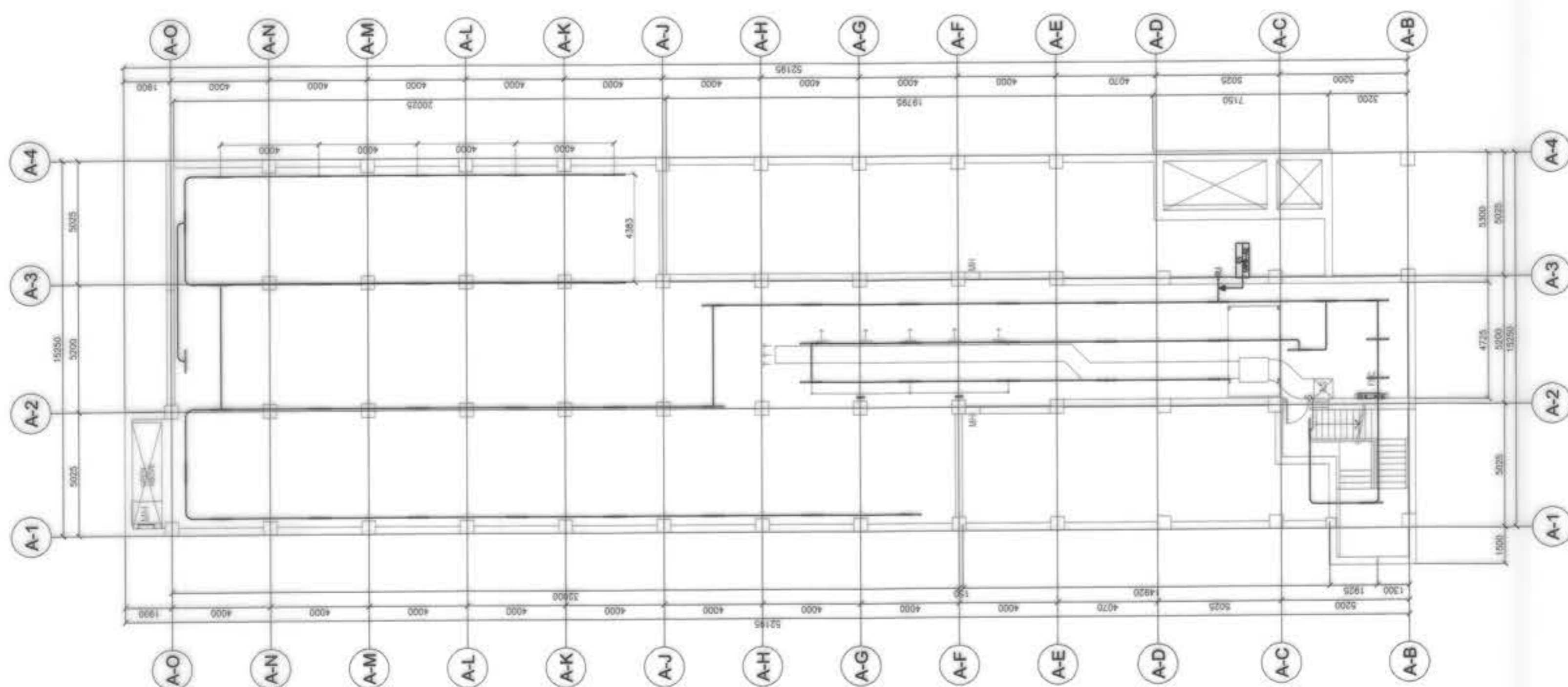


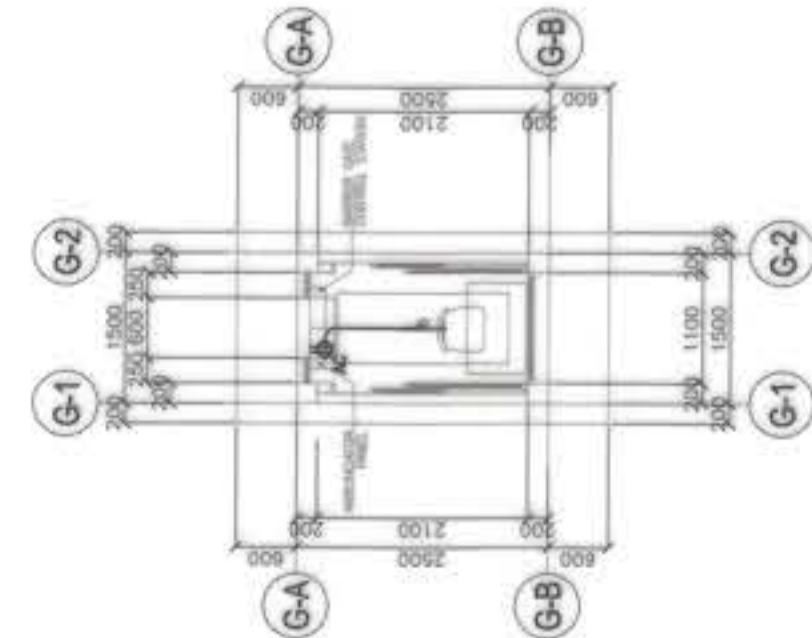
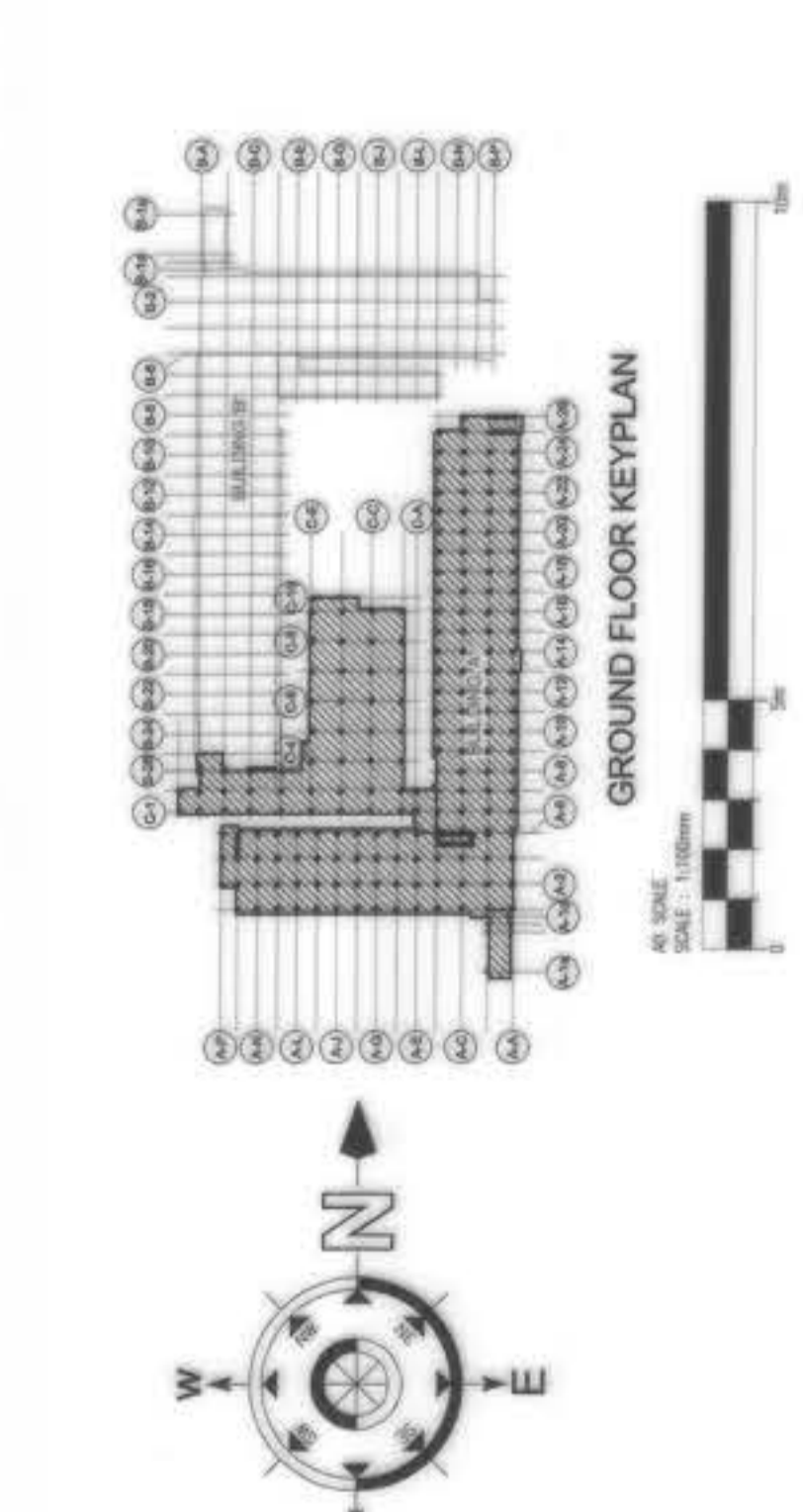
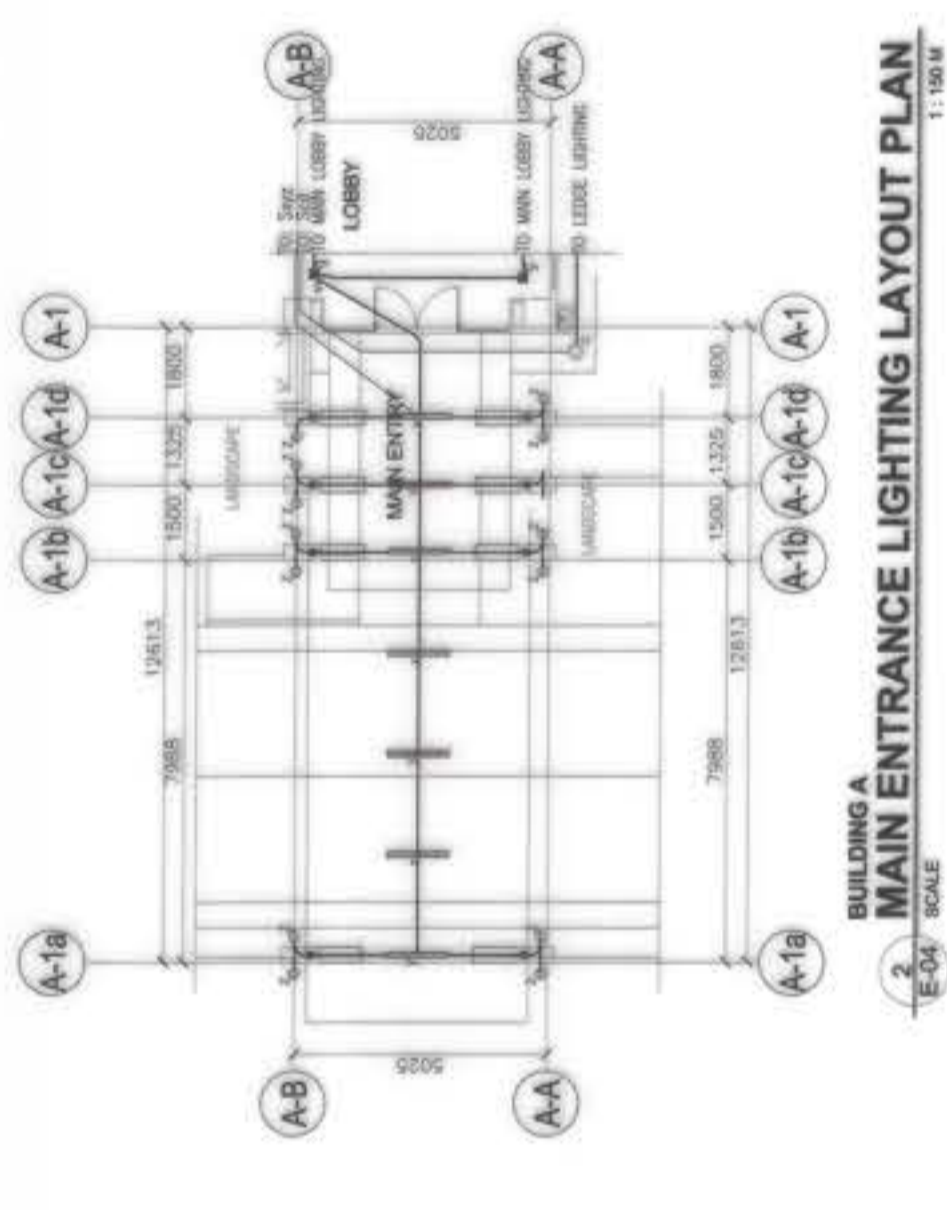
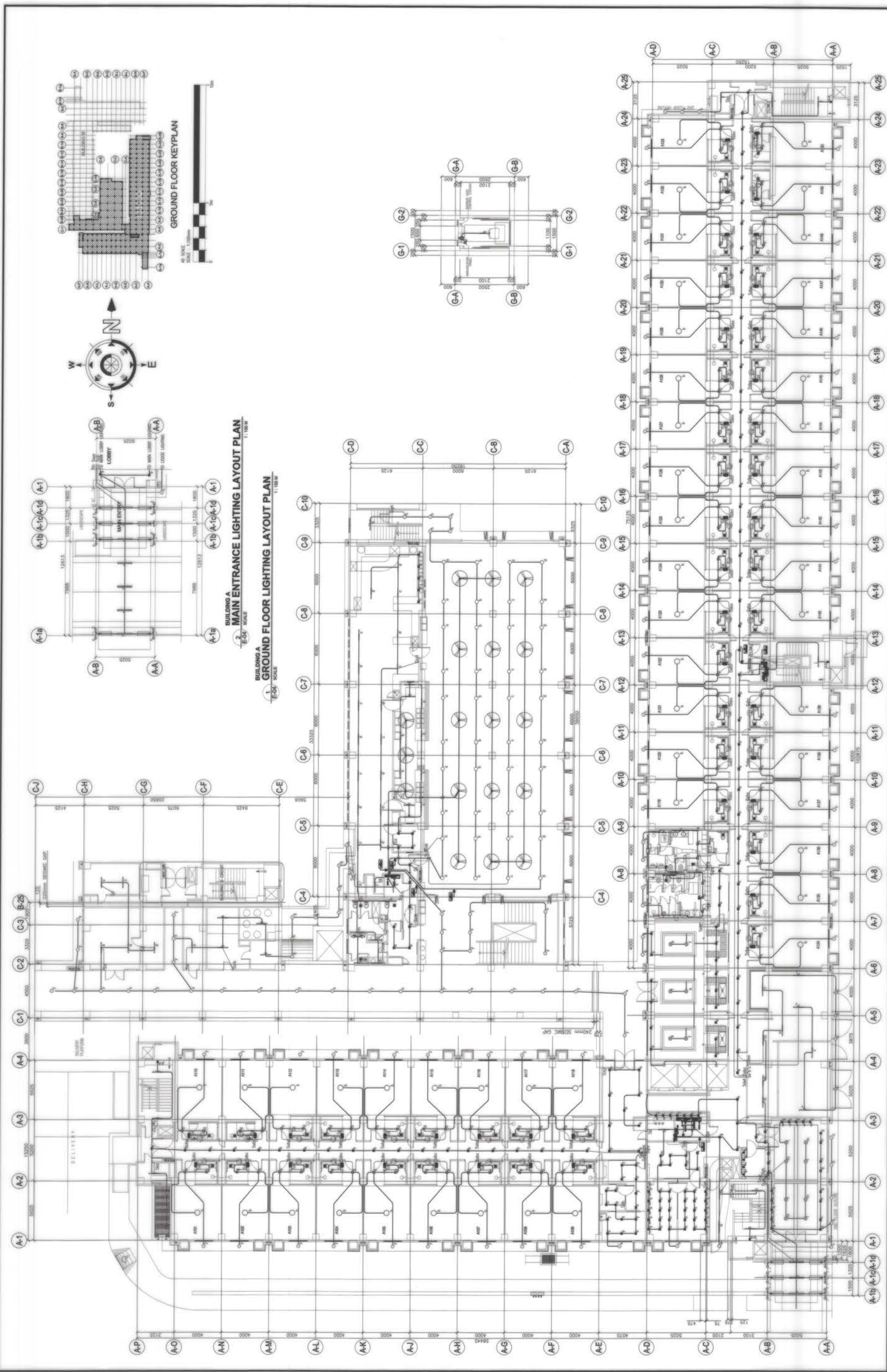
**MAIN POWER DISTRIBUTION LAYOUT/  
SITE LIGHTING AND POWER LAYOUT**  
E-02 SCALE 1:200.00

<p>OWNER : NGAC PHASE 1 JV COMPANY AND BCDA VICENCO B. PEZON PRESIDENT</p>	<p>PREPARED BY: FREY-FIL CORPORATION MAYNARD, MA VICENCO B. PEZON PRESIDENT</p>	<p>REVIEWED AND VALIDATED BY: FID ALFREDO R. REVILLA PROJECT MANAGER</p>	<p>SUBMITTED BY: BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT</p>	<p>CERTIFIED BY: INDEPENDENT CONSULTANT TCGIENGINEERS VIRGLIO A. MADRAGO PRESIDENT/CEO</p>	<p>PROJECT TITLE: <b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE ELECTRICAL</p>	<p>SHEET CONTENTS: MAIN POWER DISTRIBUTION LAYOUT / SITE LIGHTING AND POWER LAYOUT</p> <p>SHEET NO. <b>E-02</b></p>
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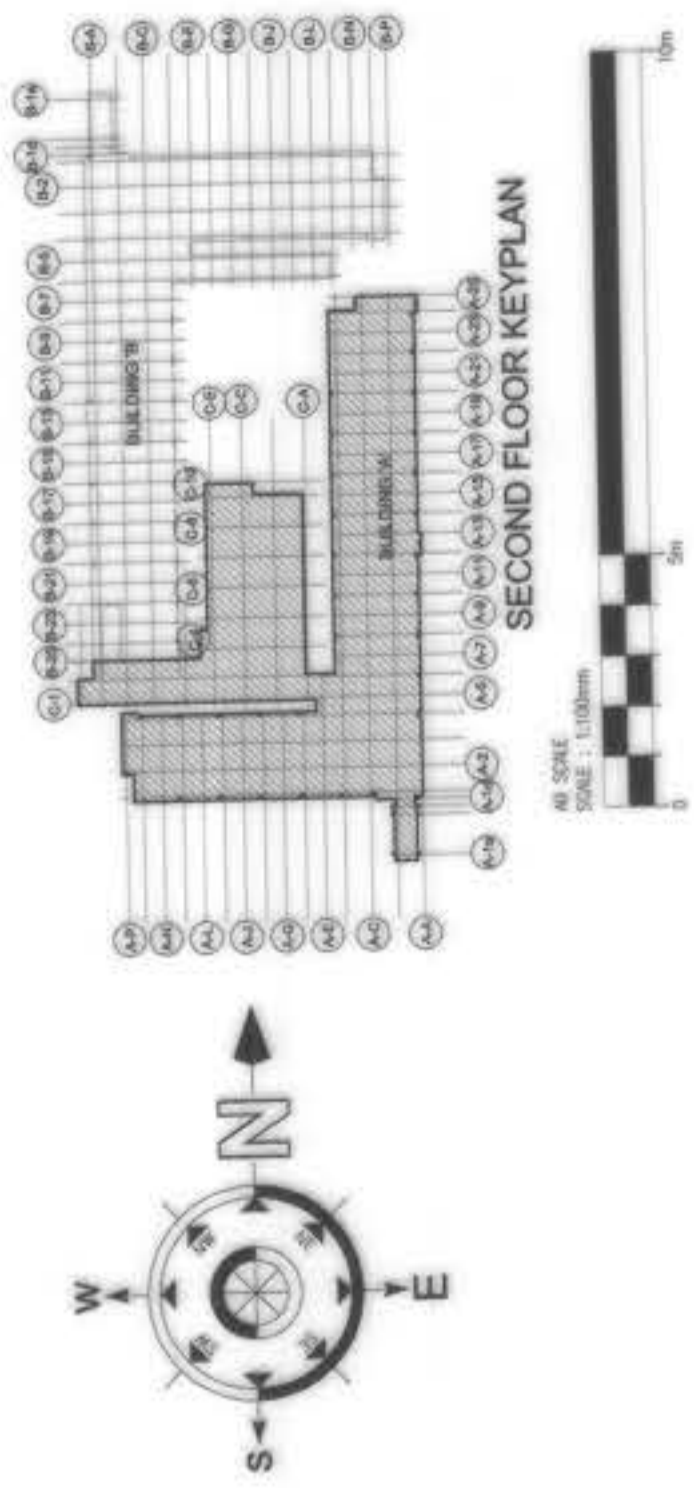


**BUILDING A**  
**1. BASMENT FLOOR LIGHTING LAYOUT PLAN**  
 E-03 SCALE 1:100

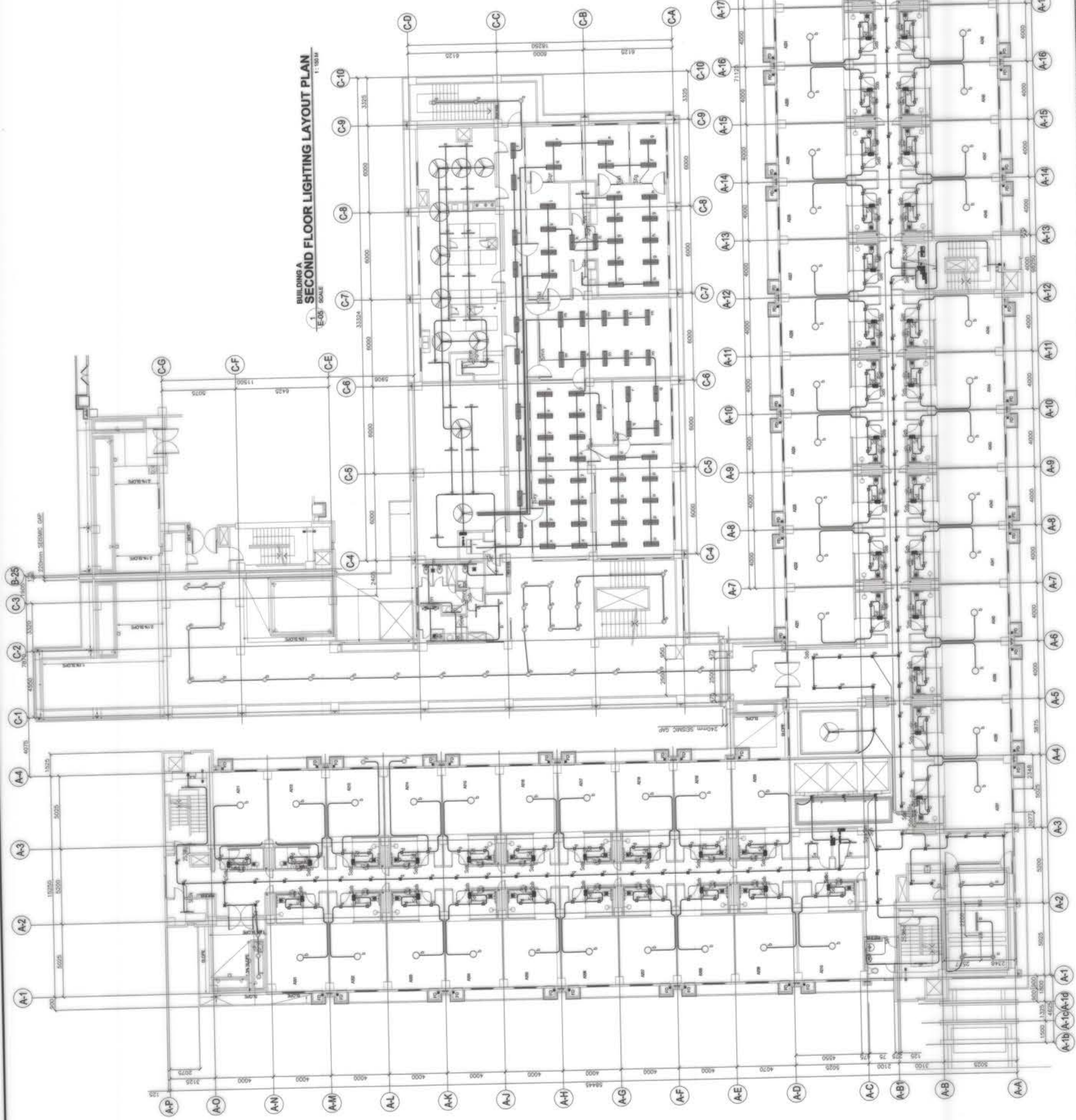
<p>OWNER : NGAC PHASE 1A COMPANY          AND  <b>BCDA</b>          BANGALOR CITY DEVELOPMENT AUTHORITY          VENKAT B. DIXON          PRESIDENT</p>	<p>PREPARED BY:  <b>FREY-FIL CORPORATION</b>          REG. NO.: 062609 TR. NO.: 118-08-214 PLACE: MUMBAI          ZOILO S. DELA CRUZ          VICE PRESIDENT - OPERATION          PIR. No: 011608          DATE: 01-20-2018</p>	<p>REVIEWED AND VALIDATED BY:  <b>FUD</b>          FILIPINAS DRAVO CORPORATION          Architectural &amp; Engineering Consultants          ALFREDO R. REVILLA          PROJECT MANAGER</p>	<p>SUBMITTED BY:  <b>AmMa</b>          BANDAR HEBAT BUILDERS, INC.          ISAAC S. DAVID          PRESIDENT</p>	<p>CERTIFIED BY: INDEPENDENT CONSULTANT  <b>T</b>  <b>TCCI ENGINEERS</b>          VIRGILIO A. MADRAZO          PRESIDENT/CEO</p>	<p>PROJECT TITLE:  <b>AS-BUILT DRAWING</b>          NGAC PHASE 1A          ATHLETES VILLAGE - BUILDING A          ELECTRICAL          New Clark City, Capas, Tarlac</p>	<p>SHEET CONTENTS:          BUILDING "A" BASEMENT FLOOR          LIGHTING LAYOUT PLAN</p> <p>SHEET NO.  <b>E-03</b></p>
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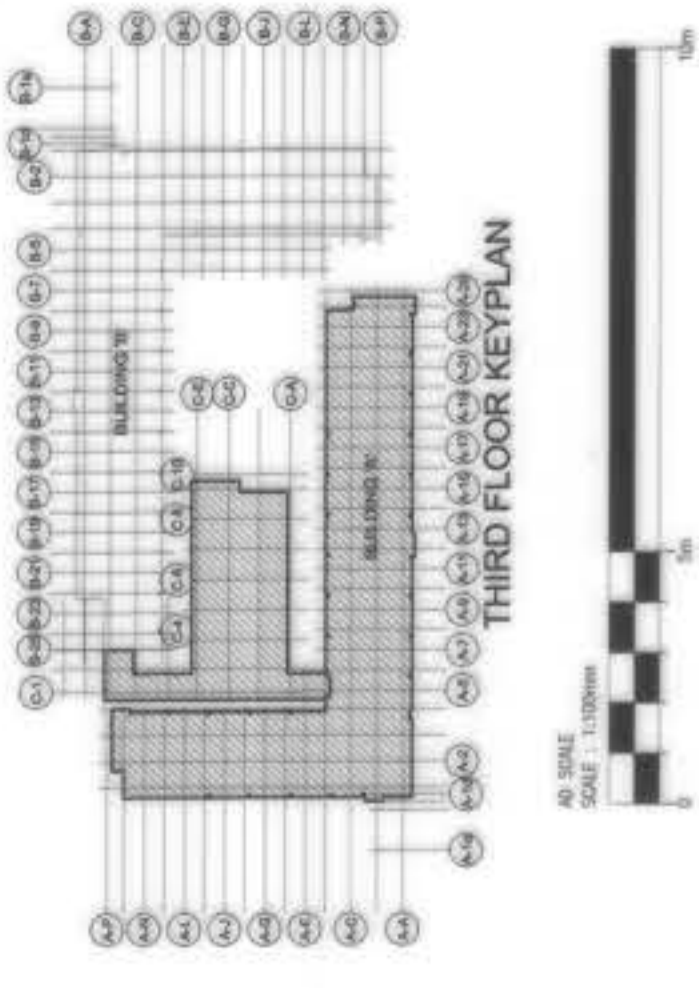
OWNER :	NGAC PHASE I JV COMPANY	PREPARED BY :	FREY-FIL CORPORATION REG. NO. 150007 TIN NO. 118-09-214 DATE: 01.20.2019	REVIEWED AND VALIDATED BY :	FILIPINAS DRAYVO CORPORATION Architectural & Engineering Consultants ALFREDO T. REVILLA PROJECT MANAGER	SUBMITTED BY :	BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	CERTIFIED BY :	TCGI ENGINEERS INDEPENDENT CONSULTANT VIRGIOLO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE :	AS-BUILT DRAWING NGAC PHASE IA ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	SHEET NO. :	E-04
	AND		BCDA VICENCO B. BEZON PRESIDENT		ZOILLO S. DELA CRUZ VICE PRESIDENT-OPERATION REG. NO. 150007 TIN NO. 118-09-214 DATE: 01.20.2019		FILIPINAS DRAYVO CORPORATION Architectural & Engineering Consultants ALFREDO T. REVILLA PROJECT MANAGER		BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT		TCGI ENGINEERS INDEPENDENT CONSULTANT VIRGIOLO A. MADRAZO PRESIDENT/CEO		AS-BUILT DRAWING NGAC PHASE IA ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac



