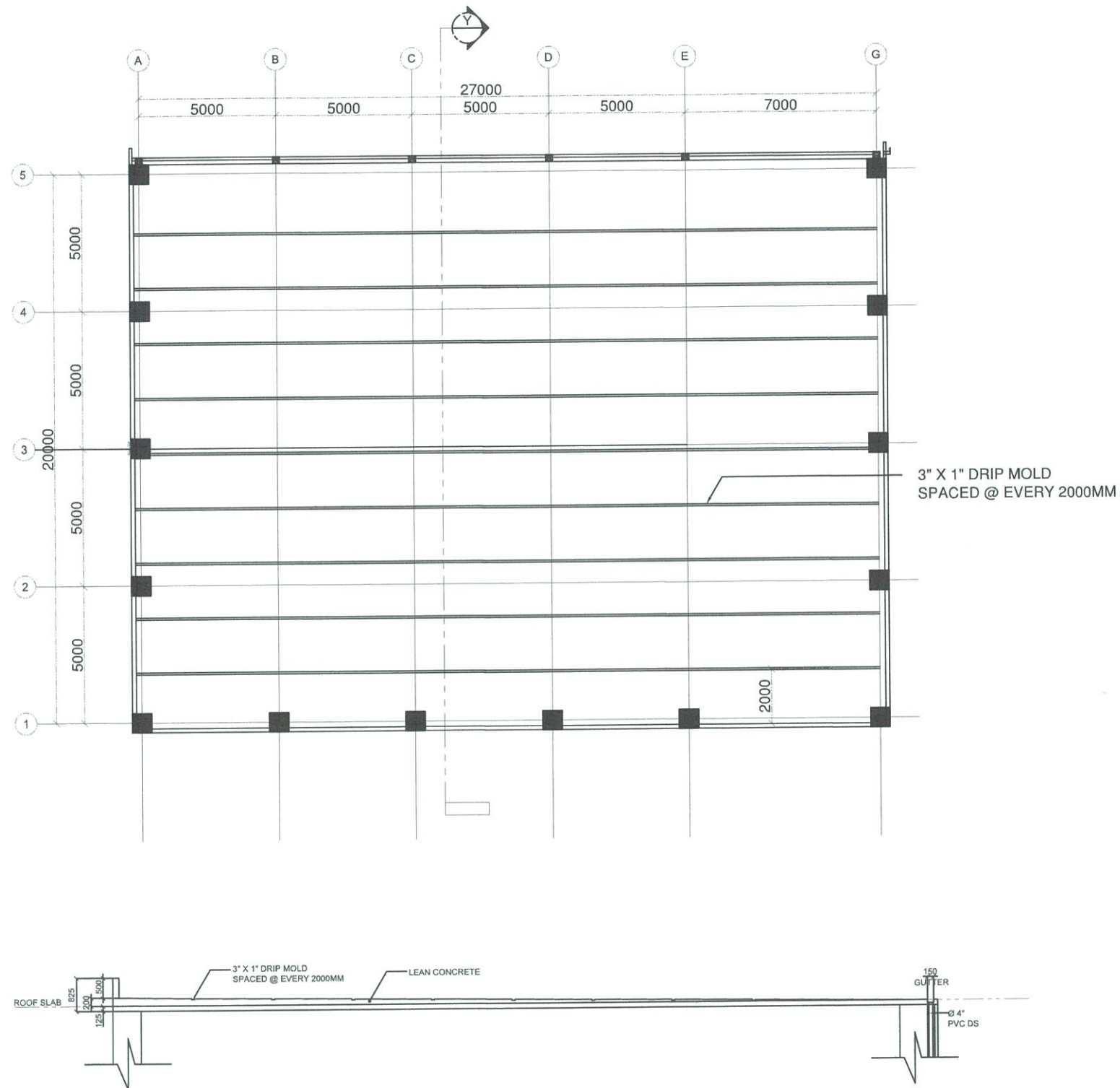
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 ENGINEERING SECTION

PROJECT MANAGER:
DIR. ENRICO C. MANARIO
 PMU-SIPTVETS

PROJECT DIRECTOR:
SEC. SUHARTO T. MANGUDADATU, Ph.D.
 PMU-SIPTVETS
 SECRETARY, TESDA

SHEET CONTENTS:
 STRUT DETAIL
 C-TRUSS DETAIL
 CANOPY PLAN
 CANOPY ELEVATION PLAN
 CONNECTION DETAIL - 01
 CONNECTION DETAIL - 02
 CONNECTION DETAIL - 03

SHEET NO.
S-18



ROOF DECK SECTION PLAN
 SCALE: 1:200 MTS

**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**

PROJECT OWNER:
**TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City

PROJECT TITLE:
**PROPOSED TESDA RTC BATANGAS
INNOVATION CENTER**
LOCATION: P. HERRERA, ST., POBLACION 8006 BATANGAS CITY

CIVIL ENGINEER:

ENGR. ENRIQUE G. DELA TORRE
 PMU-SIPTVETS
 ENGINEERING SECTION

PROJECT MANAGER:

DIR. ENRICO C. BANARIO
 PMU-SIPTVETS

PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
 PMU-SIPTVETS
 SECRETARY, TESDA