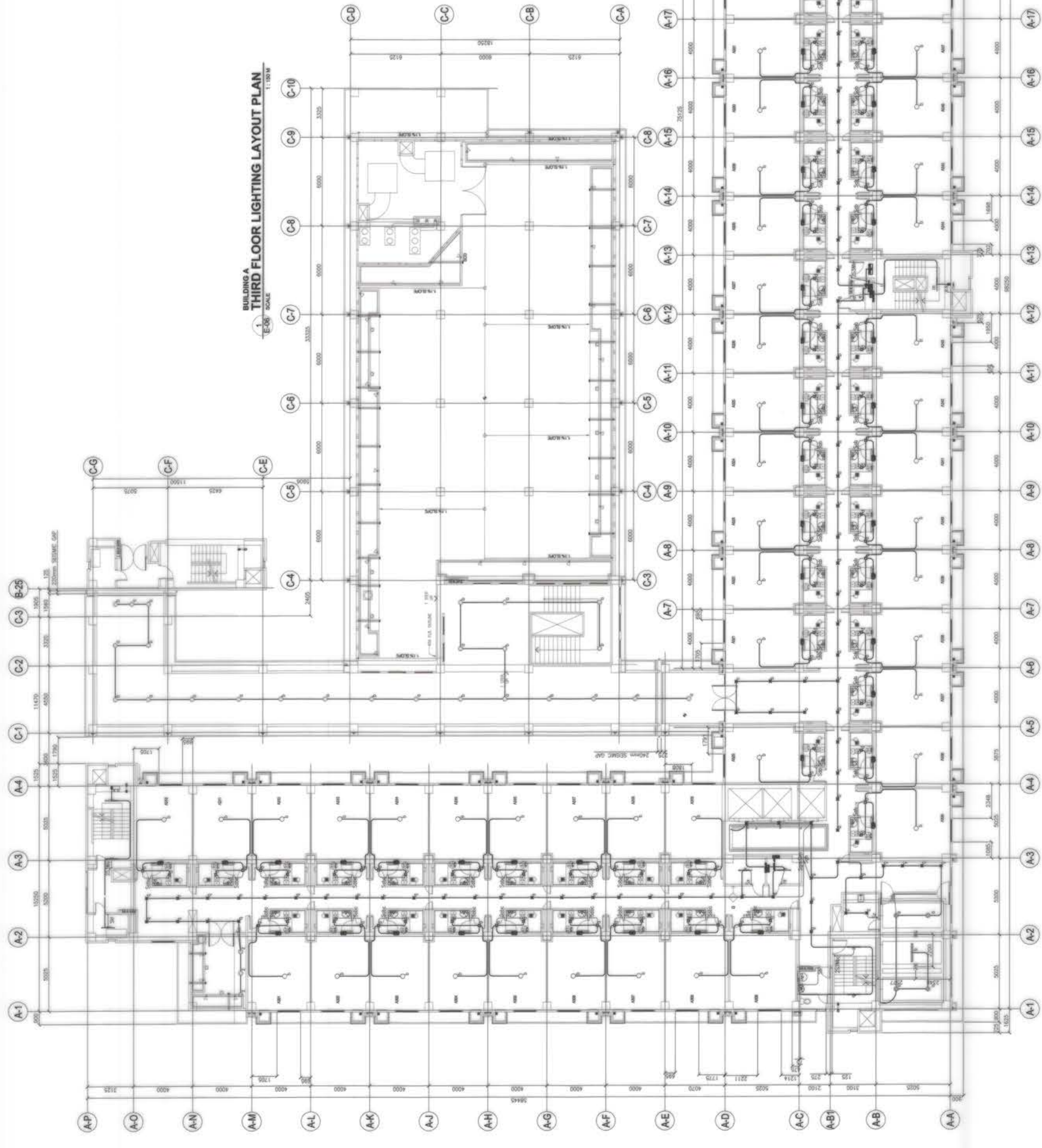
**BUILDING A  
SECOND FLOOR LIGHTING LAYOUT PLAN**  
E-05 SCALE 1:1000



OWNER : <b>BCDA</b> WENCO B. DEON PRESIDENT	PREPARED BY: <b>FREY-FIL CORPORATION</b> REG. NO. 000007 VIN. NO. 115-05-078 DATE: 01.03.2018	REVIEWED AND VALIDATED BY: <b>F70</b>	SUBMITTED BY: <b>FILIPINAS DRAVO CORPORATION</b> Architectural & Engineering Consultants ALFREDO R. REVILLA PROJECT MANAGER	BANDAR HERBAT BUILDERS, INC. <b>ISAAC S. DAVID</b> PRESIDENT	CERTIFIED BY: INDEPENDENT CONSULTANT <b>TCGI ENGINEERS</b> VIRGIO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE: <b>AS-BUILT DRAWING</b>	SHEET NO.:
						PROJECT TITLE: <b>NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL</b> New Clark City, Capas, Tarlac	<b>E-05</b>

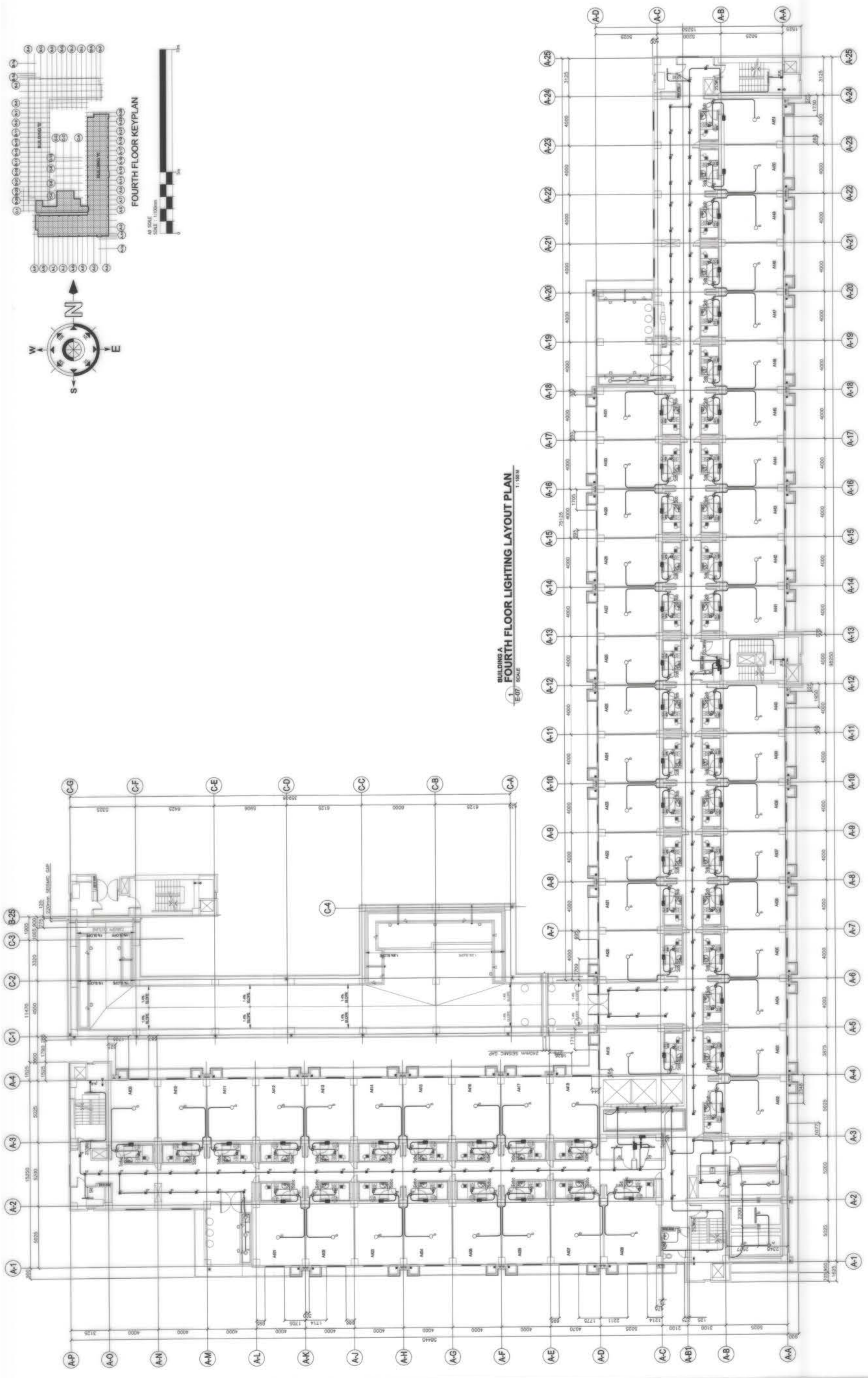


BUILDING A  
THIRD FLOOR LIGHTING LAYOUT PLAN  
E-06 SCALE 1:100

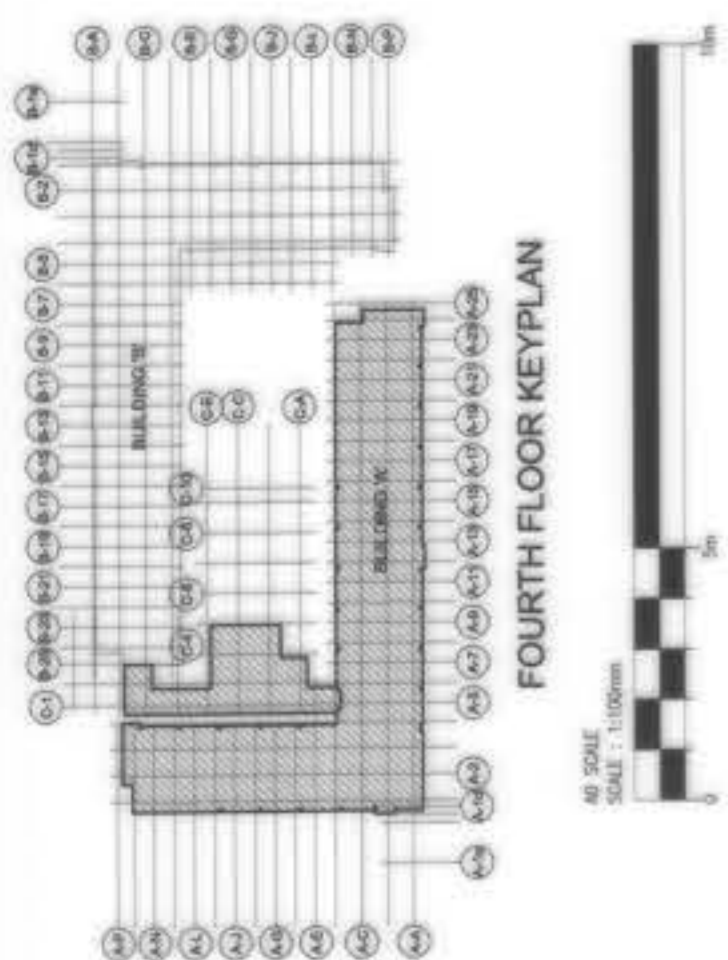


<p>OWNER : NGAC PHASE I JV COMPANY</p>	<p>PREPARED BY: FREY-JIL CORPORATION MANILA - DIVISION - CEBU - LEGAL REG. No. 009897 / PIR No. 011008 DATE: 02.28.2018</p>	<p>REVIEWED AND VALIDATED BY: 770</p>	<p>SUBMITTED BY: BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT</p>	<p>CERTIFIED BY: INDEPENDENT CONSULTANT TCGI ENGINEERS VIRGILIO A. MADRAZO PRESIDENT/CEO</p>	<p>PROJECT TITLE: AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac</p>	<p>SHEET CONTENTS: BUILDING "A" THIRD FLOOR LIGHTING LAYOUT PLAN</p>	<p>SHEET NO. E-06</p>
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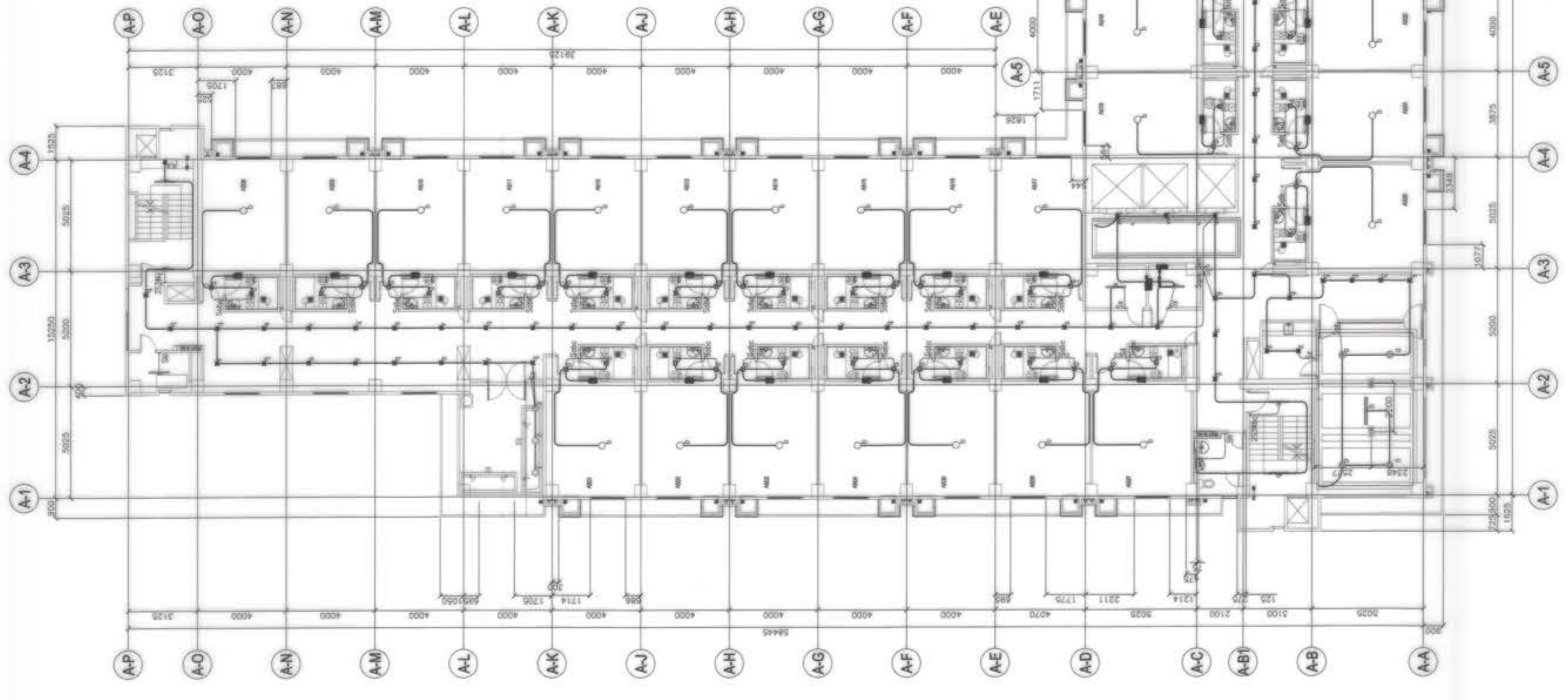
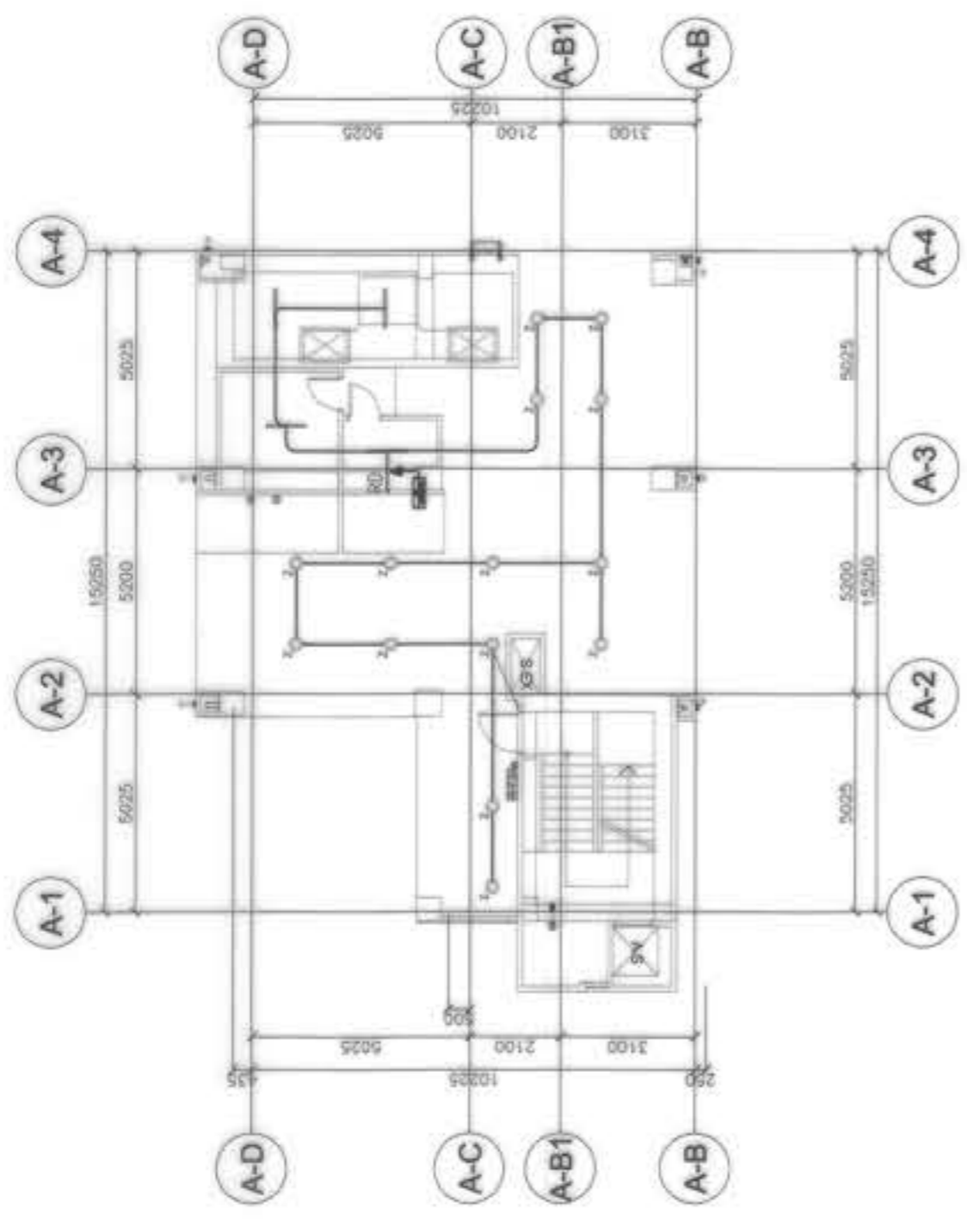
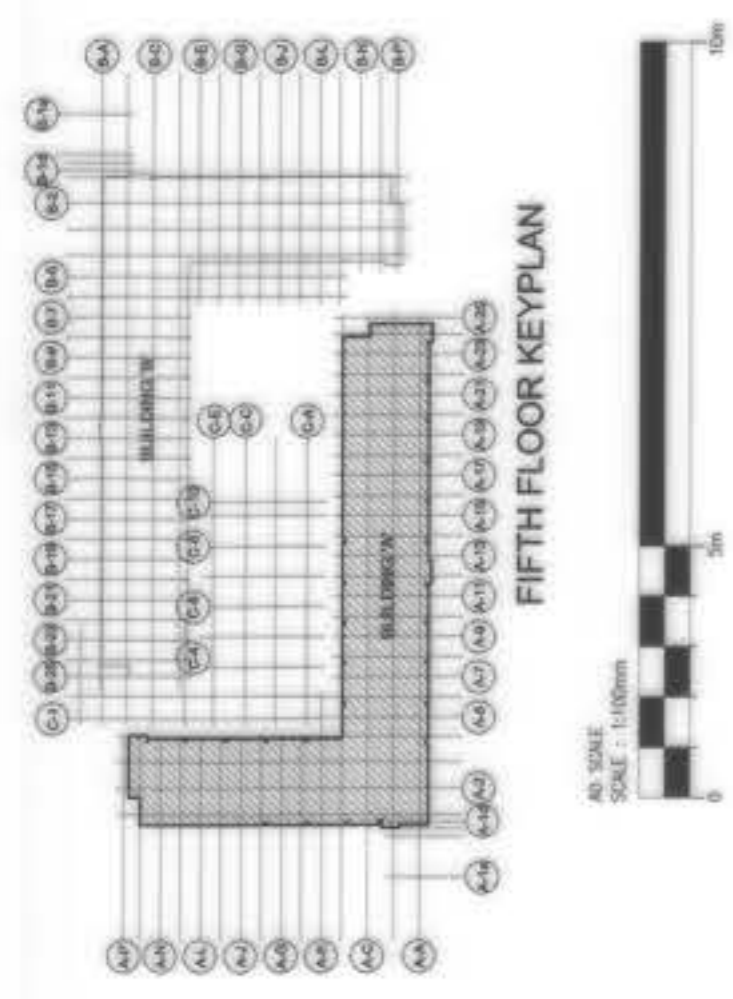
<p>AND BCDA VIVENCIO B. BIZON PRESIDENT</p>	<p>PREPARED BY: ZUILO S. DELA-CRUZ VICE PRESIDENT - OPERATION REG. No. 009897 / PIR No. 011008 DATE: 02.28.2018</p>	<p>REVIEWED AND VALIDATED BY: 770</p>	<p>SUBMITTED BY: BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT</p>	<p>CERTIFIED BY: INDEPENDENT CONSULTANT TCGI ENGINEERS VIRGILIO A. MADRAZO PRESIDENT/CEO</p>	<p>PROJECT TITLE: AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac</p>	<p>SHEET CONTENTS: BUILDING "A" THIRD FLOOR LIGHTING LAYOUT PLAN</p>	<p>SHEET NO. E-06</p>
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BUILDING A  
 FOURTH FLOOR LIGHTING LAYOUT PLAN  
 1:100 SCALE

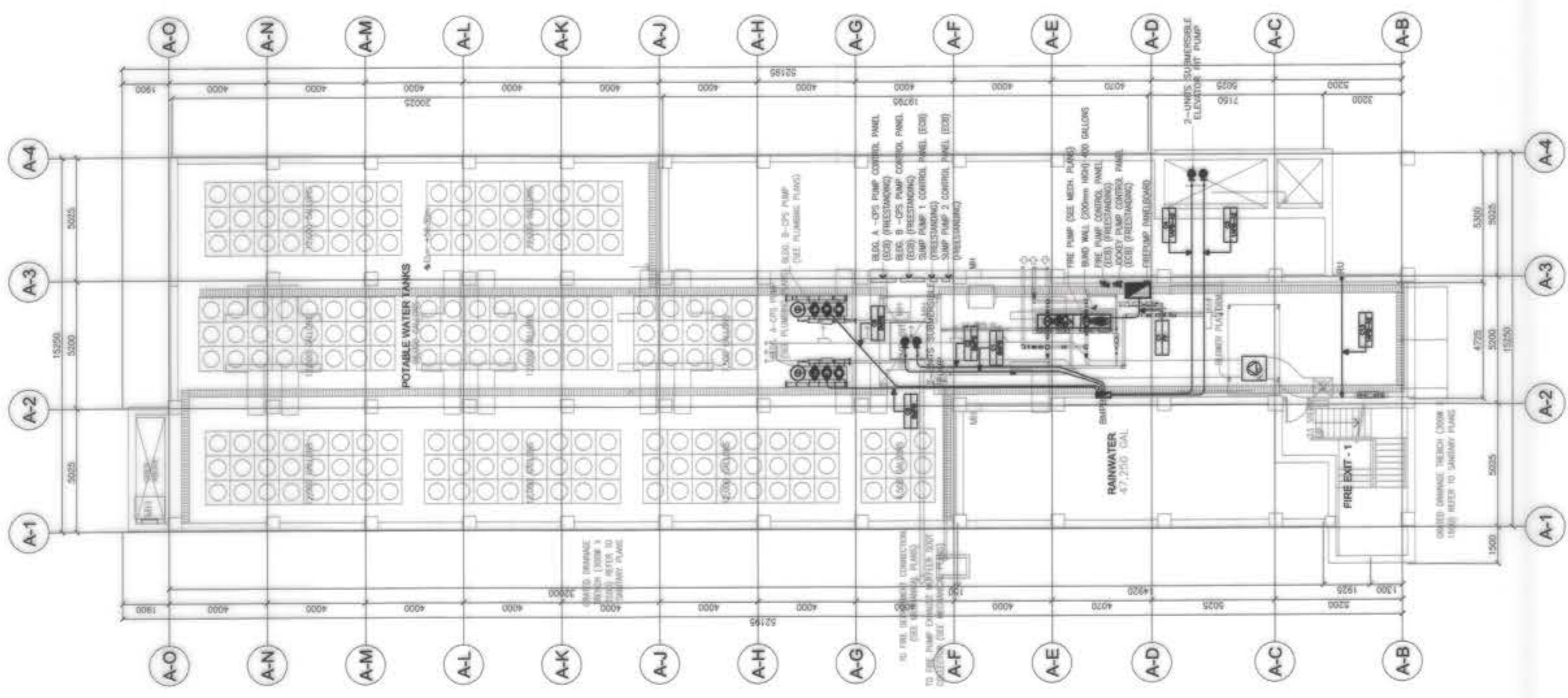


OWNER : NGAC PHASE 1 JV COMPANY AND BCDA VICENCIO B. DION PRESIDENT	PREPARED BY: FREY-FIL CORPORATION VICENTE S. FREY PRESIDENT REG. No.: 000077 TIN No.: 115-08-274 DATE: 01-20-2019	REVIEWED AND VALIDATED BY: FID ZUILO S. DELA CRUZ VICE PRESIDENT - OPERATION REG. No.: 000077 TIN No.: 115-08-274 DATE: 01-20-2019	FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants ALBERGO R. REVILLA PROJECT MANAGER	SUBMITTED BY: BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	CERTIFIED BY: INDEPENDENT CONSULTANT TCGI ENGINEERS VIRGIO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE: AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	SHEET NO.: E-07
						SHEET CONTENTS: BUILDING "A" FOURTH FLOOR LIGHTING LAYOUT PLAN	



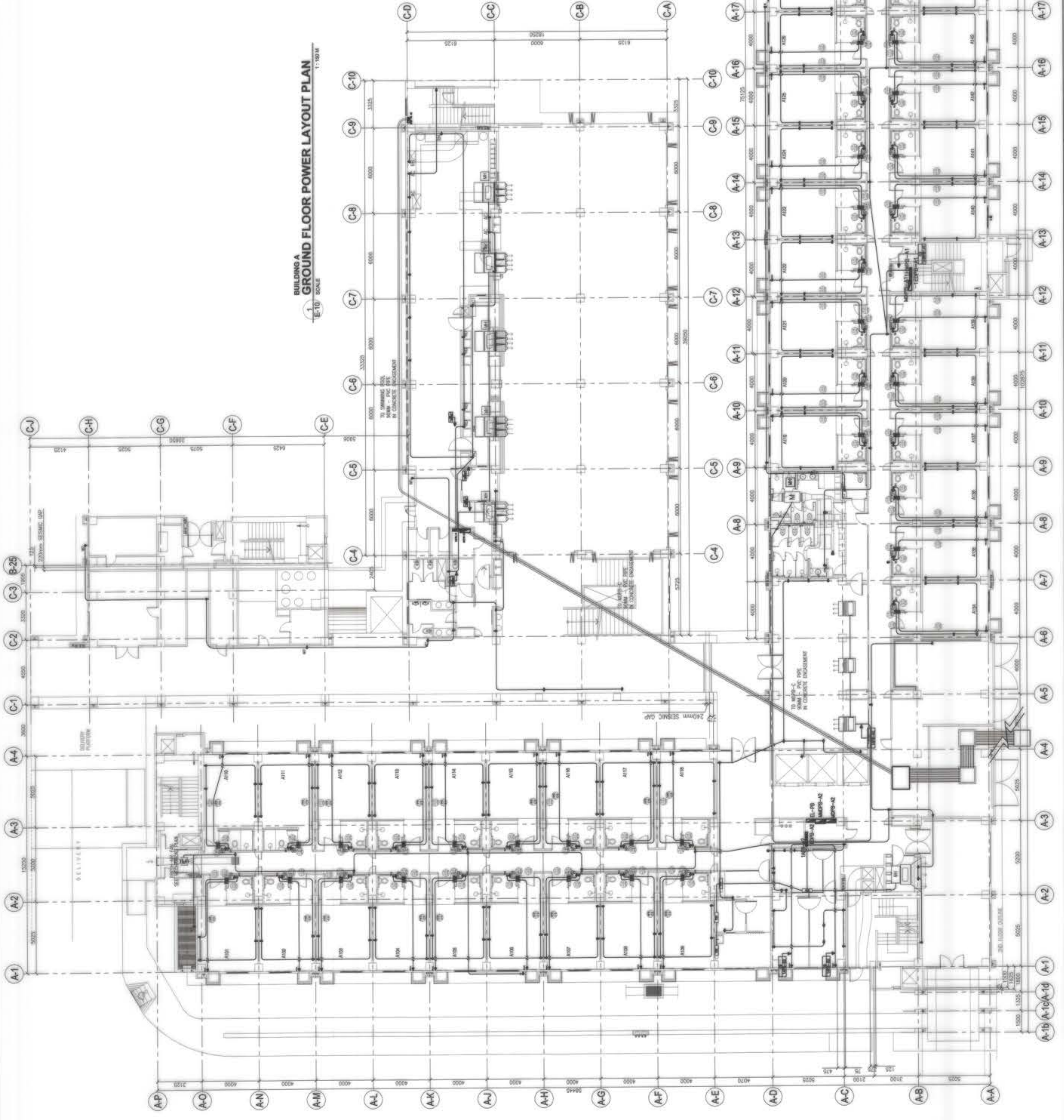
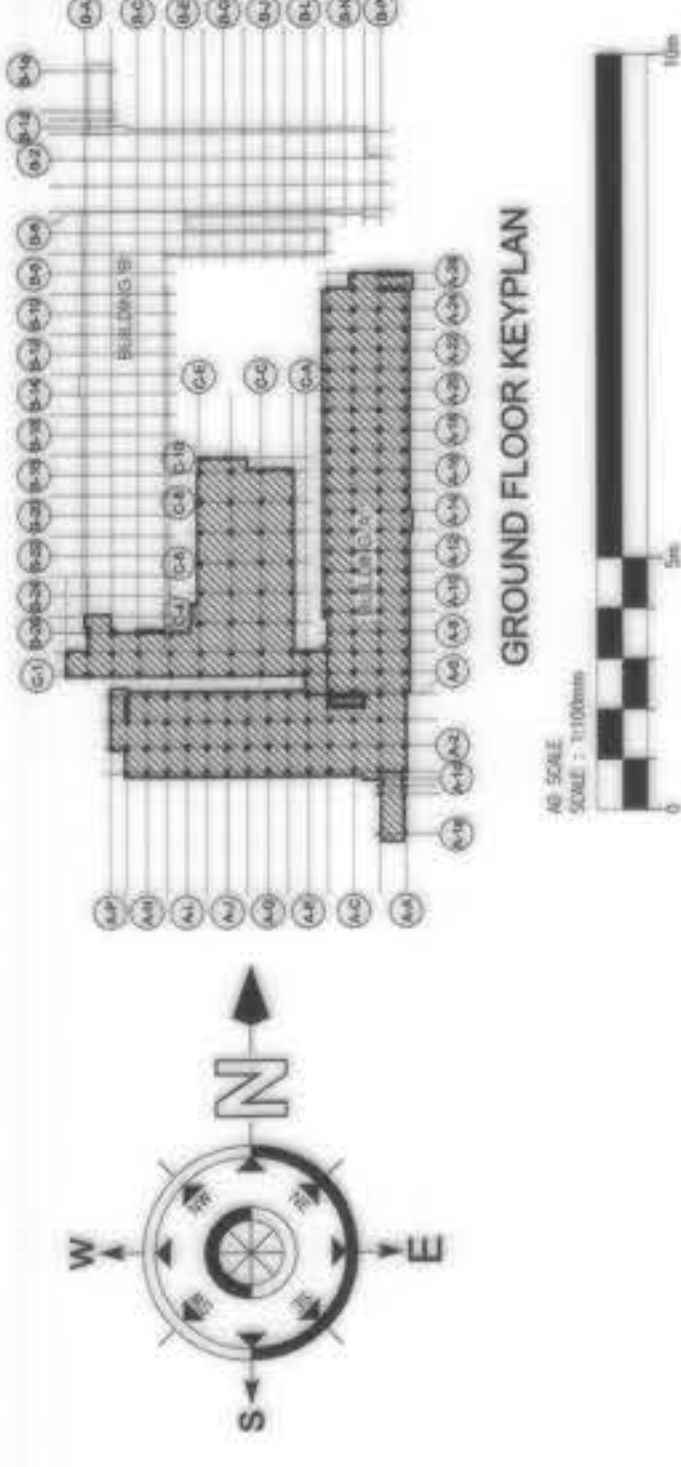
OWNER :	NGAC PHASE 1A COMPANY	PREPARED BY :	BCDA WENCO B. DEON PRESIDENT	REVIEWED AND VALIDATED BY :	 <b>FILIPINAS DRAVO CORPORATION</b> Architectural & Engineering Consultants ALFREDO R. REVILLA PROJECT MANAGER	SUBMITTED BY :	 <b>BANDAR HEBAT BUILDERS, INC.</b> ISAAC S. DAVID PRESIDENT	CERTIFIED BY :	 <b>TCGI ENGINEERS</b> VIRGILIO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE :	AS-BUILT DRAWING	SHEET NO. :	E-08
	AND		 <b>NGAC PHASE 1A</b> ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac								BUILDING "A" FIFTH FLOOR LIGHTING LAYOUT PLAN		



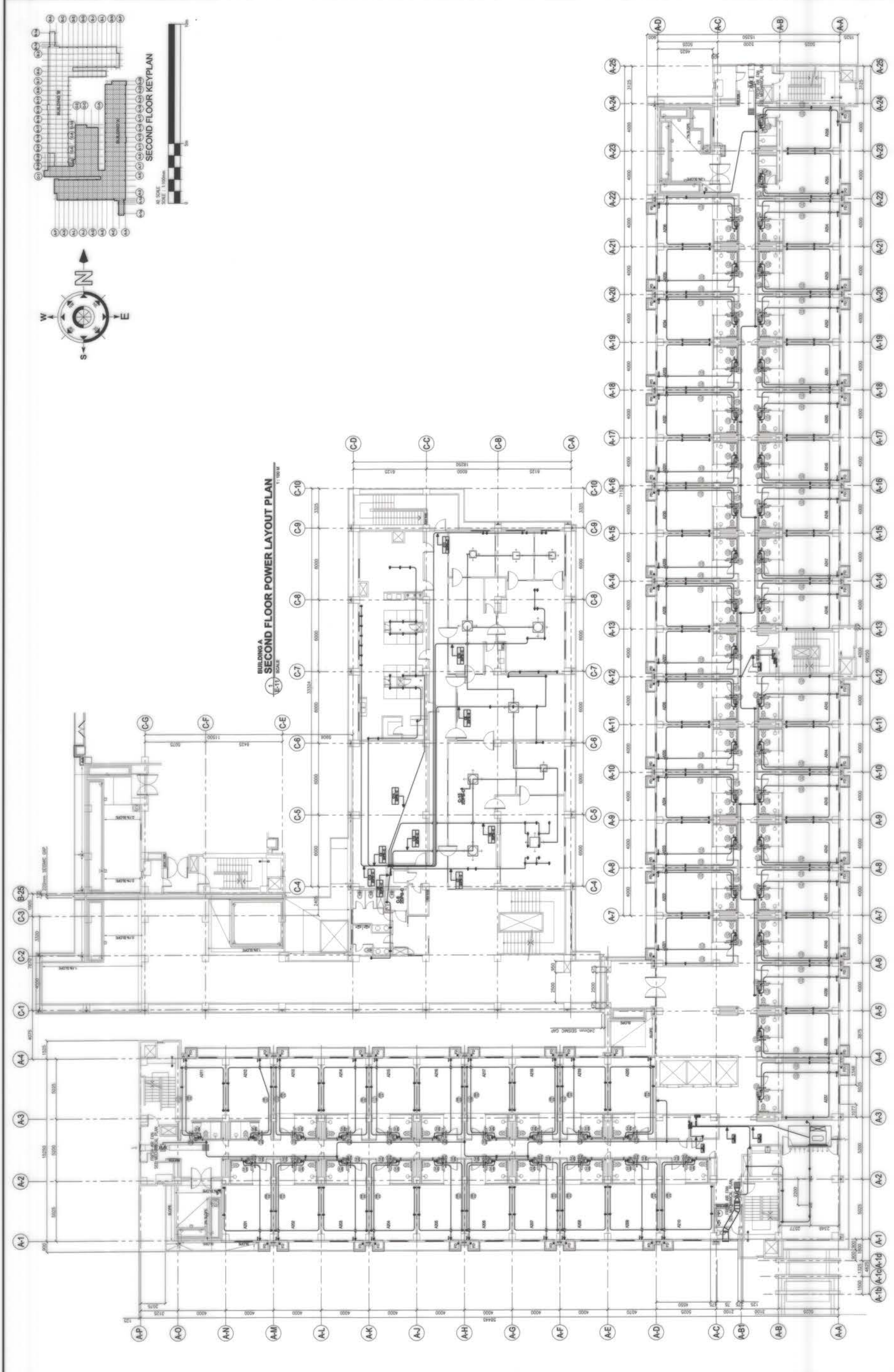


**BUILDING A**  
**BASMENT FLOOR POWER LAYOUT PLAN**  
 1/8" = 1'-0" SCALE

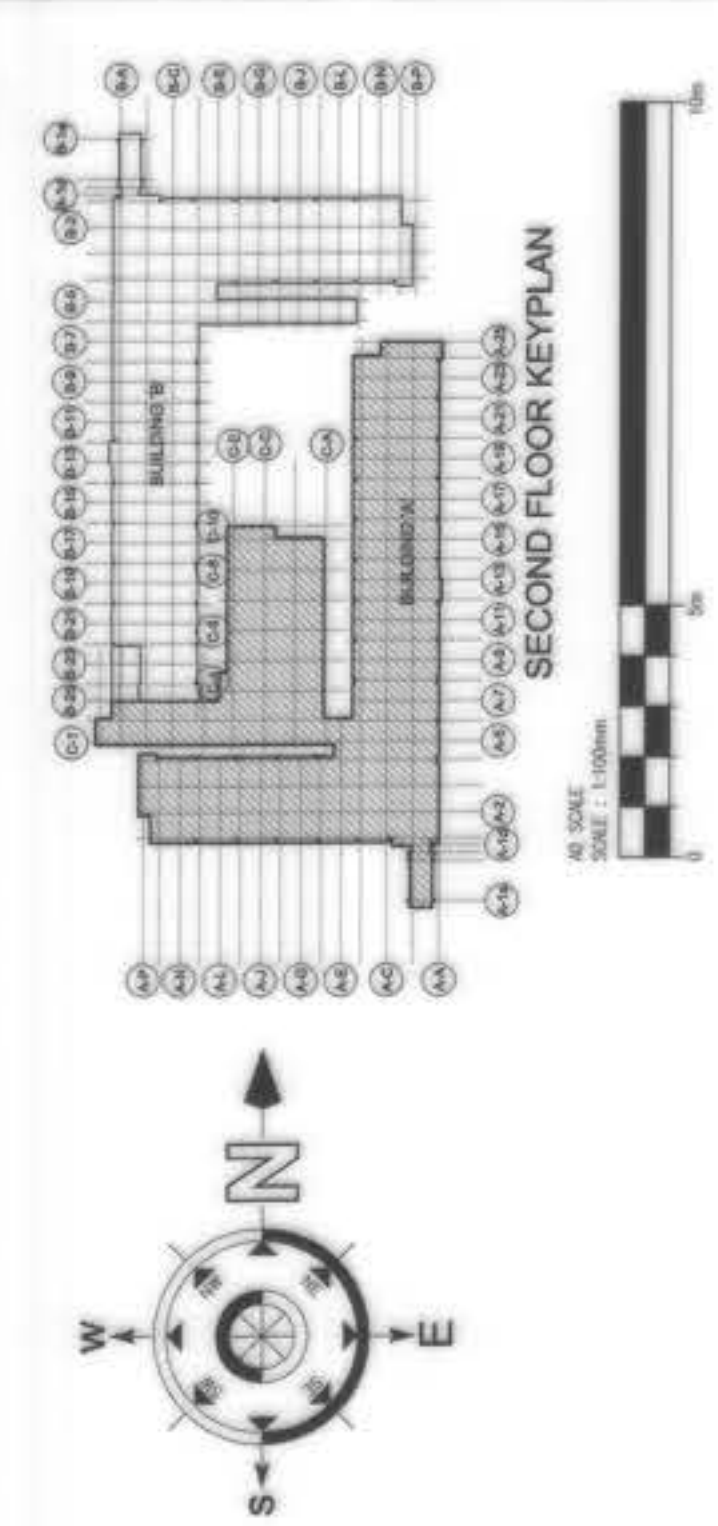
OWNER :	NGAC PHASE 1 JV COMPANY	PREPARED BY :	 <b>BCDA</b> VIRGENIO B. DUMON PRESIDENT	REVIEWED AND VALIDATED BY :	 <b>ZS</b> ZOILO S. DELA CRUZ VICE PRESIDENT REG. No.: 092997 TIN No.: 118-428-279 DATE: 04.23.2019	SUBMITTED BY :	 <b>BANDAR HEBAT BUILDERS, INC.</b> ISAAC S. DAVID PRESIDENT	SHEET NO. :	E-09	CERTIFIED BY :	 <b>TCGI ENGINEERS</b> VIRGILIO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE :	<b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	SHEET CONTENTS :	BUILDING "A" BASEMENT FLOOR POWER LAYOUT PLAN
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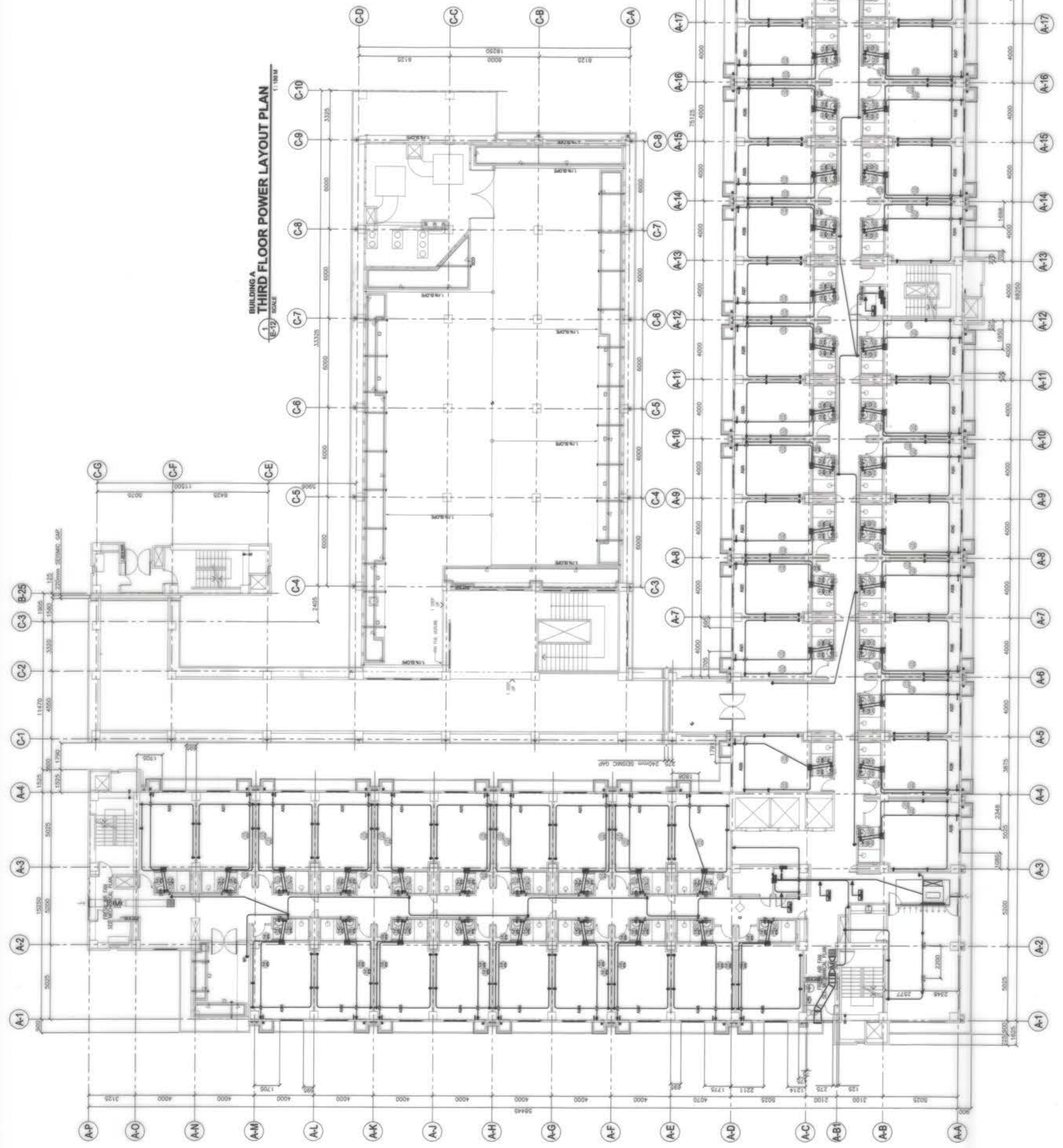
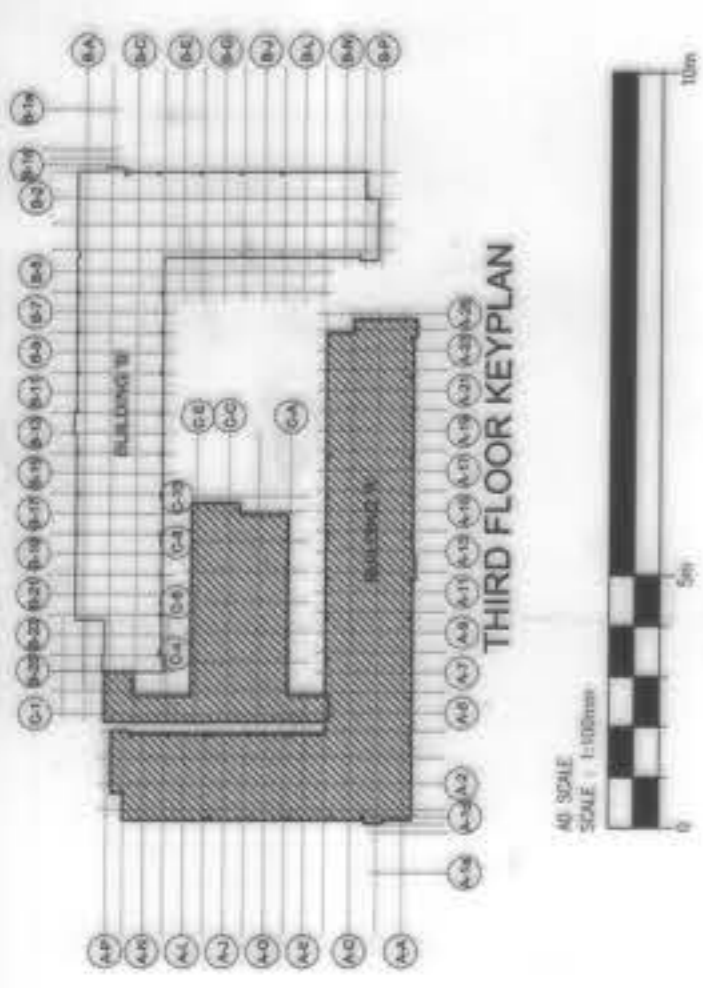
OWNER :	NGAC PHASE 1 JV COMPANY	PREPARED BY :	<b>BCDA</b> BANGALOR CITY DEVELOPMENT AUTHORITY VENCIO B. DION PRESIDENT	<b>ITD</b> AND <b>FREY-FIL CORPORATION</b> FREY-FIL CORPORATION 1105 S. BAYVIEW COURT, SUITE 100 MIAMI, FL 33134 TEL: 305-358-1234 FAX: 305-358-1234 WWW.FREY-FIL.COM	<b>ZOILO S. DELA CRUZ</b> VICE PRESIDENT - EXECUTION REG. No.: 00000000000000000000 TIN No.: 118-426-274 DATE: 01-20-2018	<b>FILIPINAS DRAVO CORPORATION</b> Architectural & Engineering Consultants 11th Floor, 1105 S. Bayview Court, Suite 100, Miami, FL 33134 TEL: 305-358-1234 FAX: 305-358-1234 WWW.FILIPINASDRAVO.COM	<b>ALFREDO R. REVILLA</b> PROJECT MANAGER	<b>BANDAR HEBAT BUILDERS, INC.</b> <b>ISAAC S. DAVID</b> PRESIDENT	<b>TCGI ENGINEERS</b> 4875 N.W. 21st Ave., Suite 200, Coral Gables, FL 33134 TEL: 305-442-1111 FAX: 305-442-1112 WWW.TCGIENGINEERS.COM	<b>VIRGILIO A. MADRAZO</b> PRESIDENT/CEO	PROJECT TITLE: <b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	SHEET CONTENTS: BUILDING "A" GROUND FLOOR POWER LAYOUT PLAN	SHEET NO. <b>E-10</b>
	SUBMITTED BY:		REVIEWED AND VALIDATED BY:										