SHEET CONTENTS:
 ROOF DECK SECTION PLAN

SHEET NO.
S-19

GENERAL NOTES AND SPECIFICATIONS

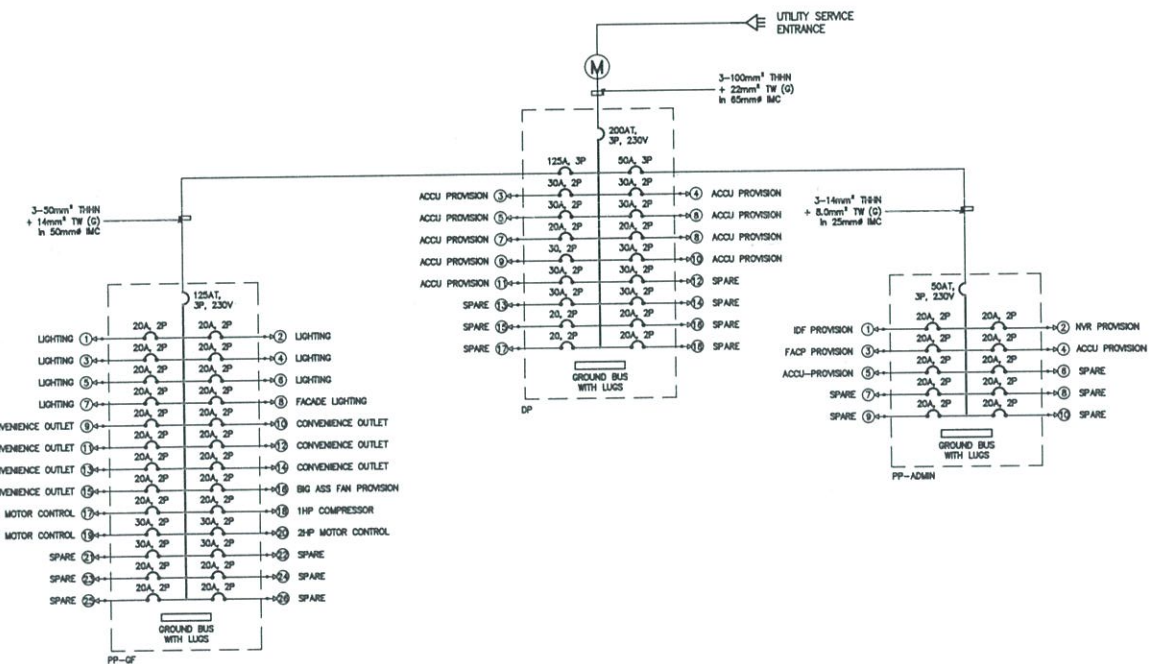
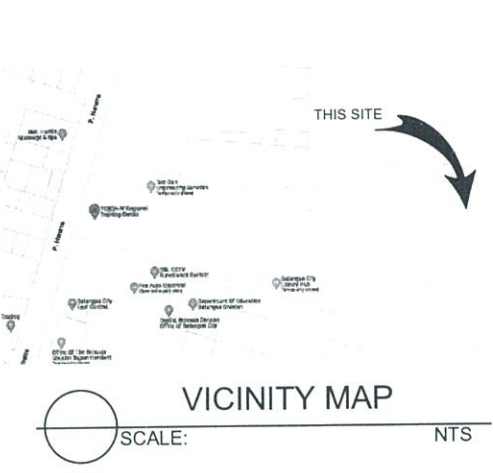
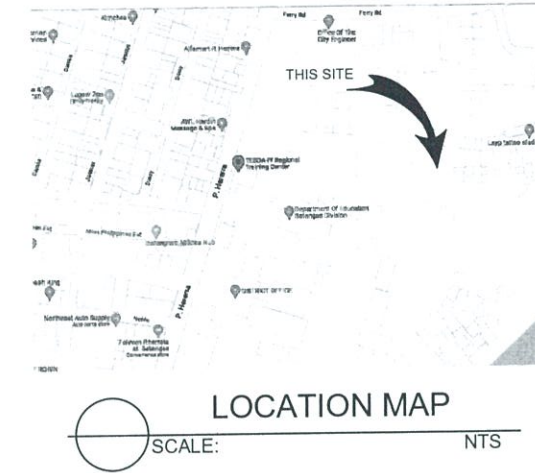
- ALL ELECTRICAL WORKS TO BE UNDERTAKEN HEREIN SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST APPROVED EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS, THE EXISTING ORDINANCES, RULES AND REGULATIONS OF CITY ENGINEER'S OFFICE, THE BUILDING ADMINISTRATION OFFICE AND INDUSTRIAL SAFETY AS WELL AS THE REQUIREMENTS OF THE UTILITY COMPANY.
- ALL MATERIALS AND REQUIREMENTS TO BE USED HEREIN SHALL BE NEW AND OF THE APPROVED TYPE FOR ITS LOCATION AND PURPOSE.
- NO OF BRANCH CIRCUIT WIRING IN LIGHTING AND POWER SHALL HAVE A LOAD MORE THAN BOX OF ITS RATING.
- LIGHT CONTROL SWITCHES SHALL BE RATED 16 AMPERES, 230 VAC.
- UNLESS OTHERWISE SPECIFIED, PULLBOXES OR JUNCTION BOXES SHALL BE PROVIDED WHENEVER REQUIRED AND NECESSARY. ALTHOUGH SUCH BOXES ARE NOT INDICATED ON PLANS.
- FOR EACH SPARE CIRCUIT IN PANELBOARD, PROVIDE AN EMPTY CONDUIT 20mm (3/4") DIA. TERMINATING TO A COVERED SQUARED BOX.
- ALL EQUIPMENT AND/OR NON CURRENT CARRYING METAL FRAME, SHALL BE PROVIDED WITH ADEQUATE AND EFFECTIVE GROUNDING SYSTEM.
- STANDARD TYPE OF ACCESSORIES, SPLICING DEVICES, TERMINATION AND OTHER APPURTENANCES SHALL BE USED FOR THE ENTIRE ELECTRICAL INSTALLATION.
- POWER SUPPLY SHALL BE 230 VOLTS, 3ø, 3 WIRE PLUS NEUTRAL PLUS GROUND, 60 HERTZ.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A DULY LICENSED AND REGISTERED ELECTRICAL ENGINEER OR MASTER ELECTRICIAN.
- UNLESS OTHERWISE INDICATED, MOUNTING HEIGHTS SHALL BE AS FOLLOWS:
 - PANELBOARDS.....1.80m CENTER OF ENCLOSURE
 - CONVENIENCE OUTLET.....0.3m CENTER OF THE BOX
 - SWITCH OUTLET.....1.30m CENTER OF THE BOX
 - CITY OUTLET.....0.30m CENTER OF THE BOX
 - GFCI COUNTERTOP.....0.30m FROM TOP OF LAVATORY
 - COUNTERTOP OUTLET.....0.30m FROM TOP OF KITCHEN SINK
 - TEL./DATA OUTLET.....0.30m CENTER OF THE BOX
- THE JOB SHALL BE EXECUTED IN THE MOST THOROUGH PROMPT AND WORKMAN LIKE MANNER, EMPLOYING STANDARD TOOLS, EQUIPMENT, METHODS AND GOOD ENGINEERING PRACTICES. THE JOB SHALL BE DONE COMPLETE IN ALL ASPECTS AS REQUIRED IN PLANS AND SPECIFICATIONS AND READY FOR OPERATION.
- ADDITIONAL MATERIALS SPECIFICATIONS:
 - CONDUIT....."PANASONIC", "MC GILL", "SMARTUBE" OR APPROVED EQUAL.
 - WIRES AND CABLES....."PHELPS DODGE", "PHILFLEX", "DURAFLEX"
 - CIRCUIT BREAKER BOARD....."ABB", "GE", "SCHNEIDER ELECTRIC" BOLT-ON TYPE
 - WIRING DEVICES....."PANASONIC", "LEVITON", "SCHNEIDER ELECTRIC"
- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE PROPER IDENTIFICATION AND LABELING OF ALL CIRCUIT BREAKER. EACH PANEL WILL BE APPROVED WITH A TYPEWRITTEN CIRCUIT DIRECTORY.
- WIRES SHALL BE COLOR CODED:
 - THREE PHASE
 - LINE 1.....RED
 - LINE 2.....YELLOW
 - LINE 3.....BLUE
 - GROUND.....GREEN
 - SINGLE PHASE
 - LINE 1,2,3.....RED
 - GROUND.....GREEN
- NO REVISION IN DESIGN SHALL BE DONE WITHOUT THE PRIOR KNOWLEDGE AND APPROVAL OF THE DESIGNER AND THE OWNER. ANY SUCH REVISION DONE WITHOUT THE APPROVAL SHALL CAUSE RESPONSIBILITY OF THE DESIGNER TO CEASE A WHOLE.
- ALL WEATHER-EXPOSED INSTALLATIONS SHALL USE WEATHERPROOF TYPE MATERIALS, ESPECIALLY WEATHERPROOF CONVENIENCE OUTLET, CAST-BOXES, JUNCTION BOXES SUBMIT SAMPLE FOR APPROVAL.

ABBREVIATIONS

CO	CONVENIENCE OUTLET
MM	MILLIMETER
EF	EXHAUST FAN
FCU	FAN COIL UNIT
ACCU	AIR-COOLED CONDENSING UNIT
ECB	ENCLOSED CIRCUIT BREAKER
MCB	MINIATURE CIRCUIT BREAKER
TX	TRANSFORMER
ATS	AUTOMATIC TRANSFER SWITCH
A, AMP	AMPERE
AF	AMPERE FRAME
AT	AMPERE TRIP
IMC	INTERMEDIATE METALLIC CONDUIT
J	JUNCTION BOX
KAIC	KILOAMPERE INTERRUPTING CAPACITY
KVA	KILOVOLT-AMPERE
KWHR	KILOWATT-HOUR
KW	KILOWATT
KV	KILOVOLT
LA	LIGHTNING ARRESTER
LV	LOW VOLTAGE
3P	THREE POLE
UPVC	UNPLASTICIZED POLYVINYL CHLORIDE
V	VOLT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
C.L.	CONNECTED LOAD
#	DIAMETER
DIST	DISTRIBUTION
DF	DEMAND FACTOR
DL	DEMAND LOAD
DP	DOUBLE POLE
ENCL	ENCLOSURE, ENCLOSED
G, GND	GROUND
HZ	HERTZ
M	METER
MTD	MOUNTED
MTG	MOUNTING
MCB	MAIN CIRCUIT BREAKER
MCCB	MOLDED CASE CIRCUIT BREAKER
MSB	MAIN SWITCH BOARD
NO./ #	NUMBER
P	POLE
PH	PHASE
PVC	POLYVINYL CHLORIDE
IMC	INTERMEDIATE METALLIC CONDUIT
THWN	MOISTURE & HEAT RESISTANT THERMOPLASTIC
TYP	TYPICAL
TW	MOISTURE RESISTANT THERMOPLASTIC
LVSG	LOW VOLTAGE SWITCH GEAR
SP	SYNCHRONIZING PANEL
EE	ELECTRICAL EQUIPMENT
PP	POWER PANEL
LP	LIGHTNING PANEL
DP	DISTRIBUTION PANEL
DS	DISCONNECT SWITCH
RD	RISER DOWN
RU	RISER UP
PFC	POWER FACTOR CONTROLLER
PFI	POWER FACTOR INDICATOR
AHU	AIR HANDLING UNIT

LEGENDS AND SYMBOLS

⊙	DUPLEX CONVENIENCE OUTLET
⊞	FLOOR MOUNTED CONVENIENCE OUTLET
⊙	SIMPLEX CONVENIENCE OUTLET
⊙ HD	HAND DRYER PROVISION
⊙	SPECIAL PURPOSE OUTLET
⊙	JUNCTION BOX
⊞	DISCONNECT SWITCH
⊞	ENCLOSED CIRCUIT BREAKER
⊞	DISTRIBUTION PANEL
⊞	PANELBOARD
⊞	GROUND BAR
⊞	GROUND ROD WITH TESTING PIT
⊞	GROUND ROD
⊞ RU/RD	RISER UP/DOWN
⊞	EARLY STREAMER EMISSION LIGHTNING PROTECTION
⊞	DUPLEX CONVENIENCE OUTLET
⊞	FLOOR MOUNTED CONVENIENCE OUTLET
⊞	SIMPLEX CONVENIENCE OUTLET
⊞ HD	HAND DRYER PROVISION
⊞	SPECIAL PURPOSE OUTLET
⊞	JUNCTION BOX
⊞	DISCONNECT SWITCH
⊞	ENCLOSED CIRCUIT BREAKER
⊞	DISTRIBUTION PANEL
⊞	PANELBOARD
⊞	GROUND BAR
⊞	GROUND ROD WITH TESTING PIT
⊞	GROUND ROD
⊞ RU/RD	RISER UP/DOWN
⊞	EARLY STREAMER EMISSION LIGHTNING PROTECTION



FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023



MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road BLEX, Taguig City

PROJECT TITLE:
PROPOSED TESDA RTC-BATANGAS
INNOVATION CENTER

LOCATION: P. HERRERA ST. POBLACION 008 BATANGAS CITY

ELECTRICAL ENGINEER:
ENGR. JOHN ADRIAN C. SANTOS
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:
DIR. ENRICO C. BANARID
PMU-SIPTVETS

PROJECT DIRECTOR:
SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS

SHEET CONTENTS:
GENERAL NOTES
ABBREVIATION
LOCATION & VICINITY MAP
PANELBOARD DIAGRAM

SHEET NO.
E-0A

PANEL NAME: DP FED FROM: UTILITY COMPANY SYSTEM: 230VAC, 3ø, 3W+G, 60Hz										LOCATION: ELECTRICAL ROOM MOUNTING: WALL MOUNTED ENCLOSURE: NEMA 1																
CKT NO.	DESCRIPTION	CONV. LOAD	DEMAND FACTOR	DEMAND LOAD	VOLT	AMP				CIRCUIT BREAKER				CABLE SIZE				CONDUIT								
						3ø	ØAB	ØBC	ØCA	AT	POLE	KAIC	TYPE	PHASE	GROUND/ND	SIZE	TYPE									
1	PP-GF	22,425	0.72	16,045	230	-	39.38	24.67	33.45	125	150	3	18	MCCB	3-50mm2 THWN	1-14mm2 TW	32	IMC								
2	PP-ADMIN	4,295	0.91	3,907	230	-	8.70	7.16	2.82	50	100	3	18	MCCB	3-16mm2 THWN	1-6.0mm2 TW	32	IMC								
3	ACCU PROVISION (MULTIFUNCTION HALL)	4,375	0.70	3,063	230	-				19.02	50	100	2	10	MCCB	2-3.5mm2 THWN	1-3.5mm2 TW	25	PVC							
4	ACCU PROVISION (MULTIFUNCTION HALL)	4,375	0.70	3,063	230	-				19.02	50	100	2	10	MCCB	2-3.5mm2 THWN	1-3.5mm2 TW	25	PVC							
5	ACCU PROVISION (BUSINESS ACUBATION)	4,375	0.70	3,063	230	-				19.02	50	100	2	10	MCCB	2-3.5mm2 THWN	1-3.5mm2 TW	25	PVC							
6	ACCU PROVISION (BUSINESS ACUBATION)	4,375	0.70	3,063	230	-				19.02	50	100	2	10	MCCB	2-3.5mm2 THWN	1-3.5mm2 TW	25	PVC							
7	ACCU PROVISION (COMPUTER AREA)	648	0.70	453	230	-				2.82	20	100	2	10	MCCB	2-3.5mm2 THWN	1-3.5mm2 TW	20	PVC							
8	ACCU PROVISION (COMPUTER AREA)	648	0.70	453	230	-				2.82	20	100	2	10	MCCB	2-3.5mm2 THWN	1-3.5mm2 TW	20	PVC							
9	ACCU PROVISION (LECTURE ROOM)	2,600	0.70	1,855	230	-				11.52	80	100	2	10	MCCB	2-3.5mm2 THWN	1-3.5mm2 TW	25	PVC							
10	ACCU PROVISION (TRAINERS ROOM)	2,600	0.70	1,855	230	-				11.52	80	100	2	10	MCCB	2-3.5mm2 THWN	1-3.5mm2 TW	25	PVC							
11	ACCU PROVISION (LEARNING RESOURCE)	2,600	0.70	1,855	230	-				11.52	80	100	2	10	MCCB	2-3.5mm2 THWN	1-3.5mm2 TW	25	PVC							
12	SPARE										30	100	2	10	MCCB											
13	SPARE										30	100	2	10	MCCB											
14	SPARE										30	100	2	10	MCCB											
15	SPARE										30	100	2	10	MCCB											
16	SPARE										30	100	2	10	MCCB											
17	SPARE										30	100	2	10	MCCB											
18	SPARE										30	100	2	10	MCCB											
TOTAL CONNECTED LOAD										53,485	0.72	38,679	400	0.00	53.71	32.82	35.83	200	225	3	22	MCCB	3-100mm2 THWN	1-25mm2 TW	75	PVC
DEMAND FACTOR: 0.72 DEMAND LOAD: 38673 VA TOTAL CURRENT: 97.08 AMPS										MAIN CIRCUIT BREAKER: 200 AT 225 AF 3 POLE, 230V PHASE GROUND/ND CONDUIT: 3-100mm2 THWN 1-25mm2 TW 75 mm Ø IMC CONDUIT																