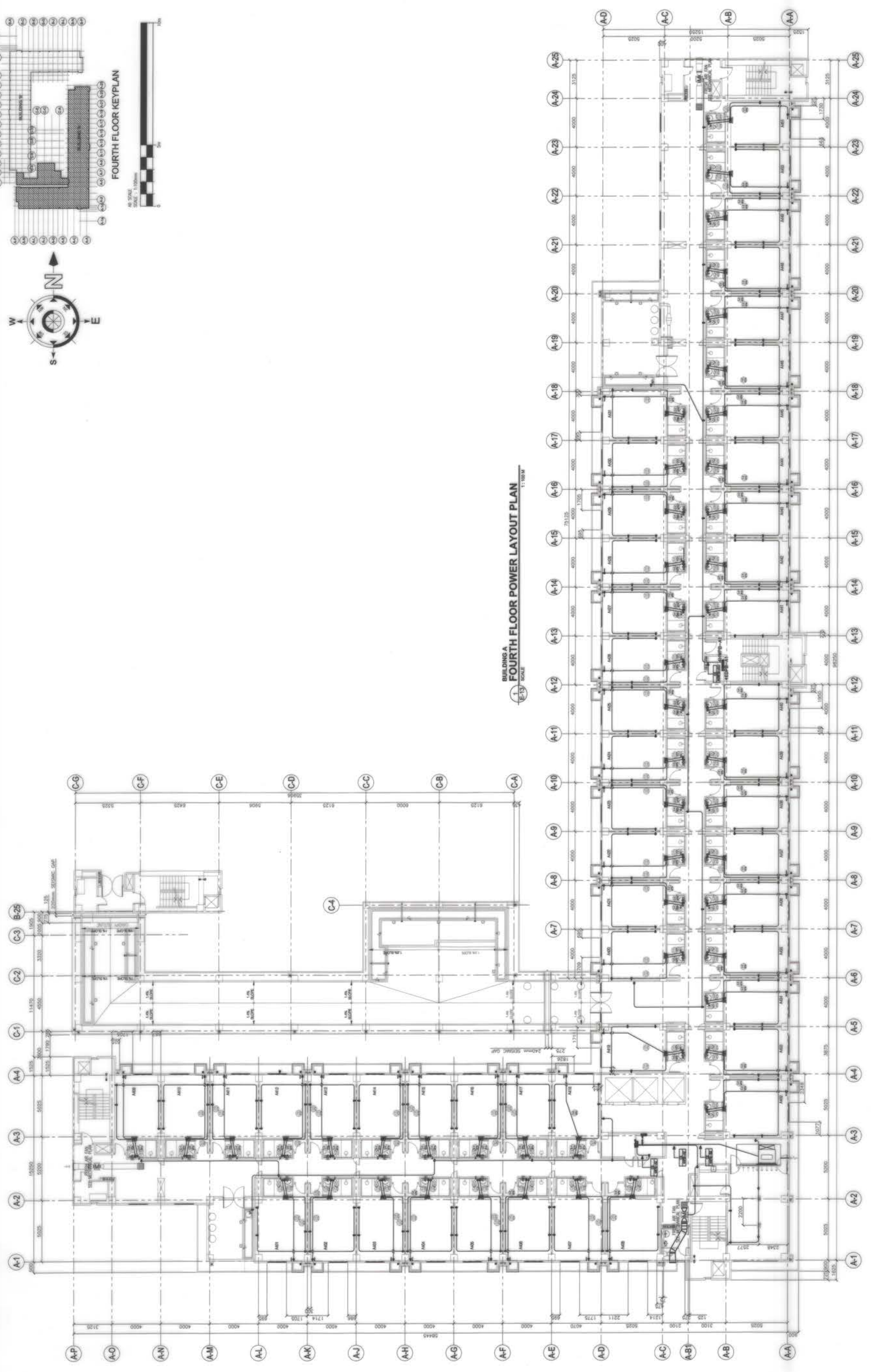
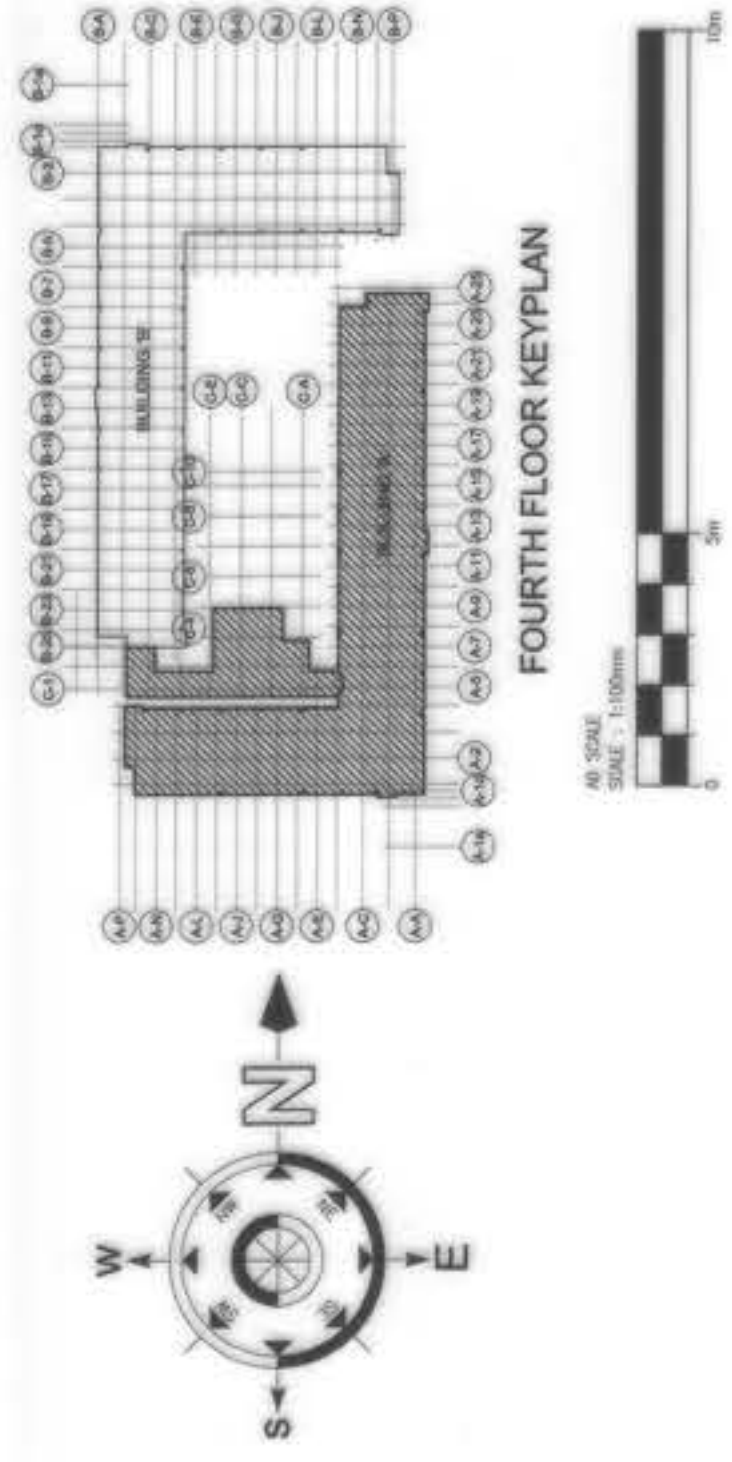
BUILDING A  
SECOND FLOOR POWER LAYOUT PLAN  
E-11 SCALE 1:1000



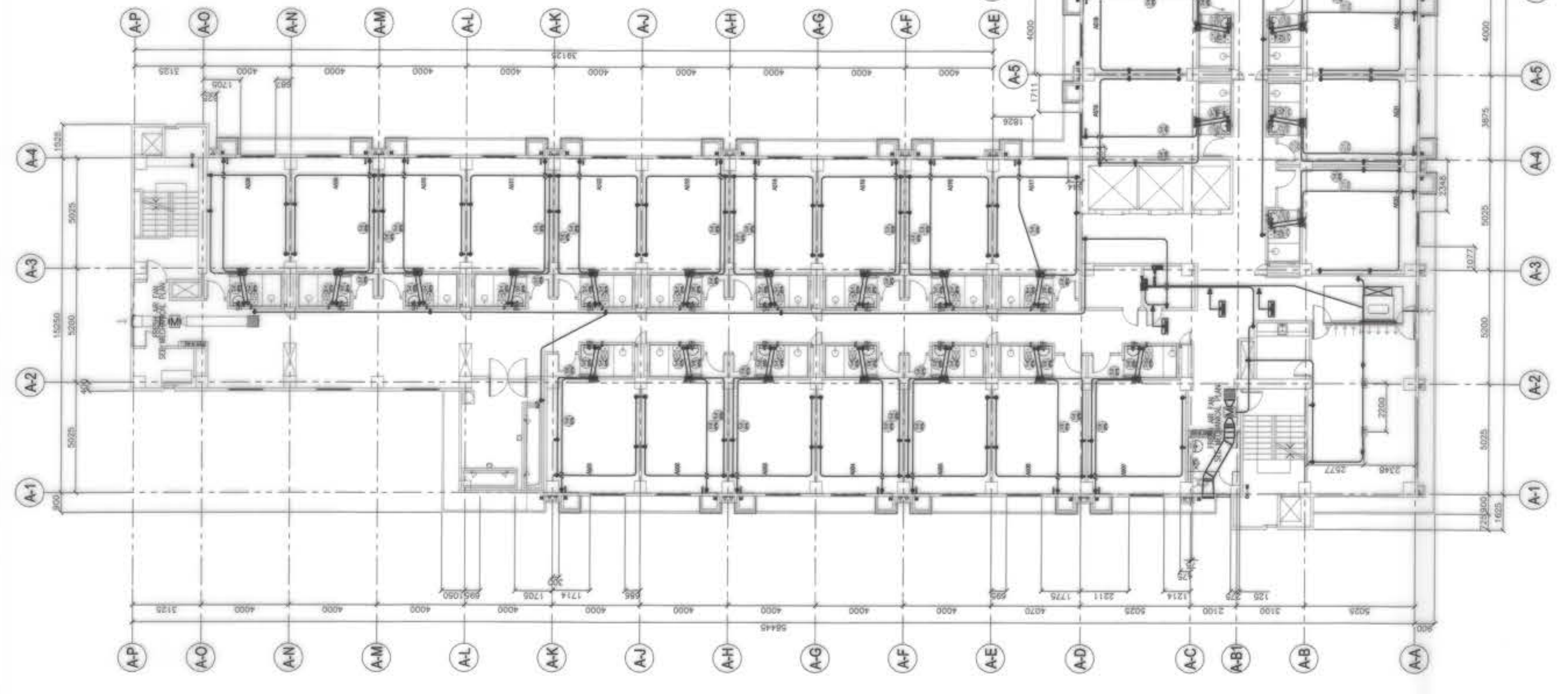
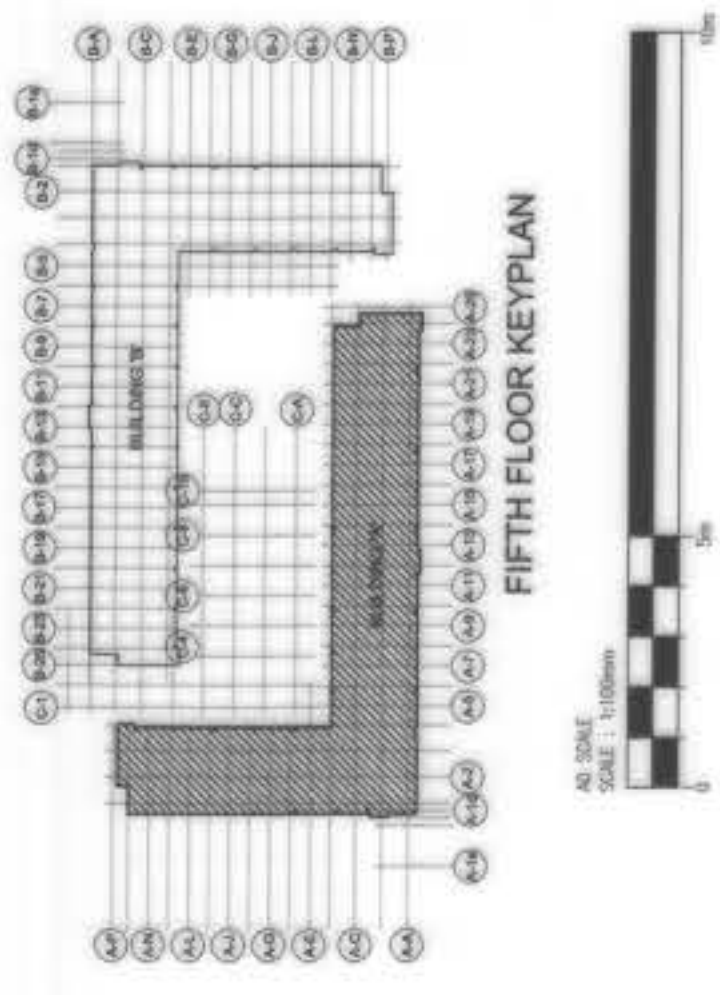
<p>OWNER : <b>BCDA</b> WENCO B. BIZON PRESIDENT</p>	<p>PREPARED BY: <b>FF</b> <b>FREY-FIL CORPORATION</b> MARIETA - BAYAN - CEBU - ILIGAN REG. NO. 082805 / 7 / PTR No. 81349R DATE: 03-20-2018</p>	<p>REVIEWED AND VALIDATED BY: <b>770</b> <b>FILIPINAS DRAVO CORPORATION</b> Architectural &amp; Engineering Consultants ALFONSO DRAVO, JR. PRESIDENT ALFREDO B. REYLLA PROJECT MANAGER</p>	<p>SUBMITTED BY: <b>Bandar Hebat Builders, Inc.</b> SAAC S. DAWO PRESIDENT</p>	<p>CERTIFIED BY: INDEPENDENT CONSULTANT <b>TCGI ENGINEERS</b> VIRGILIO A. MADRAZO PRESIDENT/CEO</p>	<p>PROJECT TITLE: <b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac</p>	<p>SHEET CONTENTS: BUILDING "A" SECOND FLOOR POWER LAYOUT PLAN</p>	<p>SHEET NO. <b>E-11</b></p>
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OWNER :	BCDA WENCO B. DZON PRESIDENT	PREPARED BY:	FREY-FIL CORPORATION REG. No.: 002851 TIN No.: 118-08-24 DATE: 01.20.2018	REVIEWED AND VALIDATED BY:	FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants REG. No.: 002851 TIN No.: 118-08-24 PROJECT MANAGER: ALFREDO R. REVILLA	SUBMITTED BY:	BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	CERTIFIED BY: INDEPENDENT CONSULTANT	TCGI ENGINEERS REG. No.: 002851 TIN No.: 118-08-24 PRESIDENT/CEO: VIRGLIO A. MADRAZO	PROJECT TITLE:	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	SHEET NO.	E-12
	AND		NGAC PHASE 1 JV COMPANY		ZOILLO S. DELA CRUZ VICE PRESIDENT - OPERATION REG. No.: 002851 TIN No.: 118-08-24 DATE: 01.20.2018		FREY-FIL CORPORATION REG. No.: 002851 TIN No.: 118-08-24 DATE: 01.20.2018		FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants REG. No.: 002851 TIN No.: 118-08-24 PROJECT MANAGER: ALFREDO R. REVILLA		BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT		TCGI ENGINEERS REG. No.: 002851 TIN No.: 118-08-24 PRESIDENT/CEO: VIRGLIO A. MADRAZO

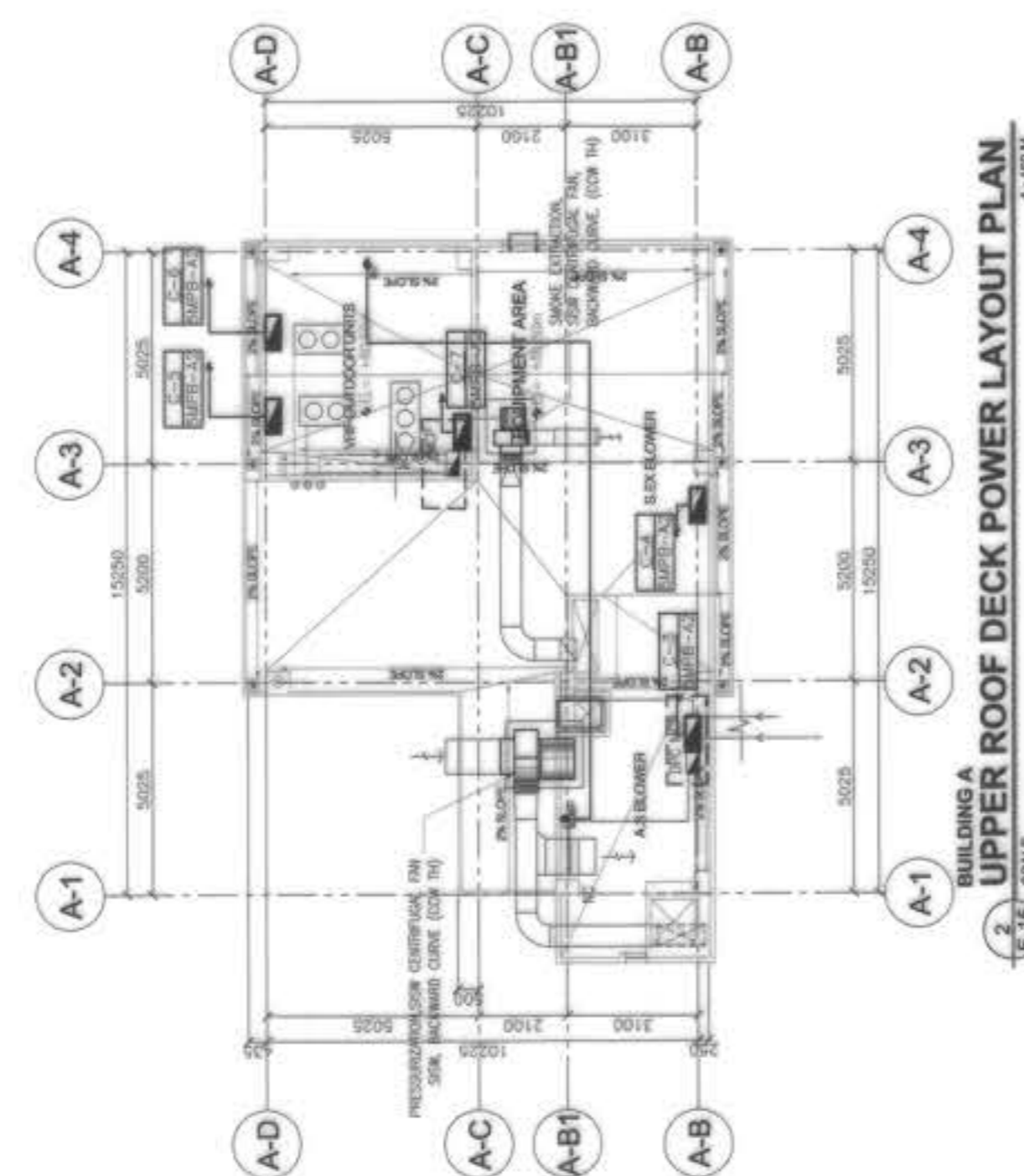
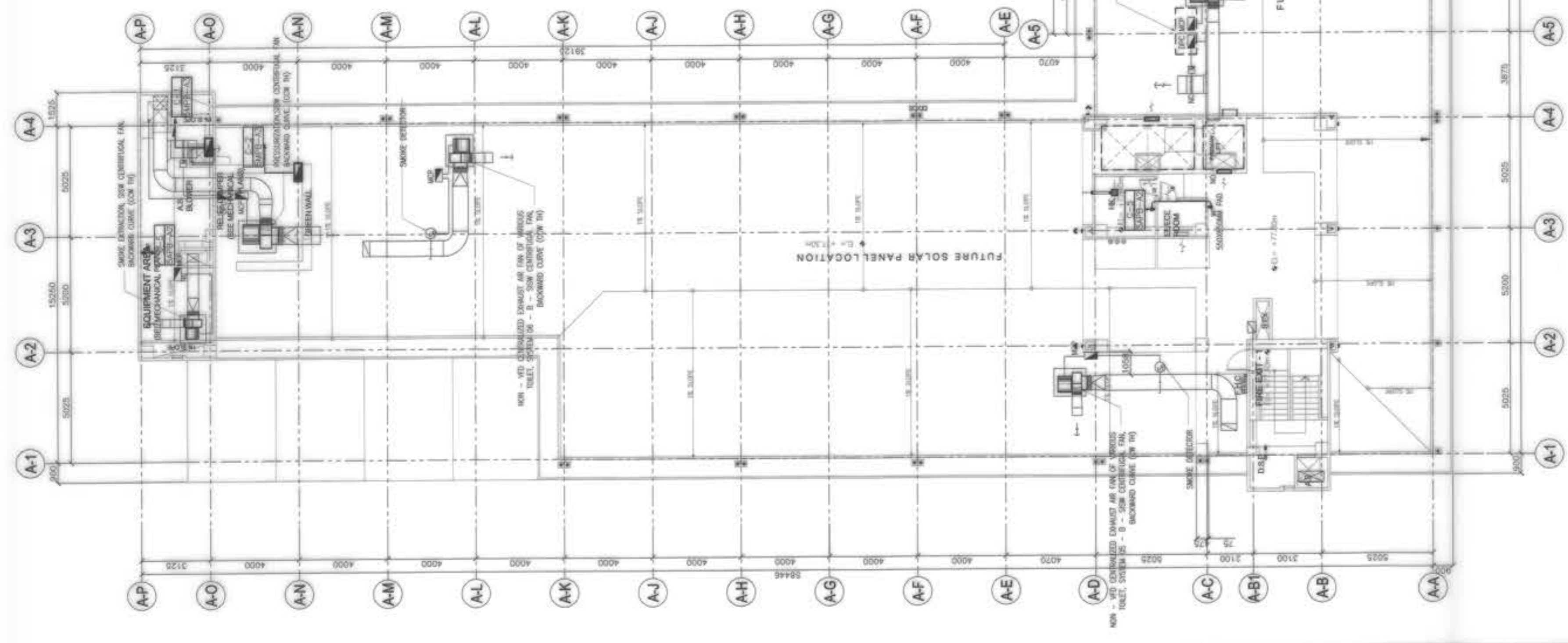
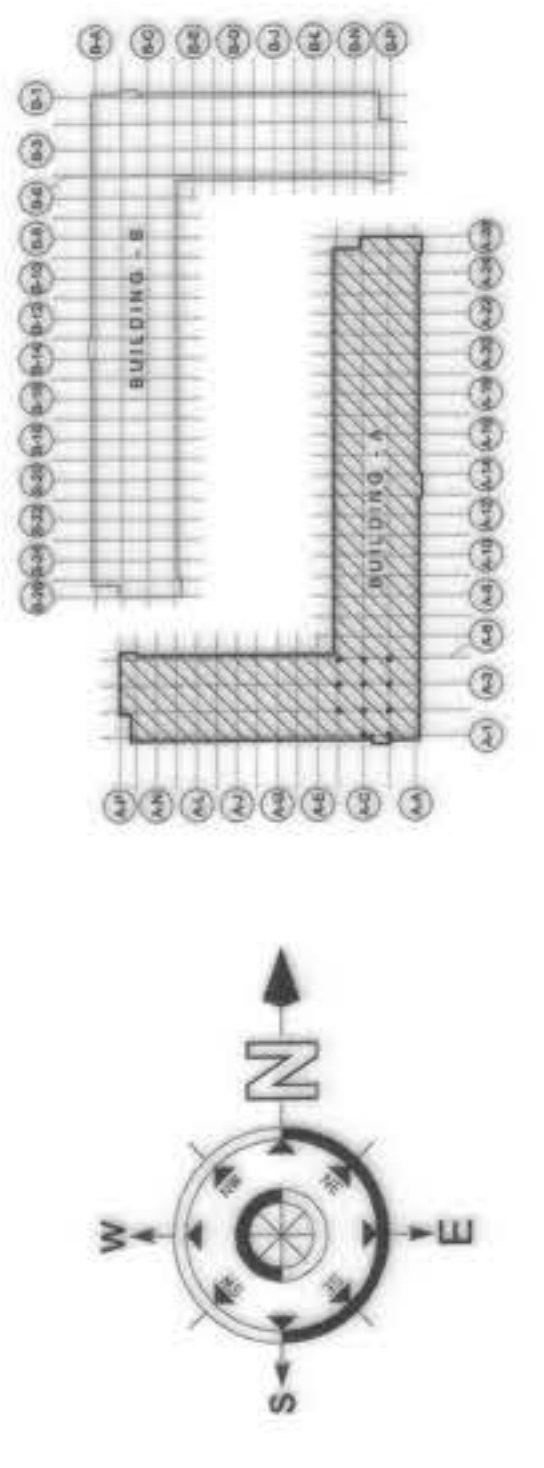