PANEL NAME: PP-GF FED FROM: DP SYSTEM: 230VAC, 3ø, 3W+G, 60Hz										LOCATION: EE ROOM MOUNTING: WALL MOUNTED ENCLOSURE: NEMA 1															
CKT NO	DESCRIPTION	CONN. LOAD	DEMAND FACTOR	DEMAND LOAD	VOLT	AMP				CIRCUIT BREAKER				CABLE SIZE				CONDUIT							
						3Ø	ØAB	ØBC	ØCA	AT	AF	POLE	KAIC	TYPE	PHASE	GROUND	SIZE	TYPE							
1	LIGHTING	310	0.90	279	230					1.35	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
2	LIGHTING	470	0.90	423	230					2.04	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
3	LIGHTING	432	0.90	389	230					1.88	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
4	LIGHTING	641	0.90	577	230					2.79	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
5	LIGHTING	1,114	0.90	1,003	230					4.84	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
6	LIGHTING	560	0.90	504	230					2.43	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
7	LIGHTING	600	0.90	540	230					2.61	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
8	FACE LIGHTING	538	0.90	484	230					2.34	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
9	CONVENIENCE LAYOUT	900	0.90	810	230					3.91	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
10	CONVENIENCE LAYOUT	1,260	0.90	1,134	230					5.48	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
11	CONVENIENCE LAYOUT	720	0.90	648	230					3.13	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
12	CONVENIENCE LAYOUT	1,620	0.90	1,458	230					7.04	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
13	CONVENIENCE LAYOUT	900	0.90	810	230					3.91	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
14	CONVENIENCE LAYOUT	720	0.90	648	230					3.13	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
15	CONVENIENCE LAYOUT	1,440	0.90	1,296	230					6.26	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
16	BACK ASS FANS PROVISION	1,000	0.60	600	230					4.35	20	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
17	1HP MOTOR CONTROL MODULE	1,800	0.70	1,260	230					8.00	30	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
18	1HP COMPRESSOR PROVISION	1,800	0.70	1,260	230					8.00	30	63	2	6	MCCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC						
19	2HP COMPRESSOR PROVISION	2,700	0.70	1,932	230					12.00	30	63	2	6	MCCB	2-5.5mm ² THWN	1-5.5mm ² TW	25	PVC						
20	2HP MOTOR CONTROL MODULE	2,700	0.70	1,932	230					12.00	30	63	2	6	MCCB	2-5.5mm ² THWN	1-5.5mm ² TW	25	PVC						
21	SPARE										30	63	2	6	MCCB										
22	SPARE										30	63	2	6	MCCB										
23	SPARE										30	63	2	6	MCCB										
24	SPARE										30	63	3	6	MCCB										
25	SPARE										30	63	3	6	MCCB										
TOTAL CONNECTED LOAD										22,425	0.72	16,045	230	39.38	24.67	33.45	125	150	3	18	MCCB	3-50mm ² THWN	1-14mm ² TW	50	IMC
DEMAND FACTOR:		0.72																							
DEMAND LOAD:		16,045 VA																							
TOTAL CURRENT:		43.28 AMPS																							
										MAIN CIRCUIT BREAKER										MAIN FEEDER					
										125 AT 150 AF 3 POLE, 230V															
										PHASE: 3-50mm ² THWN															
										GROUND: 1-14mm ² TW															
										CONDUIT: 50 mm Ø IMC CONDUIT															

PANEL NAME: PP-ADMIN FED FROM: DP SYSTEM: 230VAC, 3ø, 3W+G, 60Hz										LOCATION: ADMIN OFFICE MOUNTING: WALL MOUNTED ENCLOSURE: NEMA 1												
CKT NO.	DESCRIPTION	CONV. LOAD	DEMAND FACTOR	DEMAND LOAD	VOLT	AMP				CIRCUIT BREAKER				CABLE SIZE				CONDUIT				
						3Ø	AN	BN	CN	AT	AF	POLE	KAIC	TYPE	PHASE & NEUTRAL	GROUND	SIZE	TYPE				
1	IDF PROVISION	1,000	1.00	1,000	230					4.35	20	63	1	30	MCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC			
2	NVR PROVISION	1,000	1.00	1,000	230					4.35	20	63	1	30	MCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC			
3	FACP PROVISION	1,000	1.00	1,000	230					4.45	20	63	1	30	MCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC			
4	ACCU PROVISION	648	0.70	453	230					2.82	20	63	1	30	MCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC			
5	ACCU PROVISION	648	0.70	453	230					2.82	20	63	1	30	MCB	2-3.5mm ² THWN	1-3.5mm ² TW	20	PVC			
6	SPARE										20	63	1	30	MCB							
7	SPARE										20	63	1	30	MCB							
8	SPARE										20	63	1	30	MCB							
9	SPARE										20	63	1	30	MCCB							
10	SPARE										20	63	1	30	MCCB							
										MAIN CIRCUIT BREAKER												
TOTAL CONNECTED LOAD						4.295	0.91	3,907	230		8.70	7.16	2.82	50	100	3	18	MCCB	3-14mm ² THWN	1-8.0mm ² TW	32	IMC
DEMAND FACTOR:						0.91	50 AT 100 AF 3POLE, 230V															
DEMAND LOAD:						3907 VA	PHASE & NEUTRAL: 3-14mm ² THWN															
TOTAL CURRENT:						9.81 AMPS	GROUND: 1-8.0mm ² TW															
							CONDUIT: 32 mm Ø IMC CONDUIT															

DESIGN LOAD ANALYSIS

1. Air-Condition Loads

- a. Four (4) - 4375 VA Air Cooled Conditioning Unit(ACCU)
b. Three (3) - 2650 VA Air Cooled Conditioning Unit(ACCU)
c. Four (4) - 648 VA Air Cooled Conditioning Unit(ACCU)

Provide: Four (4) 50-Ampere Circuit, 2Pole, 230V
Provide: Three (3) 30-Ampere Circuit, 2Pole, 230V
Provide: Four (4) 20-Ampere Circuit, 2Pole, 230V

2. Lighting and Receptacle Loads

Lighting Based on Required No. of Fixtures and Rating of Fixtures:

Convenience Outlet Based on no. of Receptacles and 180 VA each:

Provide Nine (9) 20-Ampere circuit for lighting each with and a minimum wire size of 3.5 mm² THHN
Provide Eight (8) 20-Ampere circuit for convenience receptacle each and with a minimum wire size of 3.5 mm² THHN

3. Other Loads

- a. One (1) - 2HP Compressor
Provide One (1) - 30-Ampere Circuit

- b. One (1) - 1HP Compressor
Provide One (1) - 20-Ampere Circuit

- c. One (1) - 2HP Motor Control Module Provision
Provide One (1) - 30-Ampere Circuit

- d. One (1) - 1HP Motor Control Module Provision
Provide One (1) - 20-Ampere Circuit

- e. One (1) - Network Video Recorder @ 1kW
Provide One (1) - 20-Ampere Circuit

- f. One (1) - Intermediate Distribution Frame @ 1kW
Provide One (1) - 20-Ampere Circuit

- g. One (1) - Fire Alarm Control Panel @ 1kW
Provide One (1) - 20-Ampere Circuit

- h. One (1) - Public Address Rack @ 1kW
Provide One (1) - 20-Ampere Circuit

Application of Demand Factor @40%

4. Circuit Requirement:

Main Feeder:

= [45547VA + 25% of 4375] / 230V / 1.732

Use 1 Set of 3 - 100mm² THWN for Phase Conductor

Main Feeder Protection:

Use One (1) - 200 Ampere Trip, 230 Volt, 3 Pole Molded Case Circuit Breaker

Volt-Ampere

17,500

7,950

2,592

28,042 VA

4,665 VA

7,560 VA

2,760

1,840

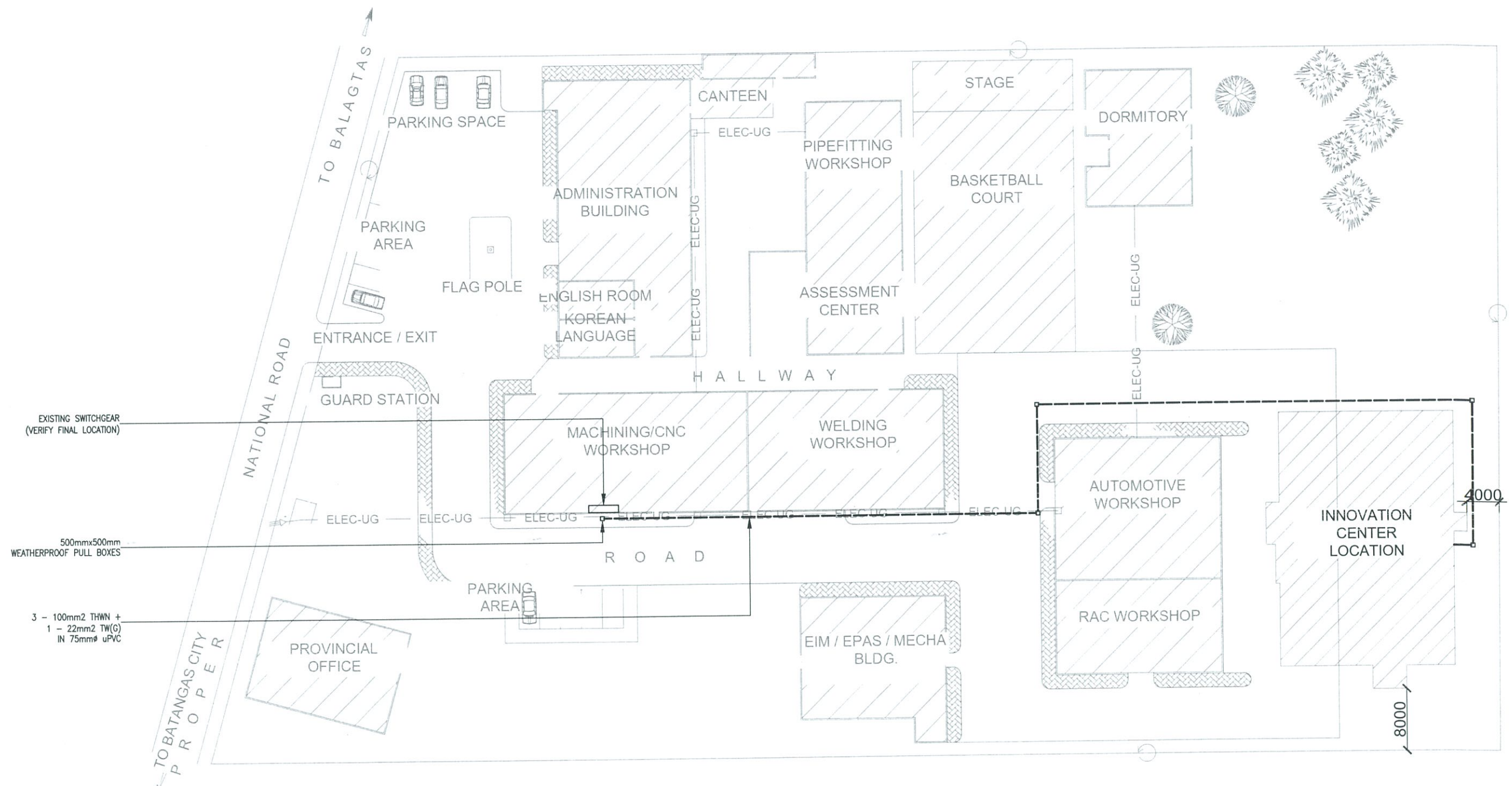
2,760

1,840

1,000

1,000

1,000

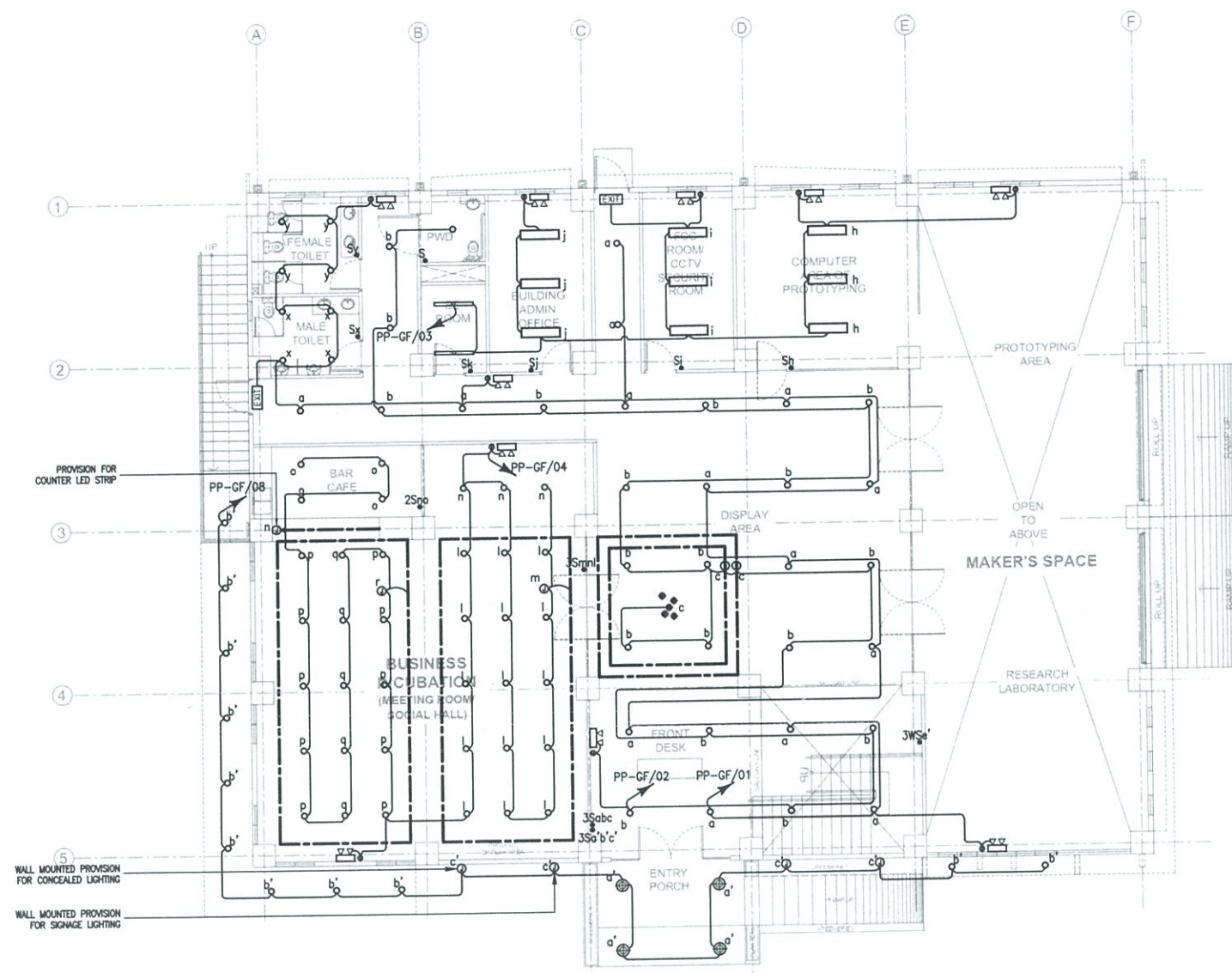


ELECTRICAL SITE DEVELOPMENT PLAN
 SCALE: 1:550MTS

**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**

PROJECT OWNER: TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY	PROJECT TITLE: PROPOSED TESDA RTC-BATANGAS INNOVATION CENTER	ELECTRICAL ENGINEER: ENGR. JOHN ADRIAN C. SANTOS PMU-SIPTVETS ENGINEERING SECTION	PROJECT MANAGER: DIR. ENRICO C. BANARIO PMU-SIPTVETS	PROJECT DIRECTOR: SEC. SUHARTO T. MANGUDATU, Ph.D. PMU-SIPTVETS	SHEET CONTENTS: SITE DEVELOPMENT PLAN	SHEET NO. E-0C
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road 15EX, Taguig City	LOCATION: P. HERRERA ST. POBLACION 006, BATANGAS CITY					

LEGENDS AND SYMBOLS	
	RECESSED MOUNTED, 13W LED DOWNLIGHT
	RECESSED MOUNTED, 26W LED DOWNLIGHT
	SURFACE MOUNTED, 1200mm, 20W LED FLUORESCENT LIGHT
	2x20W, 300mmx1200mm, CEILING RECESSED FLUORESCENT LIGHTING FIXTURE WITH ACRYLIC DIFFUSER
	PENDANT LIGHTING FIXTURE
	100W HIGH BAY LIGHTING FIXTURE
	TWIN-HEAD EMERGENCY LIGHT WITH 2HRS BATTERY BACK
	8W EXIT LIGHT WITH 2HRS BATTERY PACK
	13W SUSPENDED LINEAR LIGHT
	CONCEALED LIGHTING
	1 GANG, SINGLE POLE SINGLE THROW SWITCH, 15A, 230V
	2 GANG, SINGLE POLE SINGLE THROW SWITCH, 15A, 230V
	3 GANG, SINGLE POLE SINGLE THROW SWITCH, 15A, 230V
	RISER UP/DOWN
	JUNCTION BOX (CONCEALED LIGHTING PROVISION/TAPPING POINT)



TESDA INNOVATION CENTER - RTC-BATANGAS
GROUND FLOOR LIGHTING LAYOUT

SCALE:

1: 200 mm

FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023



TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY

MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road, SLLEX, Taguig City

PROJECT TITLE:

PROPOSED TESDA RTC-BATANGAS
INNOVATION CENTER

LOCATION: P. HERRERA ST., POBLACION 166, BATANGAS CITY

ELECTRICAL ENGINEER:

ENGR. JOHN ADRIAN C. SANTOS
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

DIR. ENRICO C. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS

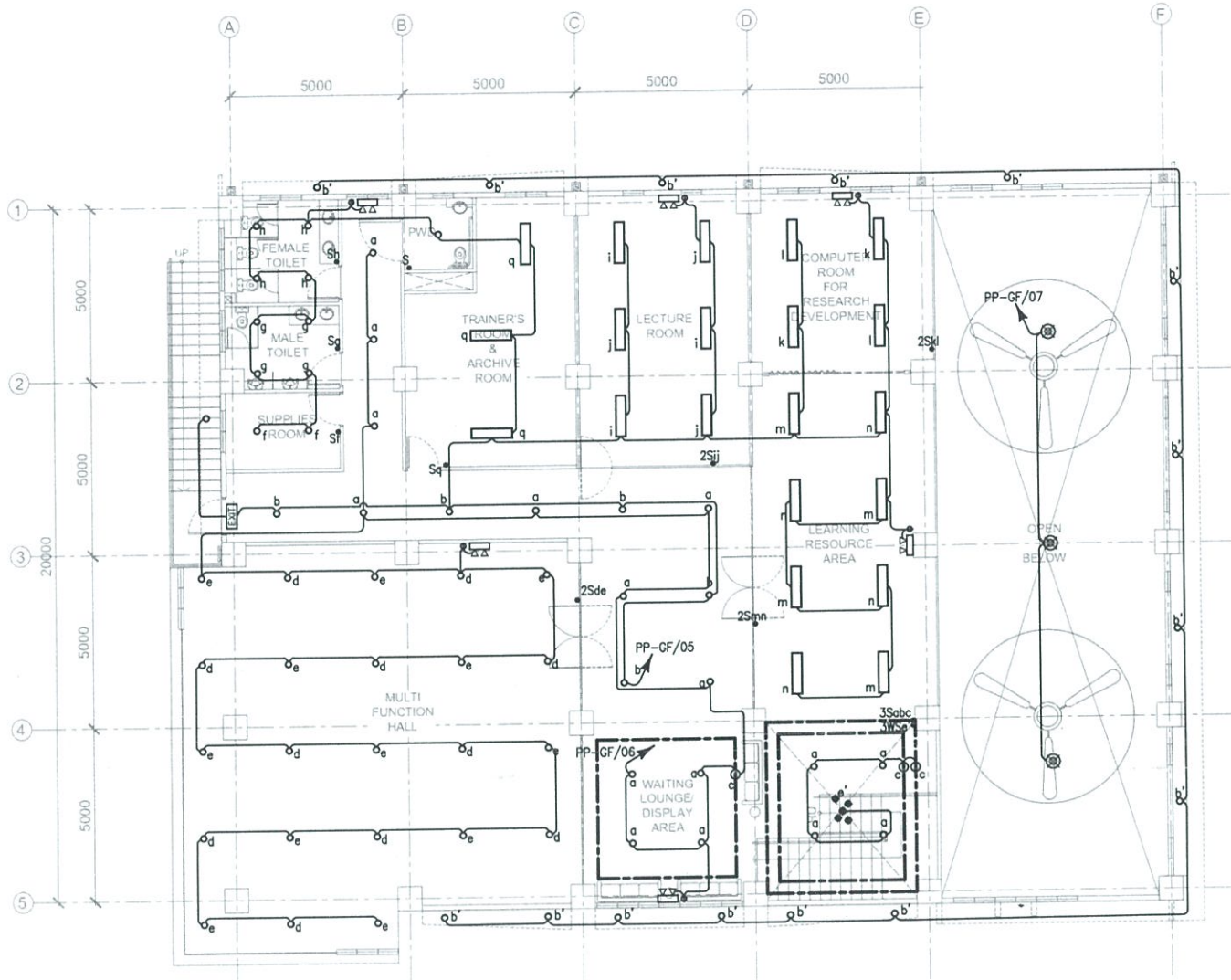
SHEET CONTENTS:

GROUND FLOOR LIGHTING LAYOUT

SHEET NO.

E-1

LEGENDS AND SYMBOLS	
	RECESSED MOUNTED, 13W LED DOWNLIGHT
	RECESSED MOUNTED, 26W LED DOWNLIGHT
	SURFACE MOUNTED, 1200mm, 20W LED FLUORESCENT LIGHT
	2x20W, 300mmx1200mm, CEILING RECESSED FLUORESCENT LIGHTING FIXTURE WITH ACRYLIC DIFFUSER
	PENDANT LIGHTING FIXTURE
	100W HIGH BAY LIGHTING FIXTURE
	TWIN-HEAD EMERGENCY LIGHT WITH 2HRS BATTERY BACK
	8W EXIT LIGHT WITH 2HRS BATTERY PACK
	13W SUSPENDED LINEAR LIGHT
	CONCEALED LIGHTING
	1 GANG, SINGLE POLE SINGLE THROW SWITCH, 15A, 230V
	2 GANG, SINGLE POLE SINGLE THROW SWITCH, 15A, 230V
	3 GANG, SINGLE POLE SINGLE THROW SWITCH, 15A, 230V
	RISER UP/DOWN
	JUNCTION BOX (CONCEALED LIGHTING PROVISION/TAPPING POINT)



TESDA INNOVATION CENTER - RTC-BATANGAS
SECOND FLOOR LIGHTING LAYOUT

SCALE:

1: 200 mm

FOR APPROVAL PLANS OF REGIONAL TVET INNOVATION CENTERS (RTICs) 2023



**TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**

MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City

PROJECT TITLE:

**PROPOSED TESDA RTC-BATANGAS
INNOVATION CENTER**

LOCATION: P. HERRERA ST. POBLACION 006, BATANGAS CITY

ELECTRICAL ENGINEER:

ENGR. JOHN ADRIAN C. SANTOS
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:	
------------------	--