OWNER : <b>BCDA</b> VICENTE B. BRON PRESIDENT	PREPARED BY: <b>FF</b> <b>FREY-FIL CORPORATION</b> MANILA • DAVAO • CEBU • ILOILO REG. NO. 000007 TIN No.: 114-08-274 DATE: 03/20/19	REVIEWED AND VALIDATED BY: <b>FDG</b> <b>FILIPINAS DRAVO CORPORATION</b> Architectural & Engineering Consultants 11th Floor, 1105 North Ave., Suite 1105, North Ave. Station, New York, NY 10022, USA ALFREDO R. REVILLA PROJECT MANAGER	SUBMITTED BY: <b>IS</b> <b>BANDAR HEBAT BUILDERS, INC.</b> ISAAC S. DAVID PRESIDENT	CERTIFIED BY: <b>TCGI ENGINEERS</b> INDEPENDENT CONSULTANT VIRGILIO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE: <b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	SHEET NO.:
						E-13



**BUILDING A**  
**FIFTH FLOOR POWER LAYOUT PLAN**  
SCALE: 1:100

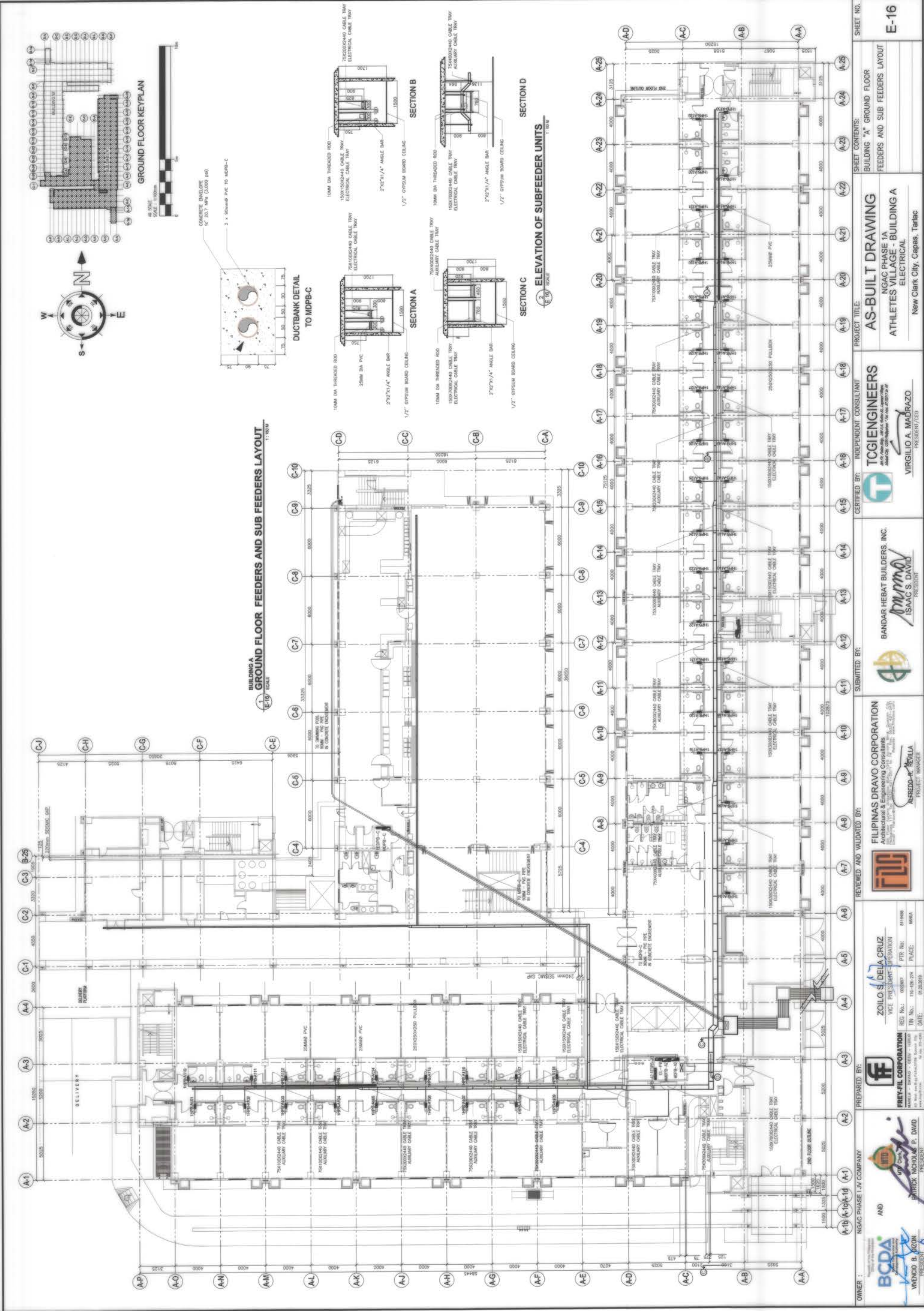
OWNER :	NGAC PHASE 1 JV COMPANY	AND	BCDA	VENCIO B. JIZON PRESIDENT	
PREPARED BY :	ZOILLO S. DELACRUZ VICE PRESIDENT OPERATION	REG. NO. :	000007	PID. No. :	0115408
REVIEWED AND VALIDATED BY :	FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultant	REG. NO. :	000007	TIN. No. :	118-08-274
PROJECT TITLE :	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL				
CERTIFIED BY :	TCGIENGINEERS ARCHITECTURAL & ENGINEERING CONSULTANT	VIRGIOLO A. MADRAZO PRESIDENT/CEO			
SUBMITTED BY :	BANDAR HEBAT BUILDERS, INC.	ISAAC S. DAVID PRESIDENT			
INDEPENDENT CONSULTANT :					
SHEET CONTENTS :	BUILDING "A" FIFTH FLOOR POWER LAYOUT PLAN				
SHEET NO. :	E-14				



**BUILDING A  
ROOF DECK POWER LAYOUT PLAN**  
1:100 M  
E-15 SCALE

**BUILDING A  
UPPER ROOF DECK POWER LAYOUT PLAN**  
1:100 M  
E-15 SCALE

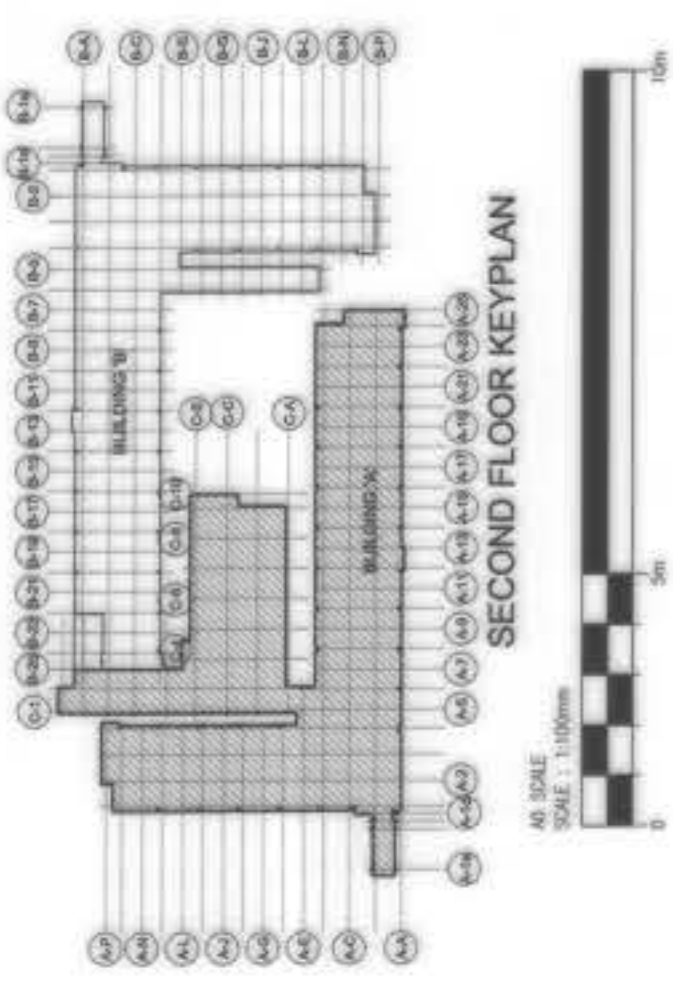
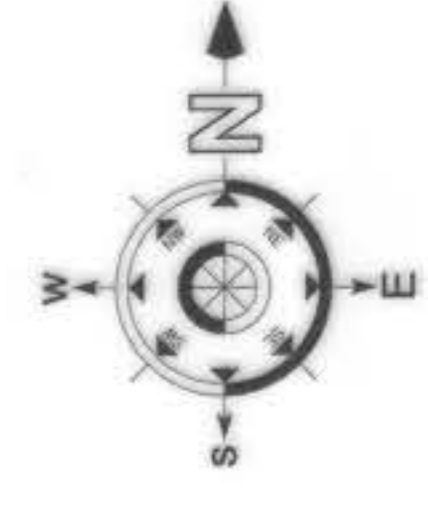
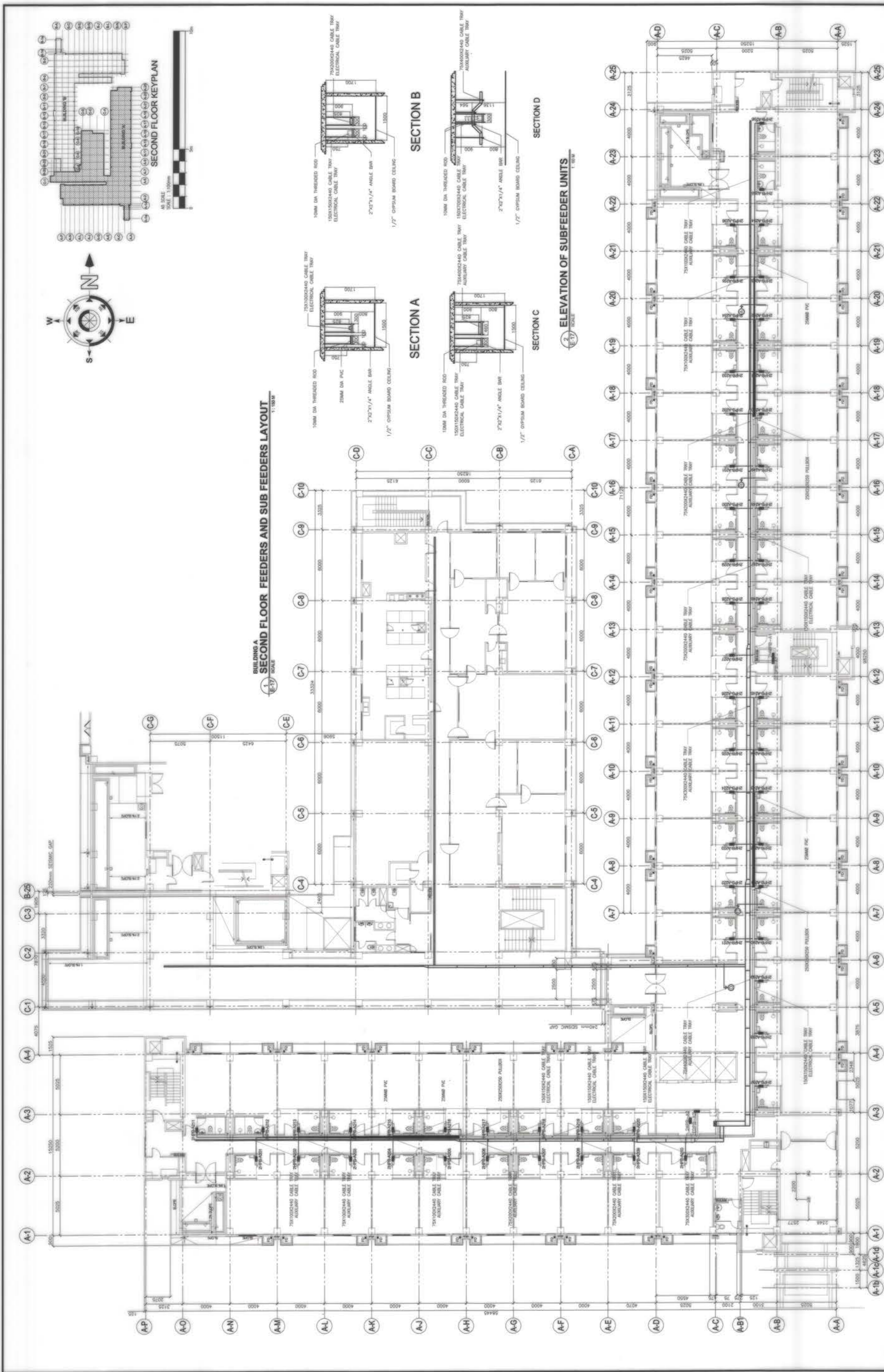
OWNER : NGAC PHASE 1 JV COMPANY AND BCDA VICENCO B. DAZON PRESIDENT	PREPARED BY: FREY-FIL CORPORATION REG. NO.: 020001 TIN. NO.: 116-652-274 DATE: 01-20-2018	REVIEWED AND VALIDATED BY: FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants ALBERO R. REVILLA PROJECT MANAGER	SUBMITTED BY: BANDAR HERBAT BUILDERS, INC. ISAC S. DAVID PRESIDENT	CERTIFIED BY: INDEPENDENT CONSULTANT TCGI ENGINEERS VIRGILIO A. MADRADO PRESIDENT/CEO	PROJECT TITLE: <b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	SHEET CONTENTS: BUILDING "A" ROOF DECK POWER LAYOUT PLAN	SHEET NO.: E-15
					<p><b>BCDA</b> VICENCO B. DAZON PRESIDENT</p> <p><b>FREY-FIL CORPORATION</b> REG. NO.: 020001 TIN. NO.: 116-652-274 DATE: 01-20-2018</p> <p><b>FILIPINAS DRAVO CORPORATION</b> Architectural &amp; Engineering Consultants ALBERO R. REVILLA PROJECT MANAGER</p> <p><b>BANDAR HERBAT BUILDERS, INC.</b> ISAC S. DAVID PRESIDENT</p> <p><b>TCGI ENGINEERS</b> VIRGILIO A. MADRADO PRESIDENT/CEO</p>		



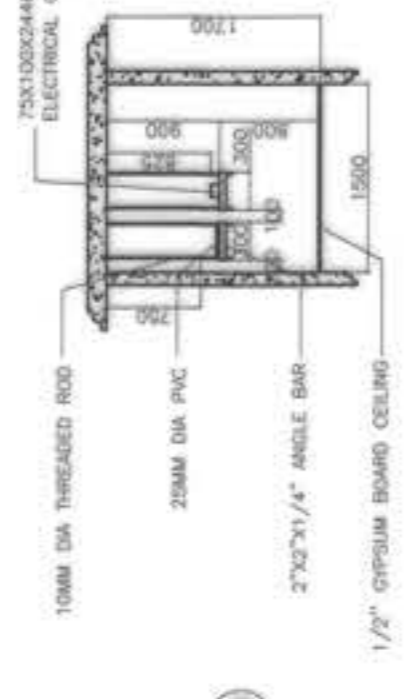
**BUILDING A**  
**GROUND FLOOR FEEDERS AND SUB FEEDERS LAYOUT**  
 SCALE: 1:100M

OWNER :	NGAC PHASE 1 JV COMPANY	PREPARED BY :	<b>FREY-FIL CORPORATION</b> REG. NO.: 00380 TIN No.: 115-45-274 DATE: 01-20-2019	REVIEWED AND VALIDATED BY :	<b>FILIPINAS DRAVO CORPORATION</b> Architectural & Engineering Consultants REG. NO.: 00380 TIN No.: 115-45-274 DATE: 01-20-2019	SUBMITTED BY :	<b>BANDAR HEBAT BUILDERS, INC.</b> ISAAC S. DAVID PRESIDENT	CERTIFIED BY :	<b>TCCI ENGINEERS</b> VIRGILIO A. MADRADO PRESIDENT/CEO	PROJECT TITLE :	<b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL	SHEET NO. :	E-16
AND	<b>BCDA</b> VENCKO B. AZON PRESIDENT	AND	<b>AND</b> PATRICK NICHOLAS P. DAVID PRESIDENT	PROJECT CONTENTS:	BUILDING "A" GROUND FLOOR FEEDERS AND SUB FEEDERS LAYOUT								