DIR. ENRICO C. BANAR
PMU-SIPTVETS

PROJECT DIRECTOR:	
-------------------	--

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS

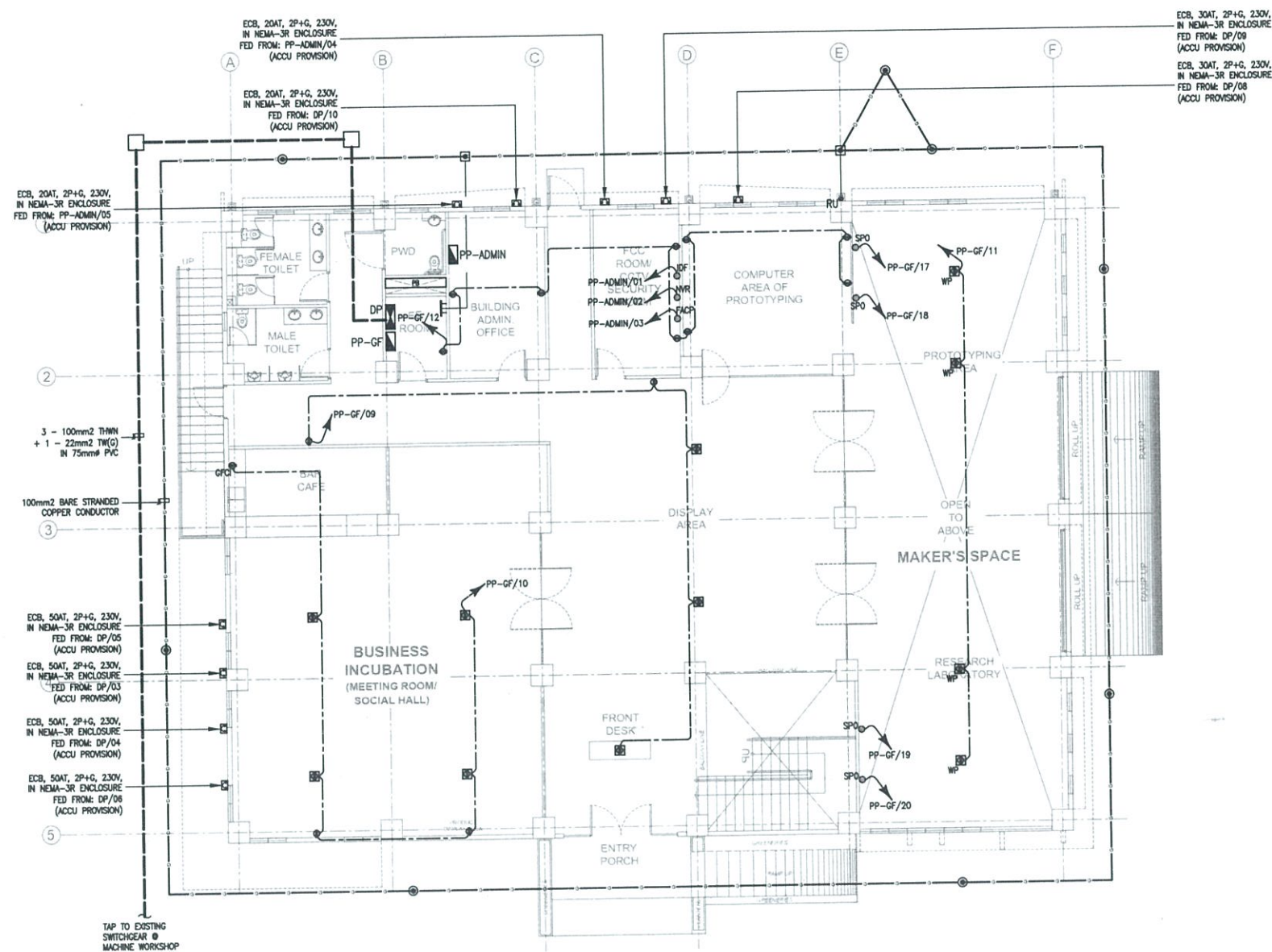
SHEET CONTENTS:

2ND FLOOR LIGHTING LAYOUT

SHEET NO.

E-2

LEGENDS AND SYMBOLS	
	DUPLEX CONVENIENCE OUTLET
	FLOOR MOUNTED CONVENIENCE OUTLET
	SIMPLEX CONVENIENCE OUTLET
	HAND DRYER PROVISION
	SPECIAL PURPOSE OUTLET
	JUNCTION BOX
	DISCONNECT SWITCH
	ENCLOSED CIRCUIT BREAKER
	DISTRIBUTION PANEL
	PANELBOARD
	GROUND BAR
	GROUND ROD WITH TESTING PIT
	GROUND ROD
	RISER UP/DOWN
	EARLY STREAMER EMISSION LIGHTNING PROTECTION



TESDA INNOVATION CENTER - RTC-BATANGAS
GROUND FLOOR GROUNDING & POWER LAYOUT

SCALE:

1: 200 mm

**FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023**

PROJECT OWNER:

**TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY**
MAIN OFFICE ADDRESS: TESDA COMPLEX, East Service Road SLEX, Taguig City

PROJECT TITLE:
**PROPOSED TESDA RTC-BATANGAS
INNOVATION CENTER**
LOCATION: P. HERRERA ST. POBLACION 006, BATANGAS CITY

ELECTRICAL ENGINEER:

ENGR. JOHN ADRIAN C. SANTOS
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

DIR. ENRICO C. BANARIO
PMU-SIPTVETS

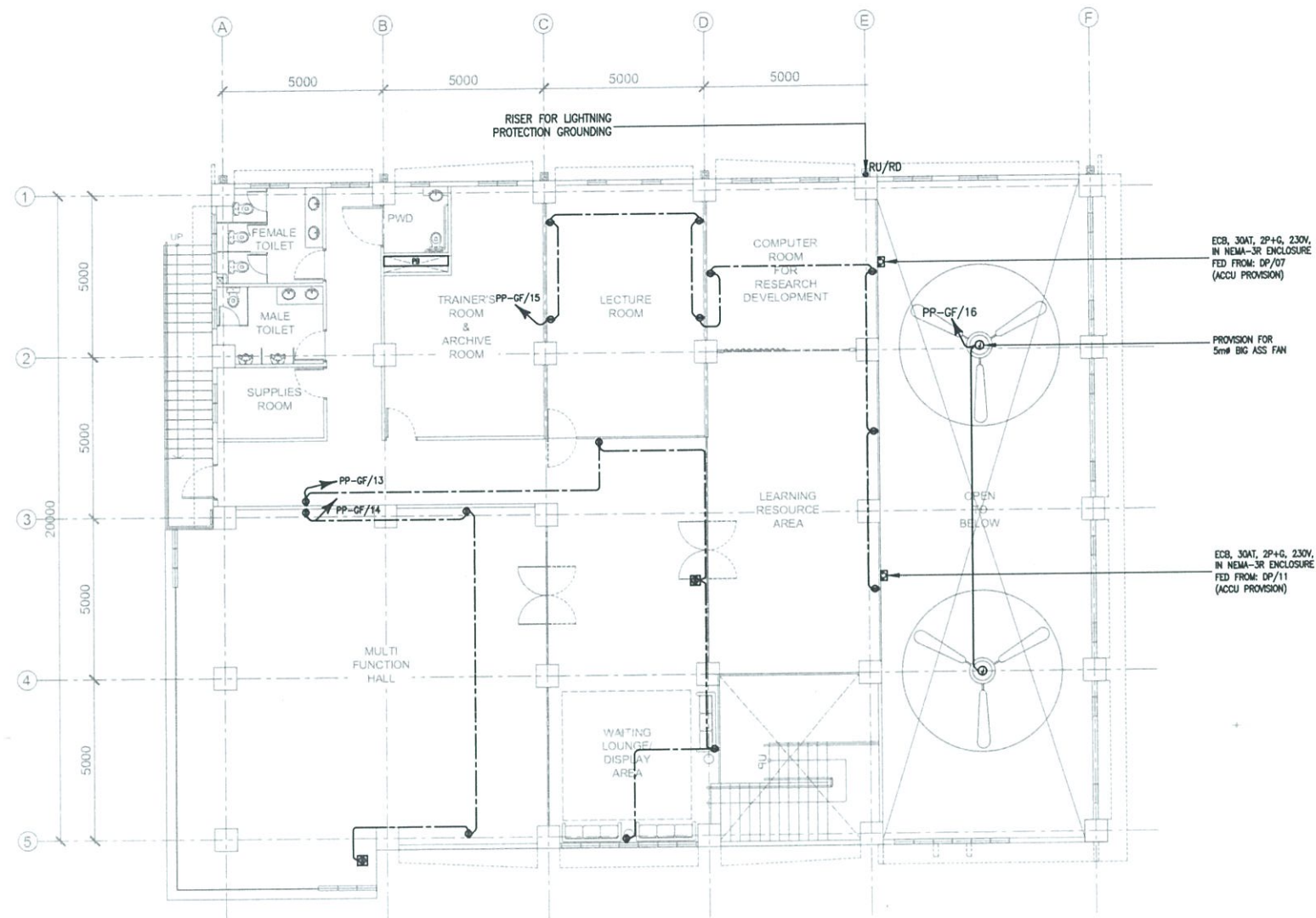
PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS

SHEET CONTENTS:
GROUND FLOOR GROUNDING &
POWER LAYOUT

SHEET NO.
E-3

LEGENDS AND SYMBOLS	
	DUPLEX CONVENIENCE OUTLET
	FLOOR MOUNTED CONVENIENCE OUTLET
	SIMPLEX CONVENIENCE OUTLET
	HAND DRYER PROVISION
	SPECIAL PURPOSE OUTLET
	JUNCTION BOX
	DISCONNECT SWITCH
	ENCLOSED CIRCUIT BREAKER
	DISTRIBUTION PANEL
	PANELBOARD
	GROUND BAR
	GROUND ROD WITH TESTING PIT
	GROUND ROD
	RISER UP/DOWN
	EARLY STREAMER EMISSION LIGHTNING PROTECTION



TESDA INNOVATION CENTER - BATANGAS
SECOND FLOOR POWER LAYOUT

SCALE: 1: 200 mm

**FOR APPROVAL PLANS OF
 REGIONAL TVET INNOVATION
 CENTERS (RTICs) 2023**



MARY OFFICE ADDRESS: TESDA COMPLEX, Exit Service Road (LEX), Taguig City

PROJECT TITLE:

**PROPOSED TESDA RTC-BATANGAS
 INNOVATION CENTER**

LOCATION: P. HERRERA ST. POBLACION 008, BATANGAS CITY

ELECTRICAL ENGINEER:

ENGR. JOHN ADRIAN C. SANTOS
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:

DIR. ENRICO C. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:

SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS

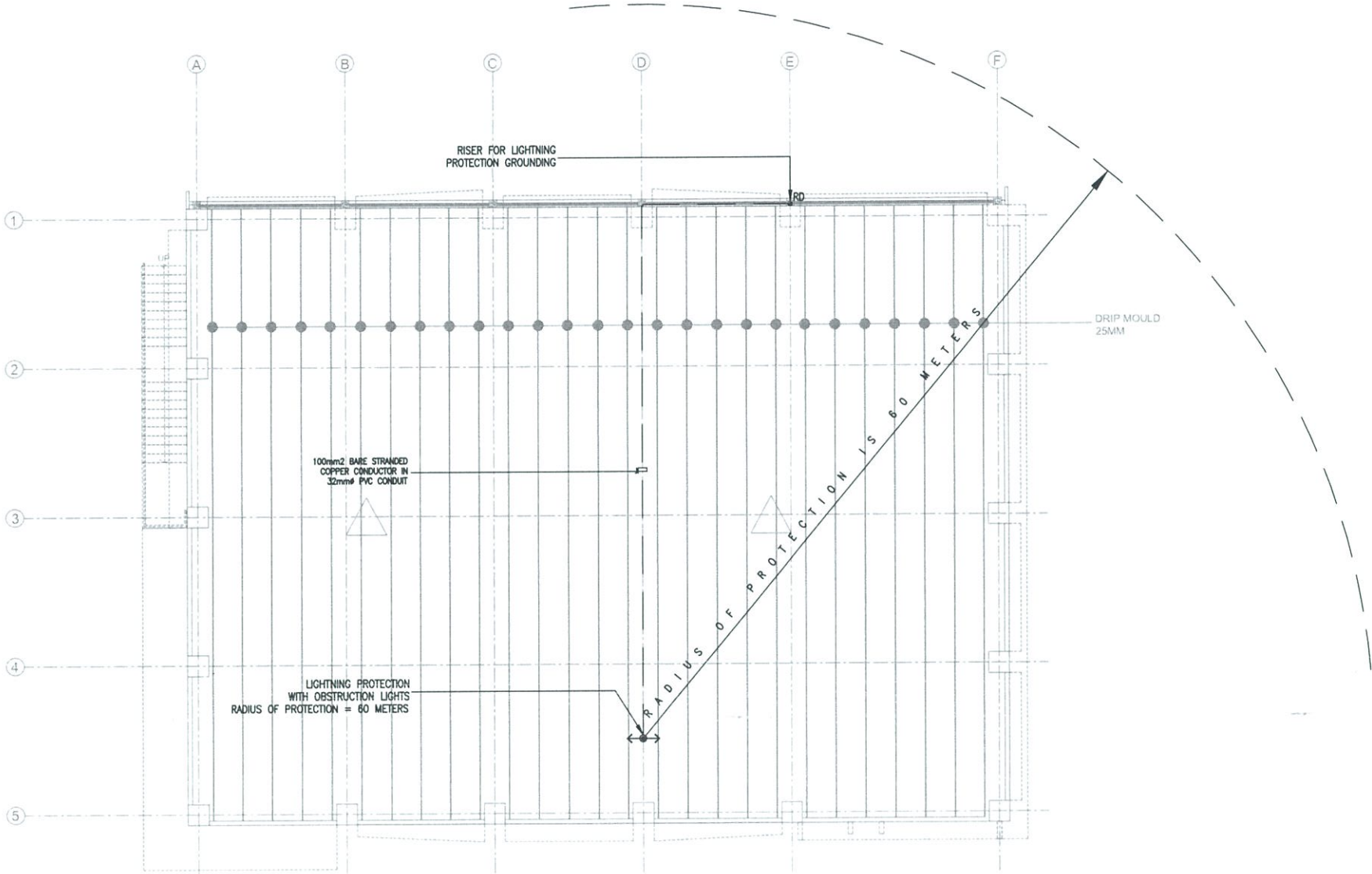
SHEET CONTENTS:

2ND FLOOR POWER LAYOUT

SHEET NO.

E-4

LEGENDS AND SYMBOLS	
	DUPLEX CONVENIENCE OUTLET
	FLOOR MOUNTED CONVENIENCE OUTLET
	SIMPLEX CONVENIENCE OUTLET
	HAND DRYER PROVISION
	SPECIAL PURPOSE OUTLET
	JUNCTION BOX
	DISCONNECT SWITCH
	ENCLOSED CIRCUIT BREAKER
	DISTRIBUTION PANEL
	PANELBOARD
	GROUND BAR
	GROUND ROD WITH TESTING PIT
	GROUND ROD
	RISER UP/DOWN
	EARLY STREAMER EMISSION LIGHTNING PROTECTION



TESDA INNOVATION CENTER - RTC-BATANGAS
ROOF LIGHTNING PROTECTION LAYOUT

SCALE: 1: 200 mm

FOR APPROVAL PLANS OF
REGIONAL TVET INNOVATION
CENTERS (RTICs) 2023

PROJECT OWNER:



TECHNICAL EDUCATION
AND
SKILLS DEVELOPMENT
AUTHORITY

MAIN OFFICE ADDRESS: TESDA COMPLEX, Exit Service Road SLEX, Taguig City

PROJECT TITLE:

PROPOSED TESDA RTC-BATANGAS
INNOVATION CENTER

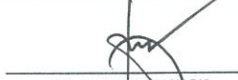
LOCATION: P. HERREIRA ST. POBLACION 306, BATANGAS CITY

ELECTRICAL ENGINEER:



ENGR. JOHN ADRIAN G. SANTOS
PMU-SIPTVETS
ENGINEERING SECTION

PROJECT MANAGER:



DIR. ENRICO C. BANARIO
PMU-SIPTVETS

PROJECT DIRECTOR:



SEC. SUHARTO T. MANGUDADATU, Ph.D.
PMU-SIPTVETS

SHEET CONTENTS:

ROOF LIGHTNING PROTECTION LAYOUT

SHEET NO.

E-5