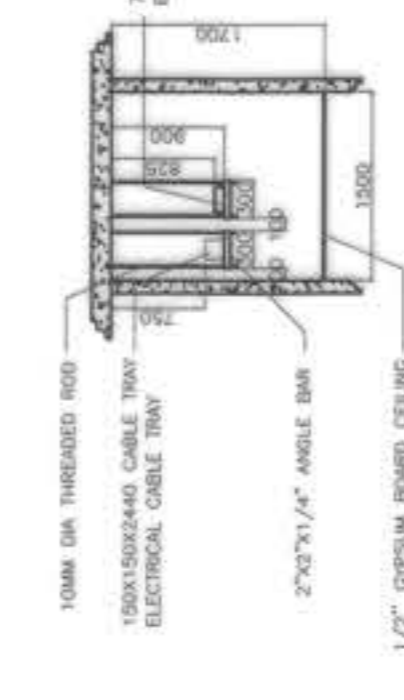




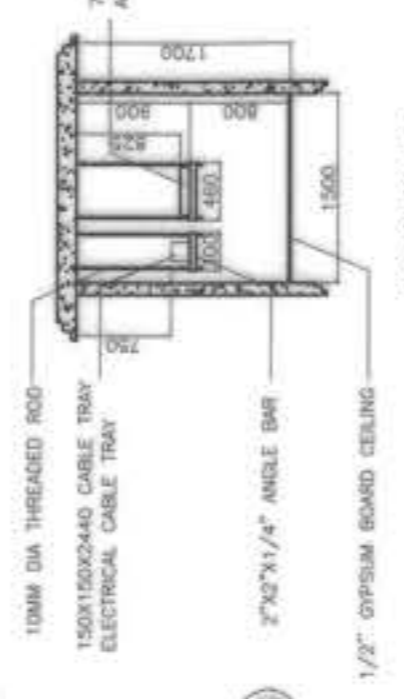
**BUILDING A  
SECOND FLOOR FEEDERS AND SUB FEEDERS LAYOUT**  
SCALE: 1:100M



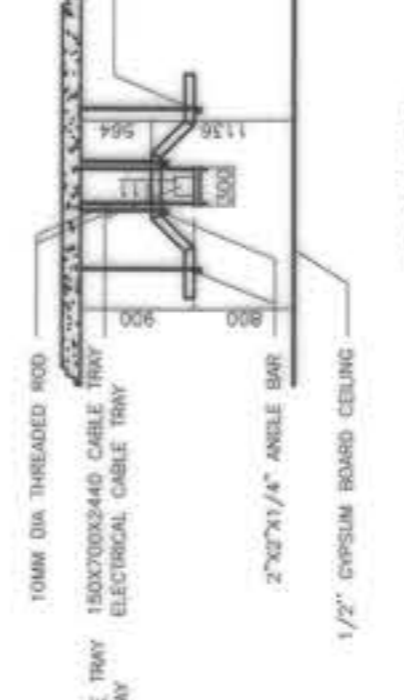
**SECTION A**



**SECTION B**



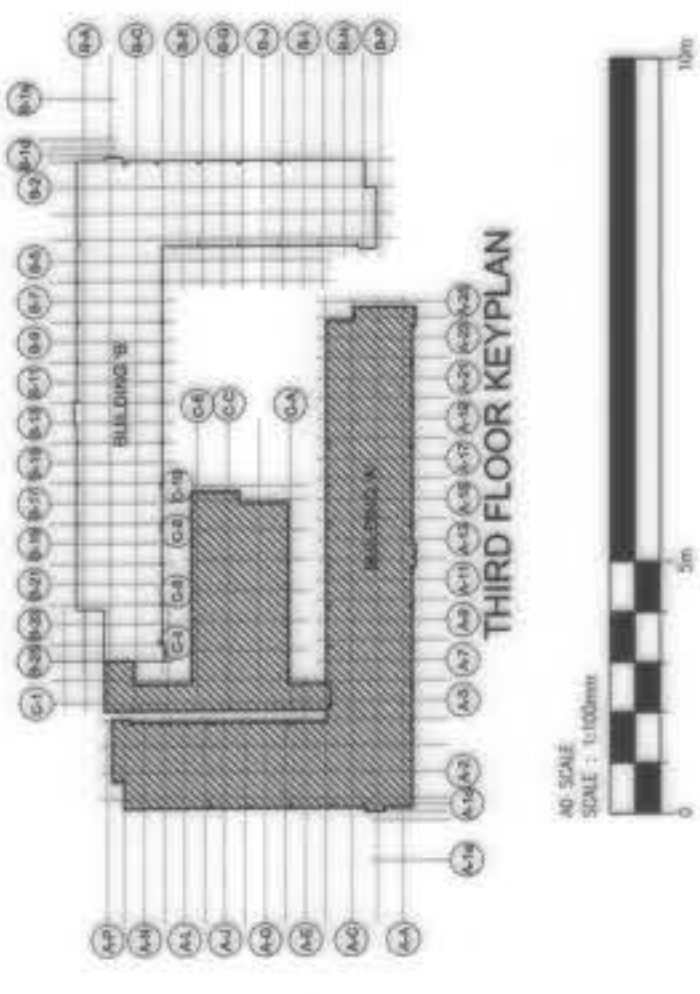
**SECTION C**



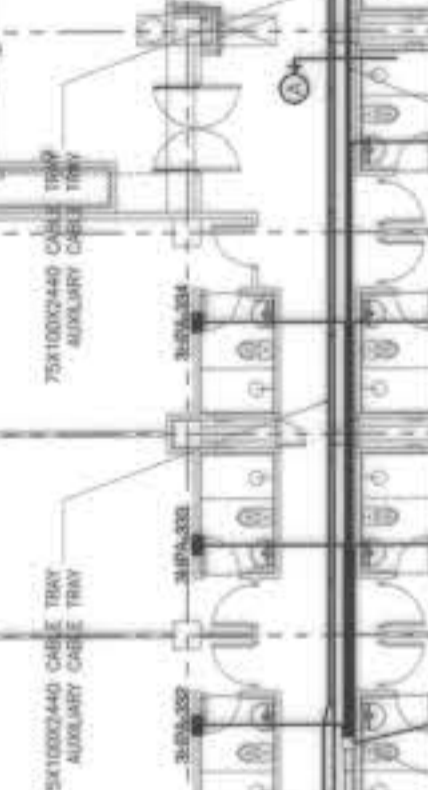
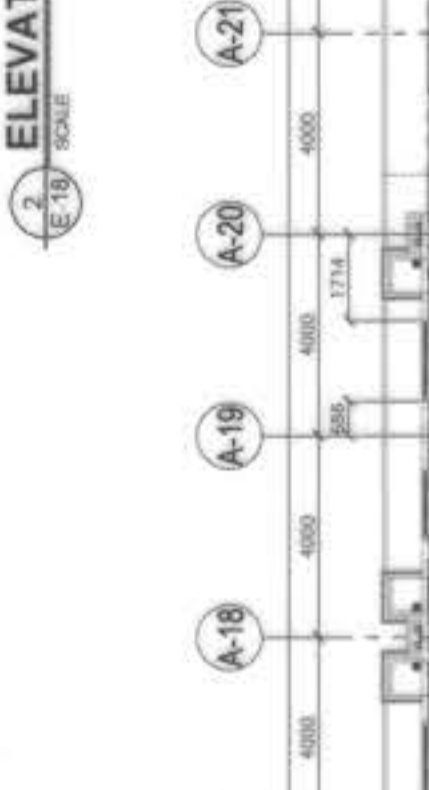
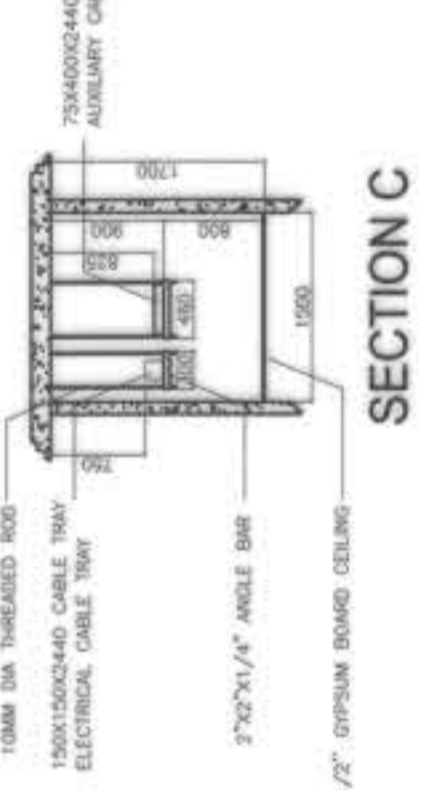
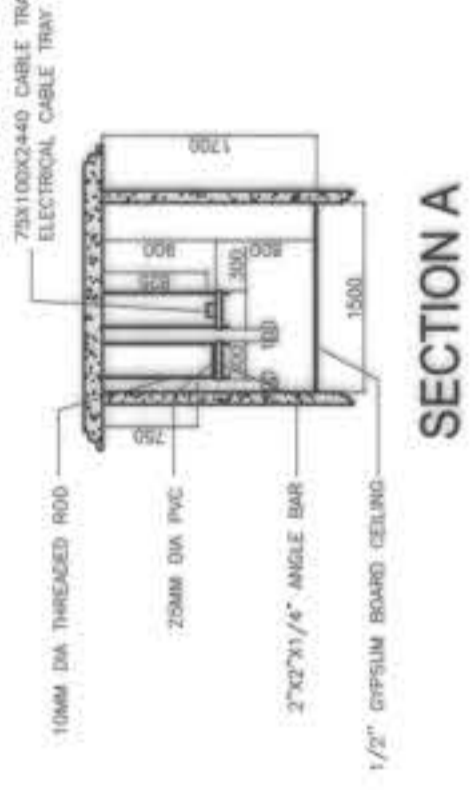
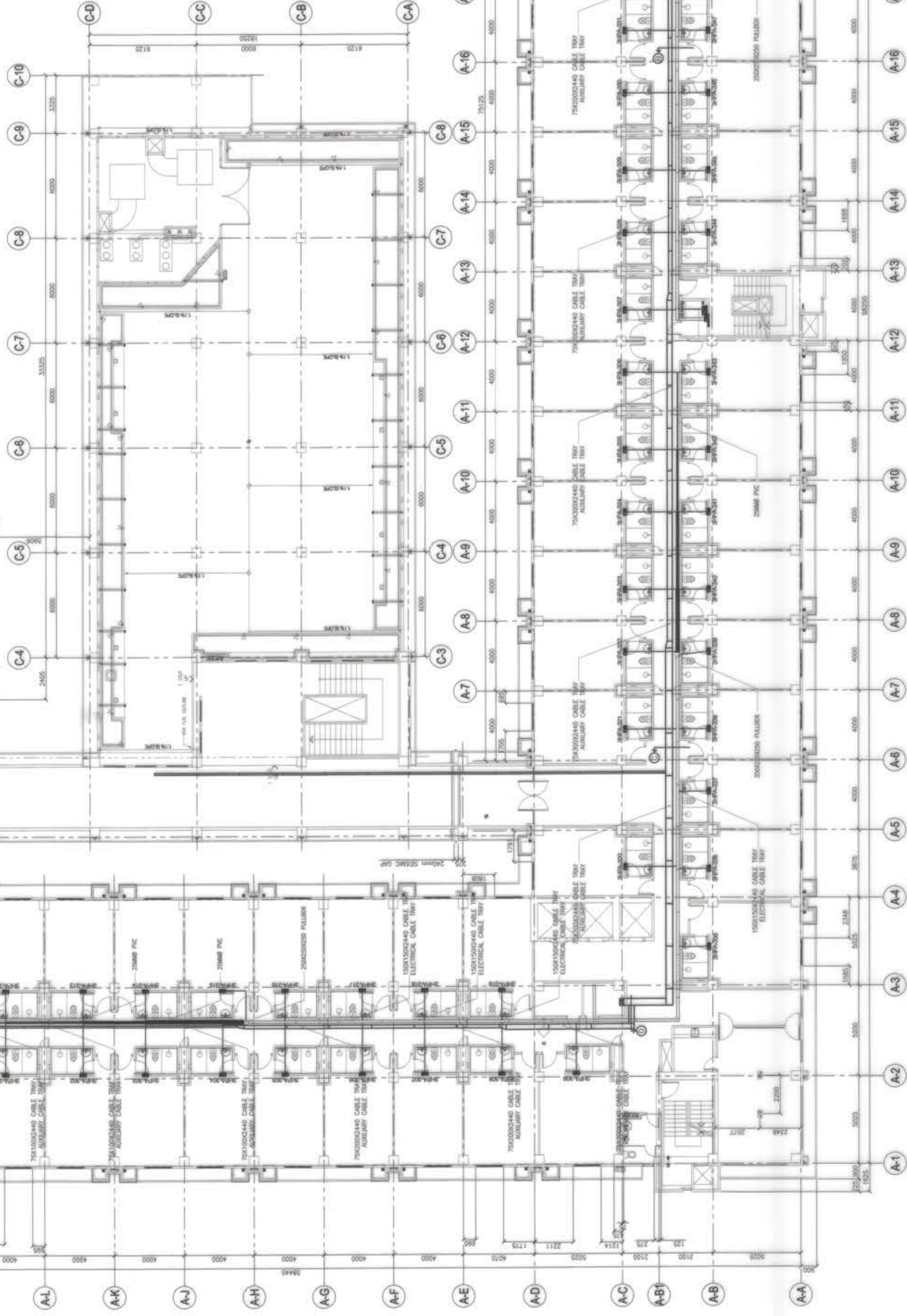
**SECTION D**

**ELEVATION OF SUBFEEDER UNITS**  
SCALE: 1:100M

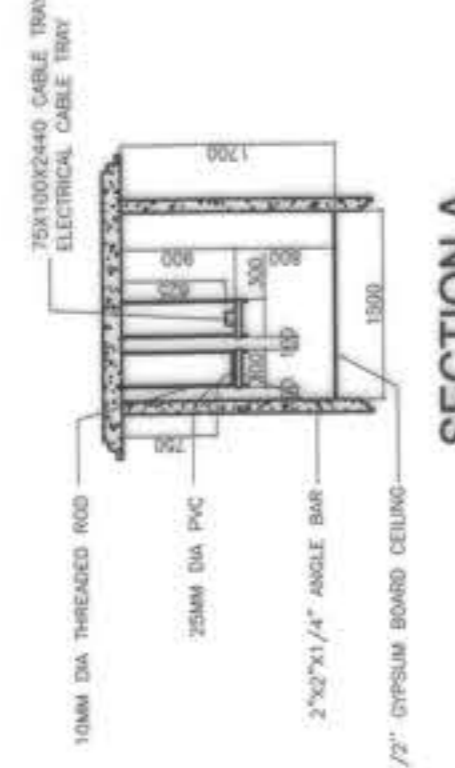
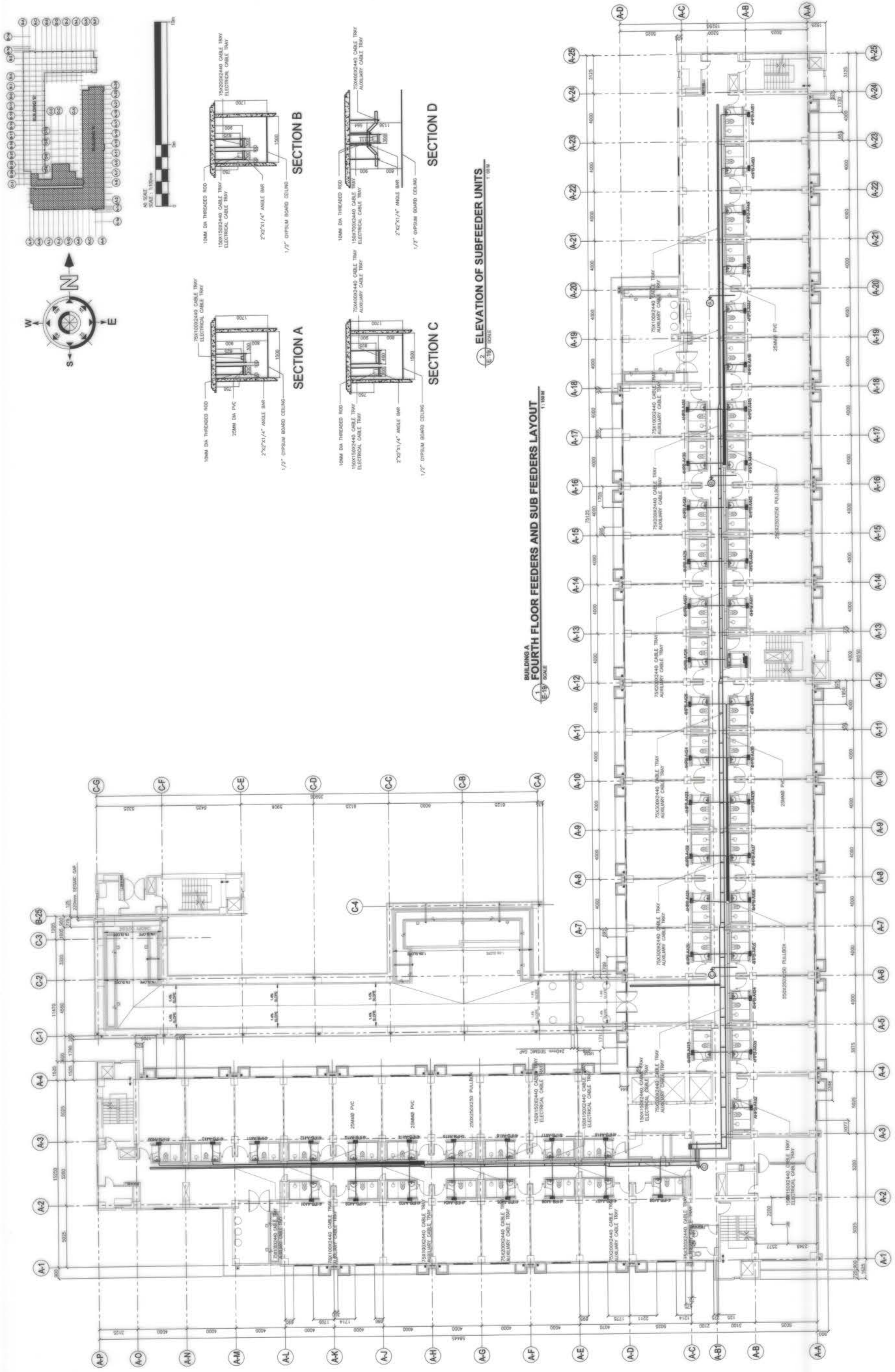
<b>OWNER :</b> <b>WENCIO B. PEZON</b> PRESIDENT	<b>PREPARED BY :</b> <b>FREY-FIL CORPORATION</b> BARCELONA - SPAIN REG. No.: 116-08-274 TIN No.: 116-08-274 DATE: 03-20-2019	<b>REVIEWED AND VALIDATED BY :</b> <b>FILIPINAS DRAVO CORPORATION</b> Architectural & Engineering Consultants 11th Floor, 1101 South E. Avenue, Suite 1101, Pasig City, Philippines <b>ALFREDO A. TRILLA</b> PROJECT MANAGER	<b>SUBMITTED BY :</b> <b>BANDAR HEBAT BUILDERS, INC.</b> PRESIDENT <b>ISAAC S. DAVID</b>	<b>CERTIFIED BY :</b> INDEPENDENT CONSULTANT <b>TCGI ENGINEERS</b> 11th Floor, 1101 South E. Avenue, Suite 1101, Pasig City, Philippines <b>VIRGILIO A. MABRAZO</b> PRESIDENT/CEO	<b>PROJECT TITLE :</b> <b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	<b>SHEET CONTENTS:</b> BUILDING "A" SECOND FLOOR FEEDERS AND SUB FEEDERS LAYOUT	<b>SHEET NO.</b> <b>E-17</b>
							<b>AND</b> <b>RICHARD T. ORTIZ</b> PRESIDENT <b>NICHOLAS P. DAVID</b> PRESIDENT



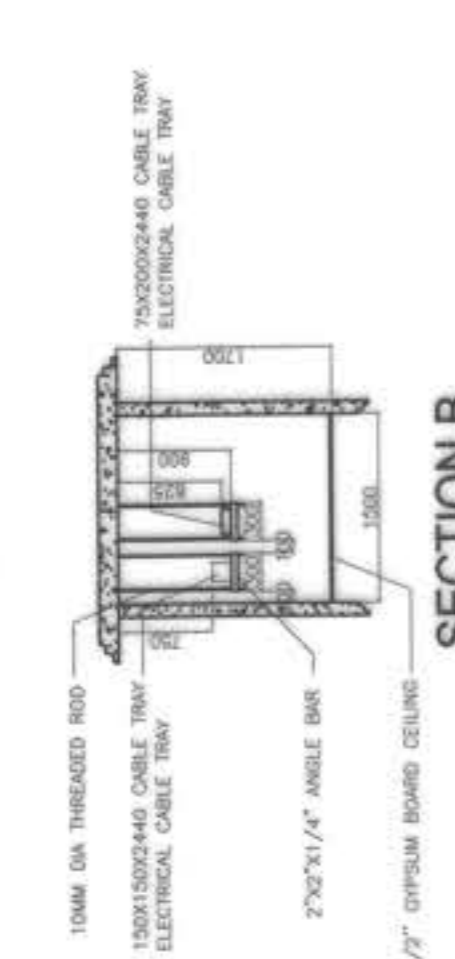
BUILDING A  
THIRD FLOOR FEEDERS AND SUB FEEDERS LAYOUT  
SCALE 1:100mm



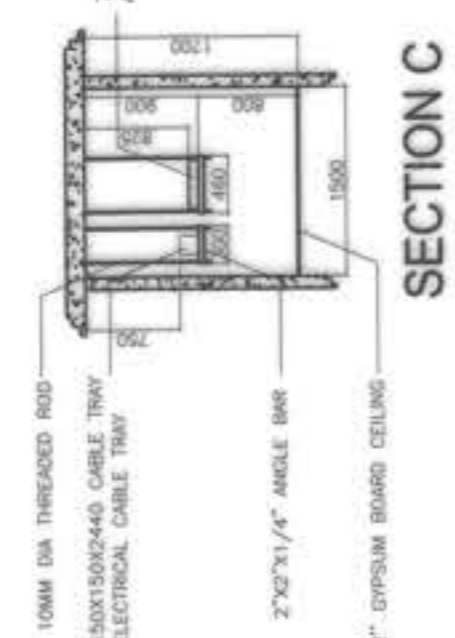
OWNER : NSAC PHASE 1 JV COMPANY <b>BCDA</b> WENCIO B. RIZON PRESIDENT	PREPARED BY: <b>FF</b> FREY-FIL CORPORATION MARTHA - ORLANDO - VILLAS - GARCIA 111 West 10th Street, Suite 1000 Miami, Florida 33139 Tel: 305.375.1111 Fax: 305.375.1112 www.frey-fil.com	REVIEWED AND VALIDATED BY: <b>FDG</b> FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants 111 West 10th Street, Suite 1000 Miami, Florida 33139 Tel: 305.375.1111 Fax: 305.375.1112 www.frey-fil.com	SUBMITTED BY: BANDAR HEBAT BUILDERS, INC. <b>mm</b> ISAAC S. DAVID PRESIDENT	CERTIFIED BY: INDEPENDENT CONSULTANT <b>T</b> TCGIENGINEERS 111 West 10th Street, Suite 1000 Miami, Florida 33139 Tel: 305.375.1111 Fax: 305.375.1112 www.tcgiengineers.com	PROJECT TITLE: <b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	SHEET CONTENTS: BUILDING "A" THIRD FLOOR FEEDERS AND SUB FEEDERS LAYOUT	SHEET NO. <b>E-18</b>
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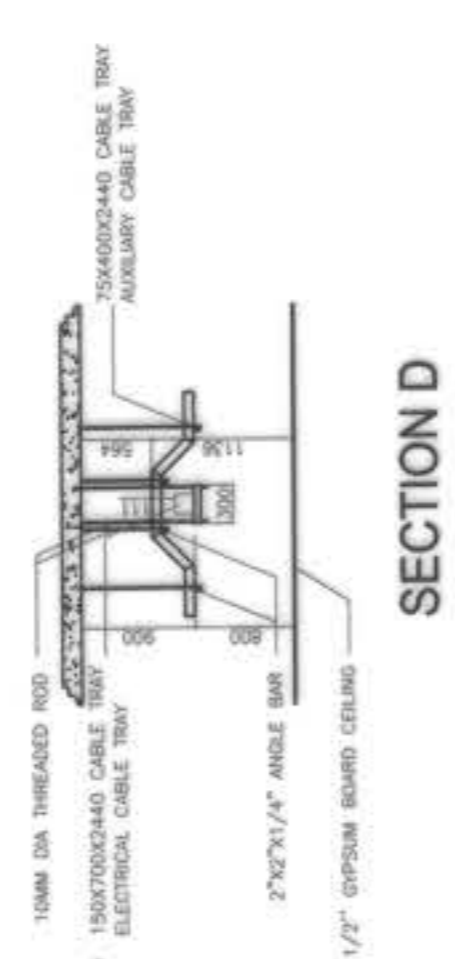
SECTION A



SECTION B



SECTION C



SECTION D



BUILDING A  
FOURTH FLOOR FEEDERS AND SUB FEEDERS LAYOUT  
1:1000

OWNER : NGAC PHASE I JV COMPANY  
 AND  
 BCDA  
 WENCO B. DEON  
 PRESIDENT

PREPARED BY: FRIEY-FIL CORPORATION  
 REG. NO.: 002867  
 TR. NO.: 114-48-274  
 DATE: 01-30-2019

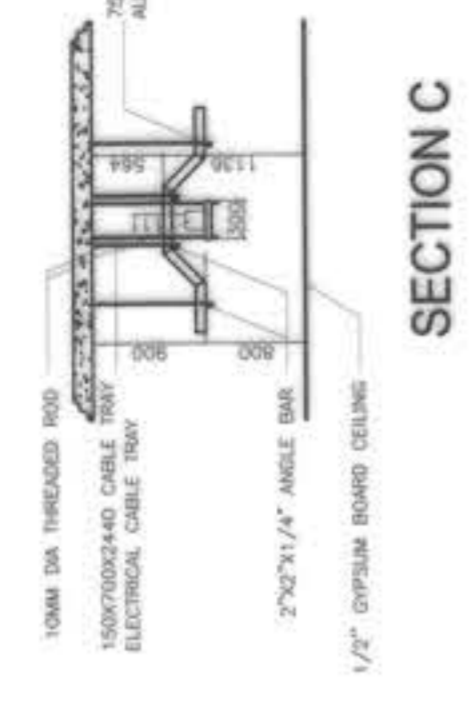
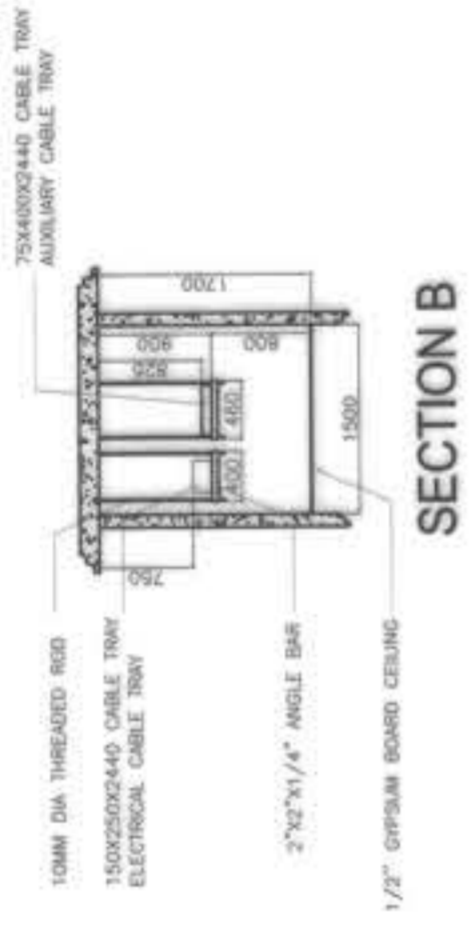
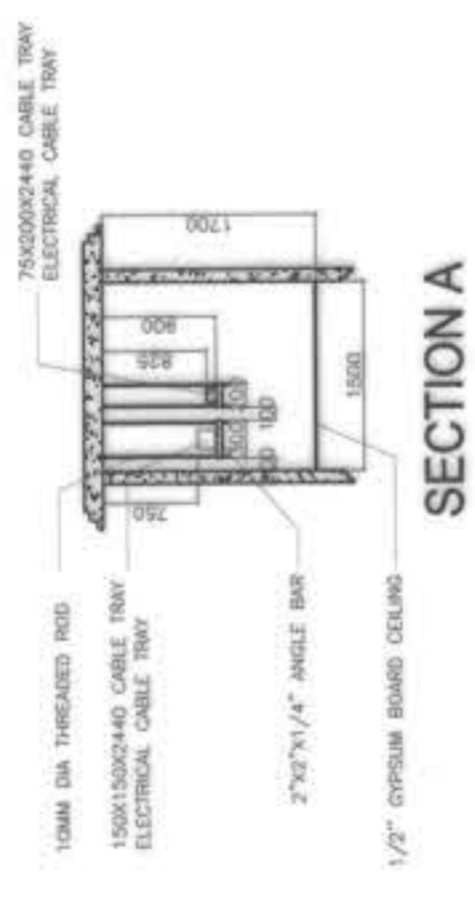
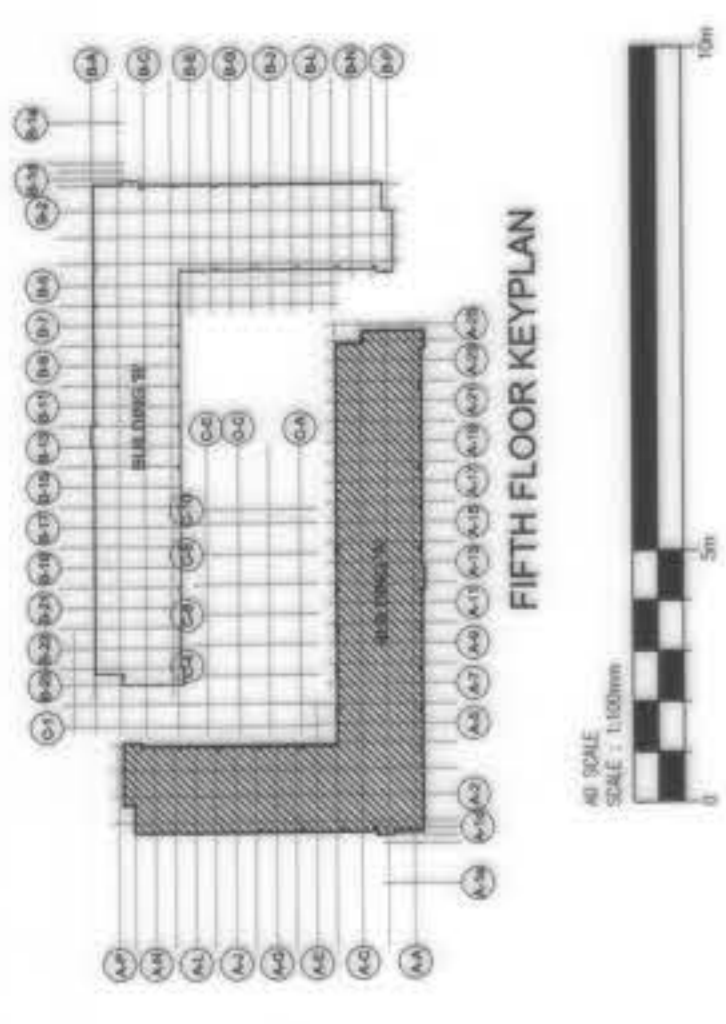
REVIEWED AND VALIDATED BY: FLO

SUBMITTED BY: BANDAR HEBAT BUILDERS, INC.  
 ISAAC S. DAVID  
 PRESIDENT

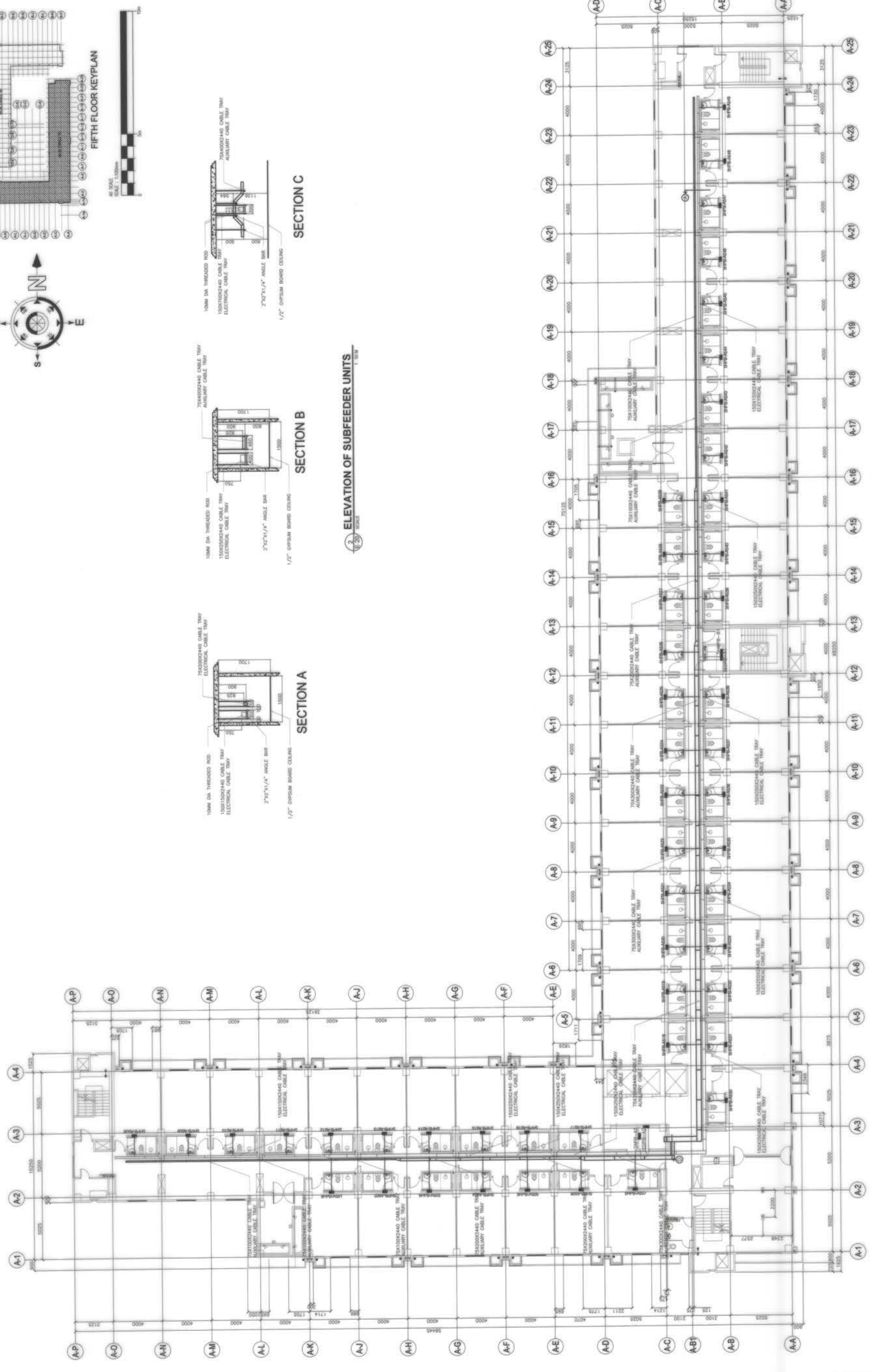
CERTIFIED BY: INDEPENDENT CONSULTANT  
 TCGIENGINEERS  
 VIRGILIO A. MADRAZO  
 PRESIDENT/CEO

PROJECT TITLE: AS-BUILT DRAWING  
 NGAC PHASE 1A  
 ATHLETES VILLAGE - BUILDING A  
 ELECTRICAL  
 New Clark City, Capas, Tarlac

SHEET NO.: E-19



**ELEVATION OF SUBFEEDER UNITS**  
Scale: 1:100



<b>OWNER :</b> NGAC PHASE 1 JV COMPANY <b>AND</b> <b>BCDA</b> <b>WENCO B. DEON</b> PRESIDENT	<b>PREPARED BY:</b> <b>FREY-FIL CORPORATION</b> REG. NO. 002897 TRN. NO. 118-028-219 DATE: 01-20-2019 <b>ZOILO S. DELA CRUZ</b> VICE PRESIDENT / OPERATION REG. NO. 002897 TRN. NO. 118-028-219 PLACE: MRAA	<b>REVIEWED AND VALIDATED BY:</b>  <b>FILIPINAS DRAVO CORPORATION</b> Architecture & Engineering Consultants PROJECT MANAGER <b>ALFREDO R. REVILLA</b>	<b>SUBMITTED BY:</b>  <b>BANDAR HEBAT BUILDERS, INC.</b> PRESIDENT <b>ISAAC S. DAVID</b>	<b>CERTIFIED BY:</b> INDEPENDENT CONSULTANT  <b>TCGI ENGINEERS</b> VIRGILIO A. MADRAZO PRESIDENT/CEO	<b>PROJECT TITLE:</b> <b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	<b>SHEET CONTENTS:</b> BUILDING "A" FIFTH FLOOR FEEDERS AND SUB FEEDERS LAYOUT	<b>SHEET NO.</b> <b>E-20</b>
						<b>OWNER :</b> NGAC PHASE 1 JV COMPANY <b>AND</b> <b>BCDA</b> <b>WENCO B. DEON</b> PRESIDENT	<b>PREPARED BY:</b> <b>FREY-FIL CORPORATION</b> REG. NO. 002897 TRN. NO. 118-028-219 DATE: 01-20-2019 <b>ZOILO S. DELA CRUZ</b> VICE PRESIDENT / OPERATION REG. NO. 002897 TRN. NO. 118-028-219 PLACE: MRAA





**PANEL "SABP-A2"**  
FIFTH FLOOR ELECTRICAL ROOM 4 BLDG A  
ADMINISTRATION PANEL BOARD  
VOLTAGE: 480/230  
PHASE: 3-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	90KVA EXCESSIVE CURRENT OUTLET	1,400	6.07			20mm Ø PVC PIPE
C2	20 1/2" x 14" LUG	240				20mm Ø PVC PIPE
C3	FAN-OF-AZ	500				20mm Ø PVC PIPE
C4	90KVA EXCESSIVE CURRENT OUTLET	1,400				20mm Ø PVC PIPE
C5	18.00 KW FAN COOL-AC 24W FAN COOL	1,744				20mm Ø PVC PIPE
C6	24 1/2" x 14" LUG	288				20mm Ø PVC PIPE
C7	S P A R E					
TOTAL =		5,024	0.07	3.43	14.13	

REL = 3.41 (25% + 14.13)  
= 14.18 AMP PER DEMAND FACTOR  
= 11.98 A

**PANEL "SABP-A1"**  
FIFTH FLOOR ELECTRICAL ROOM 4 BLDG A  
MALLWAY PANEL BOARD  
VOLTAGE: 230  
PHASE: 1-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	27 1/2" x 14" LUG	104				20mm Ø PVC PIPE
C2	EXTERNAL JUNCTION CONDUIT	1,000				20mm Ø PVC PIPE
C3	S P A R E					
TOTAL =		2,004				

REL = 0.025% + 12.03  
= 12.03 AMP PER DEMAND FACTOR  
= 10.10 A

**PANEL "MEPRA-1"**  
GROUND FLOOR ELECTRICAL ROOM 4 BLDG A  
PANEL BOARD  
VOLTAGE: 480/230  
PHASE: 3-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	(MEPRA-45) PANEL BOARD	127,100	285.17	271.64	223.84	60 mm PVC rigid/cable tray
C2	(MEPRA-45) PANEL BOARD	142,000	219.76	222.72	177.84	60 mm PVC rigid/cable tray
C3	(MEPRA-45) PANEL BOARD	128,800	192.26	192.26	192.26	60 mm PVC rigid/cable tray
C4	S P A R E					
C5	(MEPRA-45) PANEL BOARD	104,000	192.26	192.26	192.26	60 mm PVC rigid/cable tray
C6	(MEPRA-45) PANEL BOARD	108,100	192.26	192.26	192.26	60 mm PVC rigid/cable tray
TOTAL =		509,000	865.45	770.45	700.65	

REL = 10.025% + 845.45 + 0  
= 845.98 AMP PER DEMAND FACTOR  
= 692.65 A

**PANEL "MEPRA-2"**  
GROUND FLOOR ELECTRICAL ROOM 4 BLDG A  
PANEL BOARD  
VOLTAGE: 480/230  
PHASE: 3-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	(MEPRA-45) PANEL BOARD	108,000	271.64	105.61	105.61	60 mm PVC rigid/cable tray
C2	(MEPRA-45) PANEL BOARD	211,800	302.60	302.60	302.60	60 mm PVC rigid/cable tray
C3	(MEPRA-45) PANEL BOARD	227,200	382.76	312.01	312.01	60 mm PVC rigid/cable tray
C4	(MEPRA-45) PANEL BOARD	233,500	387.36	305.17	305.17	60 mm PVC rigid/cable tray
C5	(MEPRA-45) PANEL BOARD	215,500	309.84	305.17	305.17	60 mm PVC rigid/cable tray
C6	S P A R E					
TOTAL =		1,097,100	1,650.46	1,425.64	1,425.64	

REL = 10.025% + 1,650.46 + 0  
= 1,670.98 AMP PER DEMAND FACTOR  
= 1,396.15 A

**PANEL "MEPRA-4"**  
FIFTH FLOOR ELECTRICAL ROOM 4 BLDG A  
PANEL BOARD  
VOLTAGE: 480/230  
PHASE: 3-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	S P A R E					
C2	S P A R E					
C3	S P A R E					
C4	S P A R E					
C5	S P A R E					
TOTAL =		0.000				

REL = 0.000% + 0.000 + 0.000  
= 0.000 AMP PER DEMAND FACTOR  
= 0.000 A

**PANEL "MEPRA-3"**  
GROUND FLOOR ELECTRICAL ROOM 4 BLDG A  
PANEL BOARD  
VOLTAGE: 480/230  
PHASE: 3-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	3 1/2" x 14" x 1/2" LUG	28,620				20mm Ø PVC PIPE
C2	3 1/2" x 14" x 1/2" LUG	28,620				20mm Ø PVC PIPE
C3	DUPLEX COIL COMPACT PUMP 1.5 HP	1,740				20mm Ø PVC PIPE
C4	DUPLEX COIL COMPACT PUMP 1.5 HP	1,740				20mm Ø PVC PIPE
C5	FAN-OF-AZ	500				20mm Ø PVC PIPE
C6	FAN-OF-AZ	500				20mm Ø PVC PIPE
C7	S P A R E					
C8	S P A R E					
C9	S P A R E					
TOTAL =		46,120				

REL = 0.025% + 46.12 + 0  
= 46.14 AMP PER DEMAND FACTOR  
= 37.91 A

**PANEL "MEPRA-5"**  
FIFTH FLOOR ELECTRICAL ROOM 4 BLDG A  
PANEL BOARD  
VOLTAGE: 480/230  
PHASE: 3-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	(MEPRA-45) PANEL BOARD	6,817				20mm Ø PVC PIPE
C2	S P A R E					
C3	S P A R E					
C4	S P A R E					
C5	S P A R E					
TOTAL =		6,817				

REL = 0.025% + 6.817 + 0  
= 6.82 AMP PER DEMAND FACTOR  
= 5.65 A

**PANEL "MEPRA-6"**  
FIFTH FLOOR ELECTRICAL ROOM 4 BLDG A  
PANEL BOARD  
VOLTAGE: 480/230  
PHASE: 3-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	(MEPRA-45) PANEL BOARD	10,710				20mm Ø PVC PIPE
C2	(MEPRA-45) PANEL BOARD	6,048				20mm Ø PVC PIPE
C3	GROUP-2 AIR HANDLING UNIT	22,650				20mm Ø PVC PIPE
C4	GROUP-2 AIR HANDLING UNIT	13,500				20mm Ø PVC PIPE
C5	GROUP-2 AIR HANDLING UNIT	27,240				20mm Ø PVC PIPE
C6	S P A R E					
C7	S P A R E					
C8	S P A R E					
TOTAL =		107,148				

REL = 0.025% + 107.148 + 0  
= 107.17 AMP PER DEMAND FACTOR  
= 88.54 A

**PANEL "MEPRA-7"**  
FIFTH FLOOR ELECTRICAL ROOM 4 BLDG A  
PANEL BOARD  
VOLTAGE: 480/230  
PHASE: 3-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	1000 SP. 600V. 0.000 (ELEVATOR-1)	10,000				30mm Ø PVC PIPE / CABLE TRAY
C2	1000 SP. 600V. 0.000 (ELEVATOR-2)	10,000				30mm Ø PVC PIPE / CABLE TRAY
C3	1000 SP. 600V. 0.000 (ELEVATOR-3)	10,000				30mm Ø PVC PIPE / CABLE TRAY
C4	S P A R E					
TOTAL =		30,000				

REL = 24.18 (25% + 24.18)  
= 78.48 A

OVER CURRENT PROTECTION SOFT START  
REL = 24.18 (1.5) + 72.48  
= 108.88 A

**PANEL "MEPRA-8"**  
GROUND FLOOR ELECTRICAL ROOM 4 BLDG A  
PANEL BOARD  
VOLTAGE: 480/230  
PHASE: 3-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	S P A R E					
C2	S P A R E					
C3	S P A R E					
C4	S P A R E					
C5	S P A R E					
C6	S P A R E					
C7	S P A R E					
C8	S P A R E					
C9	S P A R E					
C10	S P A R E					
C11	S P A R E					
TOTAL =		84,800				

REL = 43.025% + 84.8 + 0  
= 127.82 AMP PER DEMAND FACTOR  
= 107.07 A

**PANEL "MEPRA-9"**  
FIFTH FLOOR ELECTRICAL ROOM 4 BLDG A  
PANEL BOARD  
VOLTAGE: 480/230  
PHASE: 3-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	S P A R E					
C2	S P A R E					
C3	S P A R E					
C4	S P A R E					
TOTAL =		0.000				

REL = 0.000% + 0.000 + 0.000  
= 0.000 AMP PER DEMAND FACTOR  
= 0.000 A

**PANEL "MEPRA-10"**  
FIFTH FLOOR ELECTRICAL ROOM 4 BLDG A  
PANEL BOARD  
VOLTAGE: 480/230  
PHASE: 3-P

NO.	LOAD DESCRIPTION	LOAD	WIRING			CONDUIT MM DIA.
			AN	BN	CN	
C1	S P A R E					
C2	S P A R E					
C3	S P A R E					
C4	S P A R E					
TOTAL =		0.000				

REL = 0.000% + 0.000 + 0.000  
= 0.000 AMP PER DEMAND FACTOR  
= 0.000 A

**BUILDING A  
LOAD SCHEDULE 3**  
SCALE

OWNER: NGAC PHASE 1 JV COMPANY  
PREPARED BY: ZOILO S/ DELA CRUZ  
VICE PRESIDENT - OPERATION  
REG. NO.: 000807 TRN No.: 116-08-574  
DATE: 01.20.2018  
PLACE: MANILA

REVIEWED AND VALIDATED BY:   
F70 ENGINEERING AND CONSULTING  
116-08-574

CERTIFIED BY: INDEPENDENT CONSULTANT  
TCGI ENGINEERS  
Architectural & Engineering Consultants  
116-08-574

SUBMITTED BY: BANDAR HEBAT BUILDERS, INC.  
PRESIDENT  
ISAAC S. DAVID

PROJECT TITLE: AS-BUILT DRAWING  
NGAC PHASE 1A  
ATHLETES VILLAGE - BUILDING A  
ELECTRICAL  
New Clark City, Capas, Tarlac

SHEET NO.: E-23

**PANEL "DPR-C"**  
GROUND FLOOR BLDG-C ELECTRICAL ROOM  
DISTRIBUTION PANEL BOARD  
PHASE : 3-P

NO.	LOAD DESCRIPTION	WIRES			AMPS PER PHASE			CONDUIT MM DIA
		AN	BN	CN	AN	BN	CN	
C1	2X1.5 MW RANGE OUTLET + DUPLEX CONVENIENCE OUTLET	3,000	13.04		1	40	10	20mm Ø PVC PIPE
C2	LIGHTING OUTLET	1,000	4.35		1	50	10	20mm Ø PVC PIPE
C3	LIGHTING OUTLET	1,000	4.35		1	50	10	20mm Ø PVC PIPE
C4	LIGHTING OUTLET	1,000	4.35		1	50	10	20mm Ø PVC PIPE
C5	DUPLEX CONVENIENCE OUTLET	2,145	9.33		1	50	10	20mm Ø PVC PIPE
C6	DUPLEX CONVENIENCE OUTLET	860	4.30		1	50	10	20mm Ø PVC PIPE
C7	65.000 US REFRIGERATOR	3,000	13.04		1	50	10	20mm Ø PVC PIPE
C8	2X1.5 MW RANGE OUTLET	3,000	13.04		1	50	10	20mm Ø PVC PIPE
C9	DUPLEX CONVENIENCE OUTLET	2,025	8.80		1	50	10	20mm Ø PVC PIPE
C10	DUPLEX CONVENIENCE OUTLET	500	4.30		1	50	10	20mm Ø PVC PIPE
C11	18X 100 W CEILING FAN	2,250	22.38		1	50	10	20mm Ø PVC PIPE
C12		17,400	22.38		1	50	10	20mm Ø PVC PIPE

TOTAL CONNECTED LOAD:  
IFL = 2.2 (25%) + 30.43  
= 30.98 APPLY 80% DEMAND FACTOR  
= 24.78 A

**PANEL "DPR-C"**  
SECOND FLOOR BLDG-C ELECTRICAL ROOM  
DISTRIBUTION PANEL BOARD  
PHASE : 3-P

NO.	LOAD DESCRIPTION	WIRES			AMPS PER PHASE			CONDUIT MM DIA
		AN	BN	CN	AN	BN	CN	
C1	LIGHTING OUTLET	1,000	4.35		1	50	10	20mm Ø PVC PIPE
C2	LIGHTING OUTLET	1,000	4.35		1	50	10	20mm Ø PVC PIPE
C3	LIGHTING OUTLET	1,000	4.35		1	50	10	20mm Ø PVC PIPE
C4	LIGHTING OUTLET	1,000	4.35		1	50	10	20mm Ø PVC PIPE
C5	LIGHTING OUTLET	1,000	4.35		1	50	10	20mm Ø PVC PIPE
C6	LIGHTING OUTLET	1,000	4.35		1	50	10	20mm Ø PVC PIPE
C7	7X100 W CEILING FAN	1,000	6.52		1	50	10	20mm Ø PVC PIPE
C8	DUPLEX CONVENIENCE OUTLET	600	2.87		1	50	10	20mm Ø PVC PIPE
C9	DUPLEX CONVENIENCE OUTLET	1,150	5.02		1	50	10	20mm Ø PVC PIPE
C10	DUPLEX CONVENIENCE OUTLET	1,150	5.02		1	50	10	20mm Ø PVC PIPE
C11	DUPLEX CONVENIENCE OUTLET	1,600	7.17		1	50	10	20mm Ø PVC PIPE
C12	DUPLEX CONVENIENCE OUTLET	1,150	5.02		1	50	10	20mm Ø PVC PIPE
C13	DUPLEX CONVENIENCE OUTLET	1,150	5.02		1	50	10	20mm Ø PVC PIPE
C14	DUPLEX CONVENIENCE OUTLET	1,480	6.48		1	50	10	20mm Ø PVC PIPE
C15	DUPLEX CONVENIENCE OUTLET	1,480	6.48		1	50	10	20mm Ø PVC PIPE
C16	DUPLEX CONVENIENCE OUTLET	1,480	6.48		1	50	10	20mm Ø PVC PIPE
C17	FAN COOL UNITS	1,500	6.52		1	50	10	20mm Ø PVC PIPE
C18	LIGHTING OUTLET	1,500	6.52		1	50	10	20mm Ø PVC PIPE
C19	LIGHTING OUTLET	1,000	4.35		1	50	10	20mm Ø PVC PIPE
C20	LIGHTING OUTLET	1,000	4.35		1	50	10	20mm Ø PVC PIPE

TOTAL CONNECTED LOAD:  
IFL = 8.52 (25%) + 42.88  
= 44.28 APPLY 80% DEMAND FACTOR  
= 35.43 A

**"TFRB EGRATS"**  
BASEMENT FIRE PUMP ECB  
VOLTAGE : 400/230  
PHASE : 3-P

NO.	LOAD DESCRIPTION	WIRES			AMPS PER PHASE			CONDUIT MM DIA
		AN	BN	CN	AN	BN	CN	
C1	1000 HP 3P 400 V FIRE PUMP ECB	51,780			74.75			50mm Ø PVC PIPE
	TOTAL	51,780			74.75			

TOTAL CONNECTED LOAD:  
IFL = 74.75 (25%) + 74.75  
= 93.4 A

**PANEL "MVR-2"**  
GROUND FLOOR ELECTRICAL ROOM 2 BELD, A  
DISTRIBUTION PANEL BOARD  
PHASE : 3-P

NO.	LOAD DESCRIPTION	WIRES			AMPS PER PHASE			CONDUIT MM DIA
		AN	BN	CN	AN	BN	CN	
C1	MVR-2	107,811.74			135.95			300mm Ø PVC PIPE
	MAIN FEEDER	107,811.74			135.95			
C2	ELPB	65,235.00			84.37			50mm Ø PVC PIPE
C3	ELPB	65,235.00			84.37			50mm Ø PVC PIPE
C4	TOTAL	233,281.74			200.77			

IFL = 38.98 (25%) + 20.77  
= 30.18 A

**PANEL "TRANSFORMER"**  
TRANSFORMER ELECTRICAL ROOM  
DISTRIBUTION PANEL BOARD  
PHASE : 3-P

NO.	LOAD DESCRIPTION	WIRES			AMPS PER PHASE			CONDUIT MM DIA
		AN	BN	CN	AN	BN	CN	
C1	TRANSFORMER	203,340			243.13			300mm Ø PVC PIPE
	MAIN FEEDER	203,340			243.13			
C2	MVR-2	1,047,773			1,489.84			300mm Ø PVC PIPE
C3	MVR-2	1,047,773			1,489.84			300mm Ø PVC PIPE
C4	TOTAL	2,095,546			2,979.68			

IFL = 483.13 (25%) + 483.13 (25% D.F.) + 1 (25% D.F.)  
= 288.29 A

**GENERATOR SET REQUIREMENT**

USE: 1-1.5 MVA PAD MOUNTED POWER TRANSFORMER  
13.8KV/11KV, PRIMARY 3-PHASE, 60HZ  
400VAC LINE TO LINE 200VAC LINE TO NEUTRAL, SECONDARY

IFL = 2544.42 A (25% D.F.) + 594.88 (75% D.F.)  
= 2628.29 A

IFL = 1,833.13 A

KVA = 288.29 x (1.51) = 435.32

KVA = 1033.13 (400V) x (1.732) / 1,000 = 715.75

USE: 3 SETS OF 500 KW, 40 HZ STAND-BY GENERATOR SET  
VOLTAGE: 400 VAC LINE-TO-LINE (230 VAC LINE-TO-NEUTRAL)  
3-PHASE, 4 WIRES, 80% PF, 60 HZ

IFL = 500 (1,000) / 0.8 = 625 A  
400V (1.732)

IFL = 802.14

USE: GENERATOR PANEL BOARD

3-250mm<sup>2</sup> THW WIRE (1,125 A / 902 A) IN 68.9mm Ø IMC PIPE (3 1/2" Ø)  
1-250mm<sup>2</sup> THW NEUTRAL WIRE (WHITE)  
1-40mm<sup>2</sup> TW GROUND WIRE (GREEN)

APPROXIMATE DIMENSION: 3000 mm LENGTH x 1,140 mm WIDTH x 1,441 mm HEIGHT (OPEN TYPE)  
DRY WEIGHT (OPEN TYPE): 2,500 KG  
FREQUENCY: 60 HZ

**MEDIUM VOLTAGE SWITCH GEAR**

1.5 MVA, 13.8 KV, PRIMARY  
400VAC LINE-TO-LINE / 230 VAC LINE-TO-NEUTRAL SECONDARY

SHORT CIRCUIT CAPACITY:  
MVA(SC) = 100 x 1,000,000 / (1.732 x 13,800) = 4183.7 A

WHERE:  
A - WIRE CROSS SECTIONAL AREA 80.99 sq. mm  
I - CURRENT (AMPERE, rms) 4,183.76 A  
t - CURRENT LET-THROUGH TIME (SEC) 3.00 SEC  
T0 - WIRE TEMPERATURE DUE TO SHORT CIRCUIT (°C) 280°C  
T1 - WIRE OPERATING TEMPERATURE (°C) 90°C

USE:  
1) 1 SET OF (3 - 1 x 50mm<sup>2</sup>) XLPE POWER CABLE, 15 KV (SHELOED) 13% BIL COPPER IN 110mm Ø PVC PIPE SCH40  
1 SET OF 1-40mm<sup>2</sup> BCW GRD WIRE IN 110mm Ø PIPE  
2) 630 AT, 25 KA SHORT TIME WITHSTAND CURRENT  
87.5 KA, RATED PEAK CURRENT, 13.8 KV, RATED VOLTAGE  
USE 3M MEDIUM VOLTAGE, COLD SHRINK TERMINATION KITS

**LOAD SCHEDULE 4**  
SCALE: 1/8" = 1'-0"

OWNER: NGAC PHASE 1A COMPANY  
PREPARED BY: FREY-FIL CORPORATION  
WENCIO B. DEON, PRESIDENT

REVIEWED AND VALIDATED BY: ZOILO S. DELA CRUZ, VICE PRESIDENT

SUBMITTED BY: BANDAR HEBAT BUILDERS, INC.  
ISAAC S. DAVID, PRESIDENT

CERTIFIED BY: TCGI ENGINEERS  
VIRGILIO A. MADRADO, PRESIDENT/CEO

PROJECT TITLE: AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL  
New Clark City, Capas, Tarlac

SHEET NO.: BUILDING "A" LOAD SCHEDULE 4  
E-24



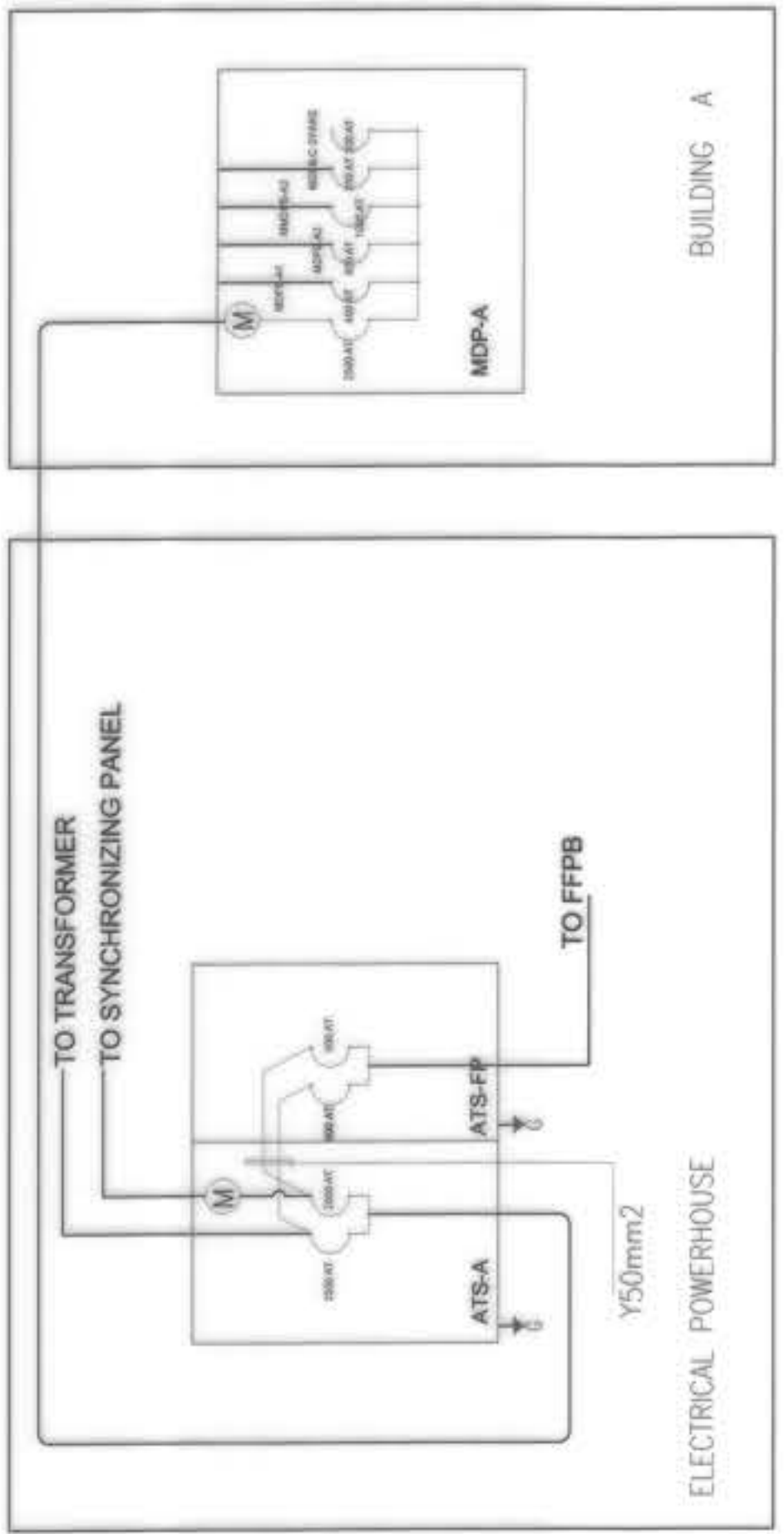
**LEGEND:**

- X1 = 1-3.5mm<sup>2</sup> THW WIRE IN 200mm PVC PIPE
- X2 = 2-3.5mm<sup>2</sup> THW WIRE IN 200mm PVC PIPE
- X3 = 3-3.5mm<sup>2</sup> THW WIRE IN 200mm PVC PIPE
- X4 = 4-3.5mm<sup>2</sup> THW WIRE IN 200mm PVC PIPE
- X5 = 5-3.5mm<sup>2</sup> THW WIRE IN 200mm PVC PIPE

**LEGEND FOR ROOF DECK:**

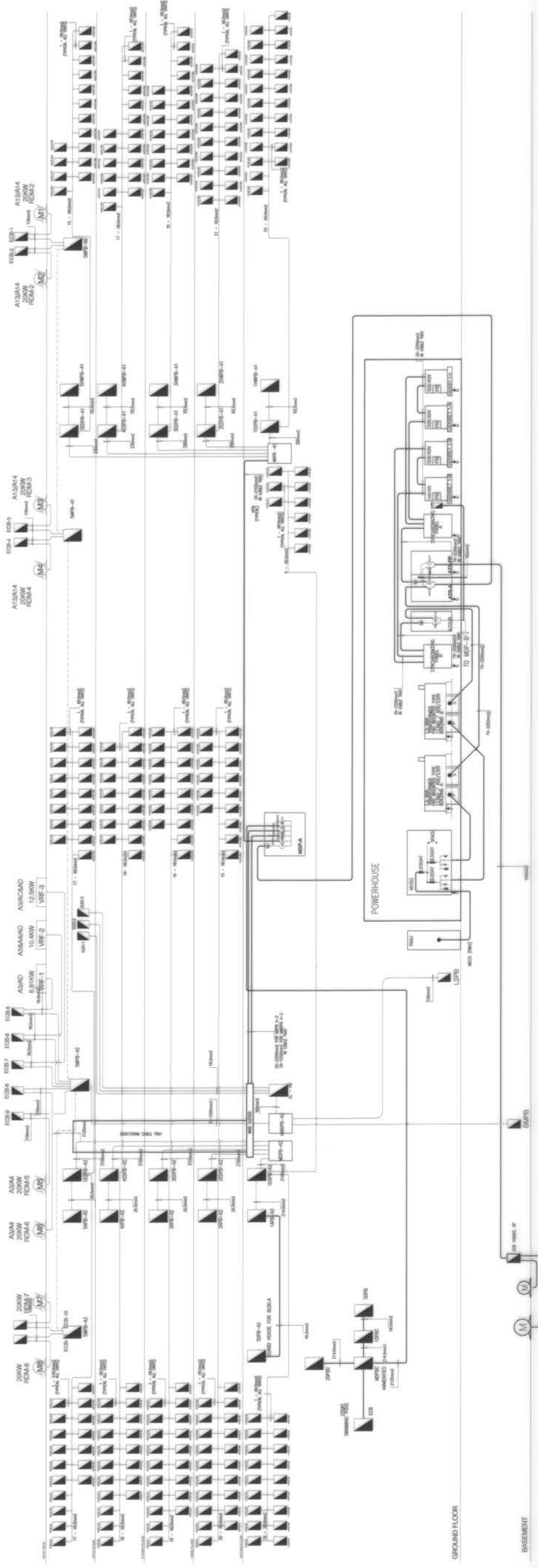
- 1.) RDM-1 = FRESH AIR BLOWER (M-1)
- 1.) RDM-2 = EXHAUST BLOWER (M-2)
- 1.) RDM-3 = FRESH AIR BLOWER (M-3)
- 1.) RDM-4 = EXHAUST BLOWER (M-4)
- 1.) RDM-5 = FRESH AIR BLOWER (M-5)
- 1.) RDM-6 = EXHAUST BLOWER (M-6)
- 1.) RDM-7 = FRESH AIR BLOWER (M-7)
- 1.) RDM-8 = FRESH AIR BLOWER (M-8)

**BUILDING A  
BLOW UP ATS-A, ATS-FP AND MDP-A**  
E-25 SCALE



**WIRE CODE**

73.5mm <sup>2</sup>	4 - 3.5mm <sup>2</sup> THWN + 1 - 2.0mm <sup>2</sup> THWN in 20mm PVC PIPE
75.5mm <sup>2</sup>	4 - 5.5mm <sup>2</sup> THWN + 1 - 3.5mm <sup>2</sup> THWN in 25mm PVC PIPE
78.0mm <sup>2</sup>	4 - 8.0mm <sup>2</sup> THWN + 1 - 5.5mm <sup>2</sup> THWN in 30mm PVC PIPE
79.0mm <sup>2</sup>	4 - 14mm <sup>2</sup> THWN + 1 - 8.0mm <sup>2</sup> THWN in 35mm PVC PIPE
79.5mm <sup>2</sup>	4 - 22mm <sup>2</sup> THWN + 1 - 14mm <sup>2</sup> THWN in 40mm PVC PIPE
80.0mm <sup>2</sup>	4 - 30mm <sup>2</sup> THWN + 1 - 20mm <sup>2</sup> THWN in 45mm PVC PIPE
80.5mm <sup>2</sup>	4 - 38mm <sup>2</sup> THWN + 1 - 28mm <sup>2</sup> THWN in 50mm PVC PIPE
81.0mm <sup>2</sup>	4 - 50mm <sup>2</sup> THWN + 1 - 38mm <sup>2</sup> THWN in 55mm PVC PIPE
81.5mm <sup>2</sup>	4 - 60mm <sup>2</sup> THWN + 1 - 48mm <sup>2</sup> THWN in 60mm PVC PIPE
82.0mm <sup>2</sup>	4 - 80mm <sup>2</sup> THWN + 1 - 64mm <sup>2</sup> THWN in 65mm PVC PIPE
82.5mm <sup>2</sup>	4 - 100mm <sup>2</sup> THWN + 1 - 80mm <sup>2</sup> THWN in 70mm PVC PIPE
83.0mm <sup>2</sup>	4 - 120mm <sup>2</sup> THWN + 1 - 96mm <sup>2</sup> THWN in 75mm PVC PIPE
83.5mm <sup>2</sup>	4 - 150mm <sup>2</sup> THWN + 1 - 120mm <sup>2</sup> THWN in 80mm PVC PIPE
84.0mm <sup>2</sup>	4 - 180mm <sup>2</sup> THWN + 1 - 144mm <sup>2</sup> THWN in 85mm PVC PIPE
84.5mm <sup>2</sup>	4 - 200mm <sup>2</sup> THWN + 1 - 160mm <sup>2</sup> THWN in 90mm PVC PIPE
85.0mm <sup>2</sup>	4 - 250mm <sup>2</sup> THWN + 1 - 200mm <sup>2</sup> THWN in 110mm PVC PIPE
85.5mm <sup>2</sup>	3 - 3.5mm <sup>2</sup> THWN + 1 - 2.0mm <sup>2</sup> THWN in 20mm PVC PIPE
86.0mm <sup>2</sup>	3 - 5.5mm <sup>2</sup> THWN + 1 - 3.5mm <sup>2</sup> THWN in 25mm PVC PIPE
86.5mm <sup>2</sup>	3 - 8.0mm <sup>2</sup> THWN + 1 - 5.5mm <sup>2</sup> THWN in 30mm PVC PIPE
87.0mm <sup>2</sup>	3 - 13mm <sup>2</sup> THWN + 1 - 8.0mm <sup>2</sup> THWN in 35mm PVC PIPE
87.5mm <sup>2</sup>	3 - 20mm <sup>2</sup> THWN + 1 - 14mm <sup>2</sup> THWN in 40mm PVC PIPE
88.0mm <sup>2</sup>	3 - 30mm <sup>2</sup> THWN + 1 - 20mm <sup>2</sup> THWN in 45mm PVC PIPE
88.5mm <sup>2</sup>	3 - 38mm <sup>2</sup> THWN + 1 - 28mm <sup>2</sup> THWN in 50mm PVC PIPE
89.0mm <sup>2</sup>	3 - 50mm <sup>2</sup> THWN + 1 - 38mm <sup>2</sup> THWN in 55mm PVC PIPE
89.5mm <sup>2</sup>	3 - 60mm <sup>2</sup> THWN + 1 - 48mm <sup>2</sup> THWN in 60mm PVC PIPE
90.0mm <sup>2</sup>	3 - 80mm <sup>2</sup> THWN + 1 - 64mm <sup>2</sup> THWN in 65mm PVC PIPE
90.5mm <sup>2</sup>	3 - 100mm <sup>2</sup> THWN + 1 - 80mm <sup>2</sup> THWN in 70mm PVC PIPE
91.0mm <sup>2</sup>	3 - 120mm <sup>2</sup> THWN + 1 - 96mm <sup>2</sup> THWN in 75mm PVC PIPE
91.5mm <sup>2</sup>	3 - 150mm <sup>2</sup> THWN + 1 - 120mm <sup>2</sup> THWN in 80mm PVC PIPE
92.0mm <sup>2</sup>	3 - 200mm <sup>2</sup> THWN + 1 - 160mm <sup>2</sup> THWN in 110mm PVC PIPE
92.5mm <sup>2</sup>	3 - 250mm <sup>2</sup> THWN + 1 - 200mm <sup>2</sup> THWN in 110mm PVC PIPE
93.5mm <sup>2</sup>	2 - 3.5mm <sup>2</sup> THWN + 1 - 2.0mm <sup>2</sup> THWN in 20mm PVC PIPE
94.0mm <sup>2</sup>	2 - 5.5mm <sup>2</sup> THWN + 1 - 3.5mm <sup>2</sup> THWN in 25mm PVC PIPE
94.5mm <sup>2</sup>	2 - 8.0mm <sup>2</sup> THWN + 1 - 5.5mm <sup>2</sup> THWN in 30mm PVC PIPE
95.0mm <sup>2</sup>	2 - 14mm <sup>2</sup> THWN + 1 - 8.0mm <sup>2</sup> THWN in 35mm PVC PIPE
95.5mm <sup>2</sup>	2 - 22mm <sup>2</sup> THWN + 1 - 14mm <sup>2</sup> THWN in 40mm PVC PIPE

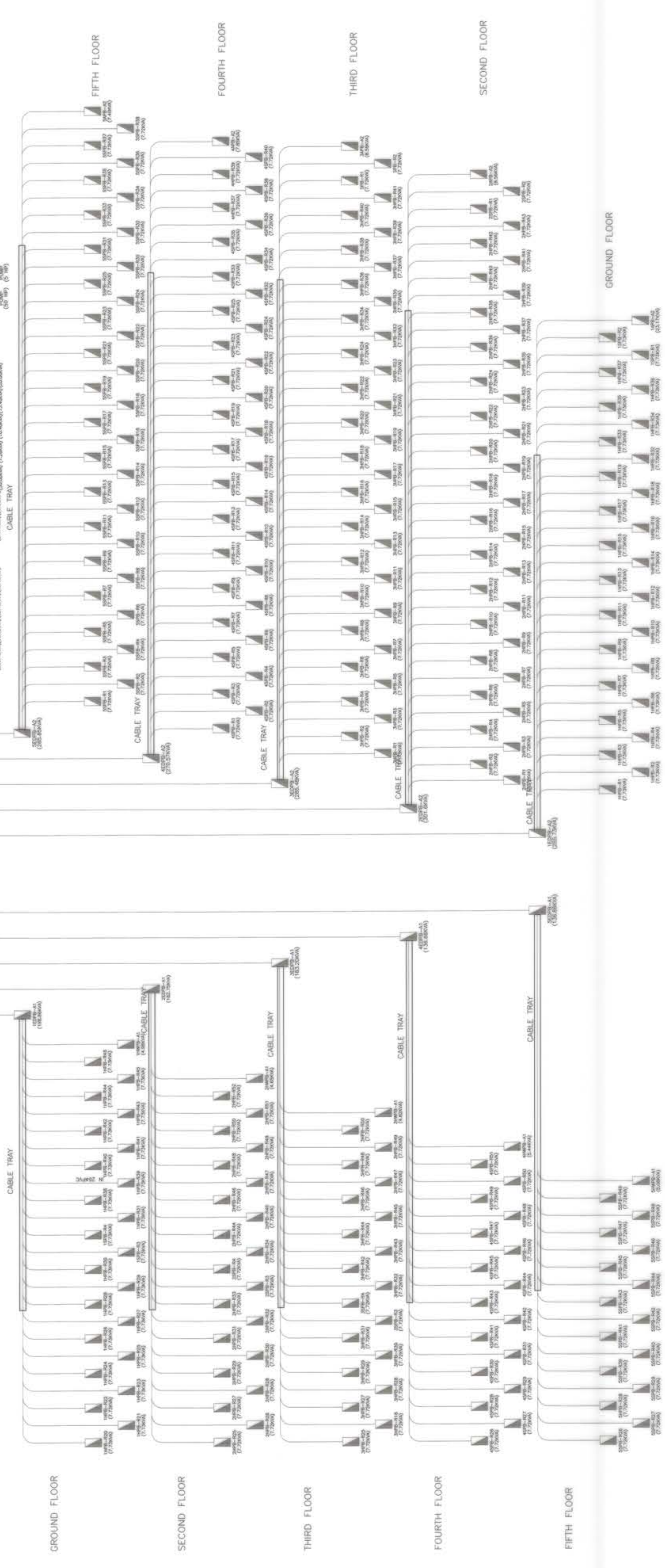
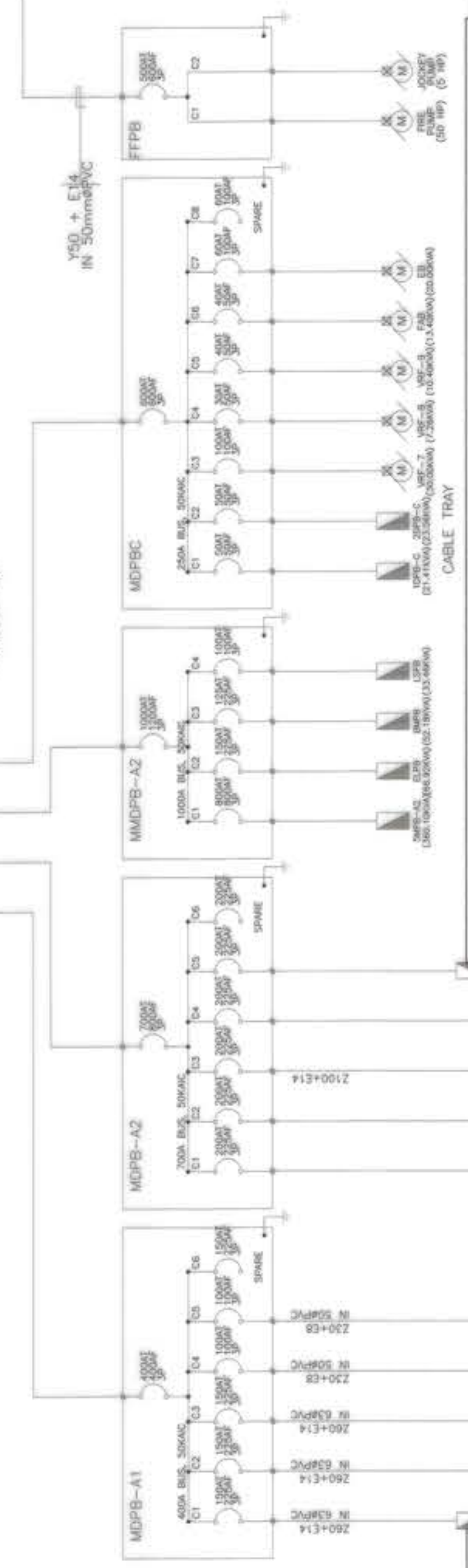


**BUILDING A  
ELECTRICAL RISER DIAGRAM**  
E-25 SCALE

<p><b>OWNER :</b> NGAC PHASE 1 JV COMPANY</p> <p><b>AND</b></p> <p><b>BCDA</b></p> <p>WENCIO B. OJON PRESIDENT</p>	<p><b>PREPARED BY:</b> FREY-FIL CORPORATION</p> <p>REC. NO.: 002097 TRN. NO.: 118-001-234 DATE: 03.20.19</p> <p><b>SOLO S. DELA CRUZ</b> VICE PRESIDENT / OPERATION</p> <p>PTR. NO.: 8118498 PLACE: MANILA</p>	<p><b>REVIEWED AND VALIDATED BY:</b> <b>FF</b></p> <p><b>FILIPINAS DRAVO CORPORATION</b> Architectural &amp; Engineering Consultants</p> <p><b>ALFREDO C. REYLLA</b> PROJECT MANAGER</p>	<p><b>SUBMITTED BY:</b> <b>TCGI ENGINEERS</b></p> <p><b>BANDAR HEBAT BUILDERS, INC.</b></p> <p><b>ISAAC S. DAVID</b> PRESIDENT</p>	<p><b>CERTIFIED BY:</b> <b>TCGI ENGINEERS</b></p> <p><b>VIRGILIO A. MADRAZO</b> PRESIDENT / CEO</p>	<p><b>PROJECT TITLE:</b> AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL</p> <p>New Clark City, Capas, Tarlac</p>	<p><b>SHEET CONTENTS:</b></p> <p>BUILDING "A" ELECTRICAL RISER DIAGRAM</p>	<p><b>SHEET NO.:</b> E-25</p>
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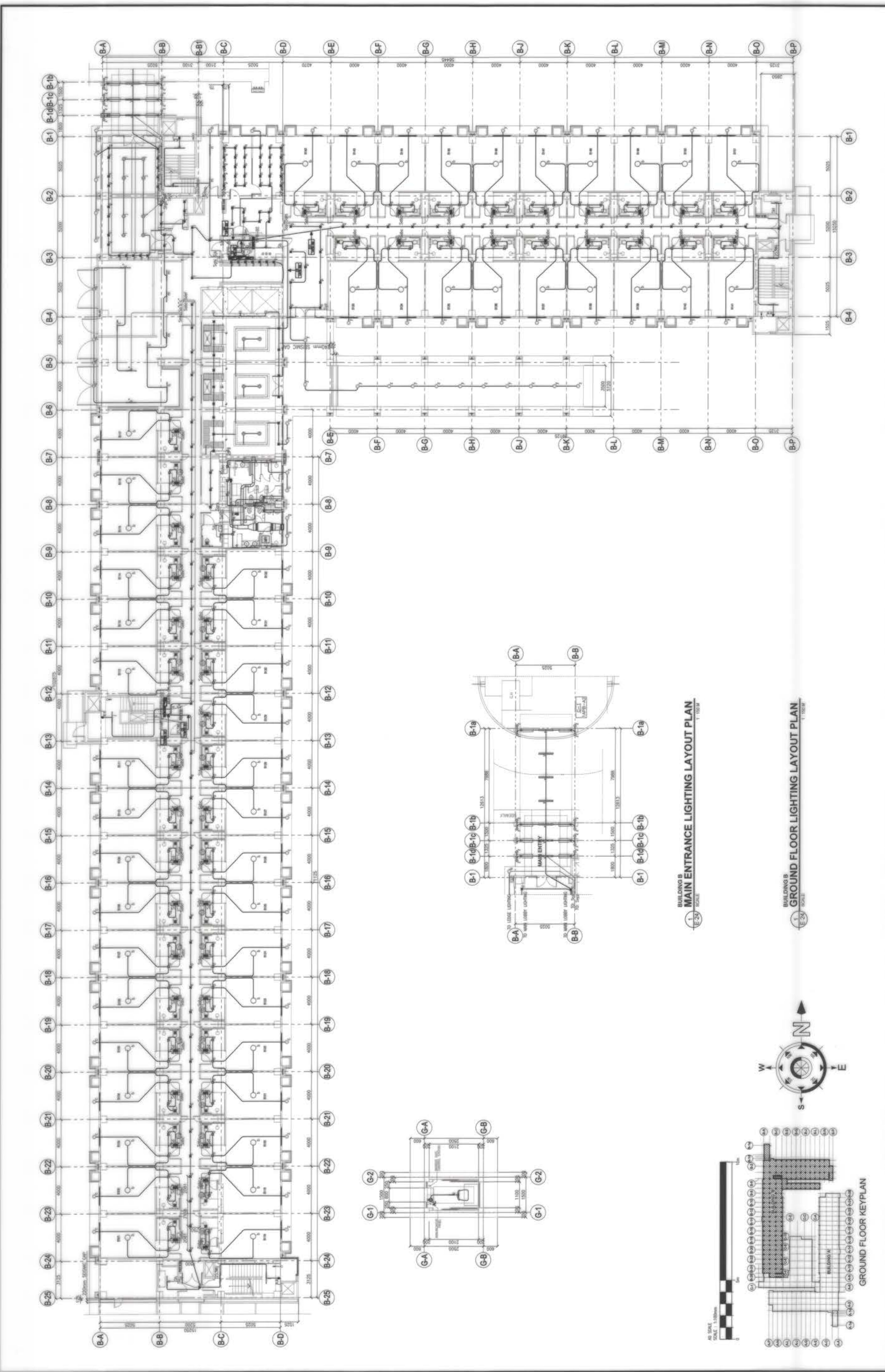
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(REFER TO E400)

TO: A15-EP  
(REFER TO E400)

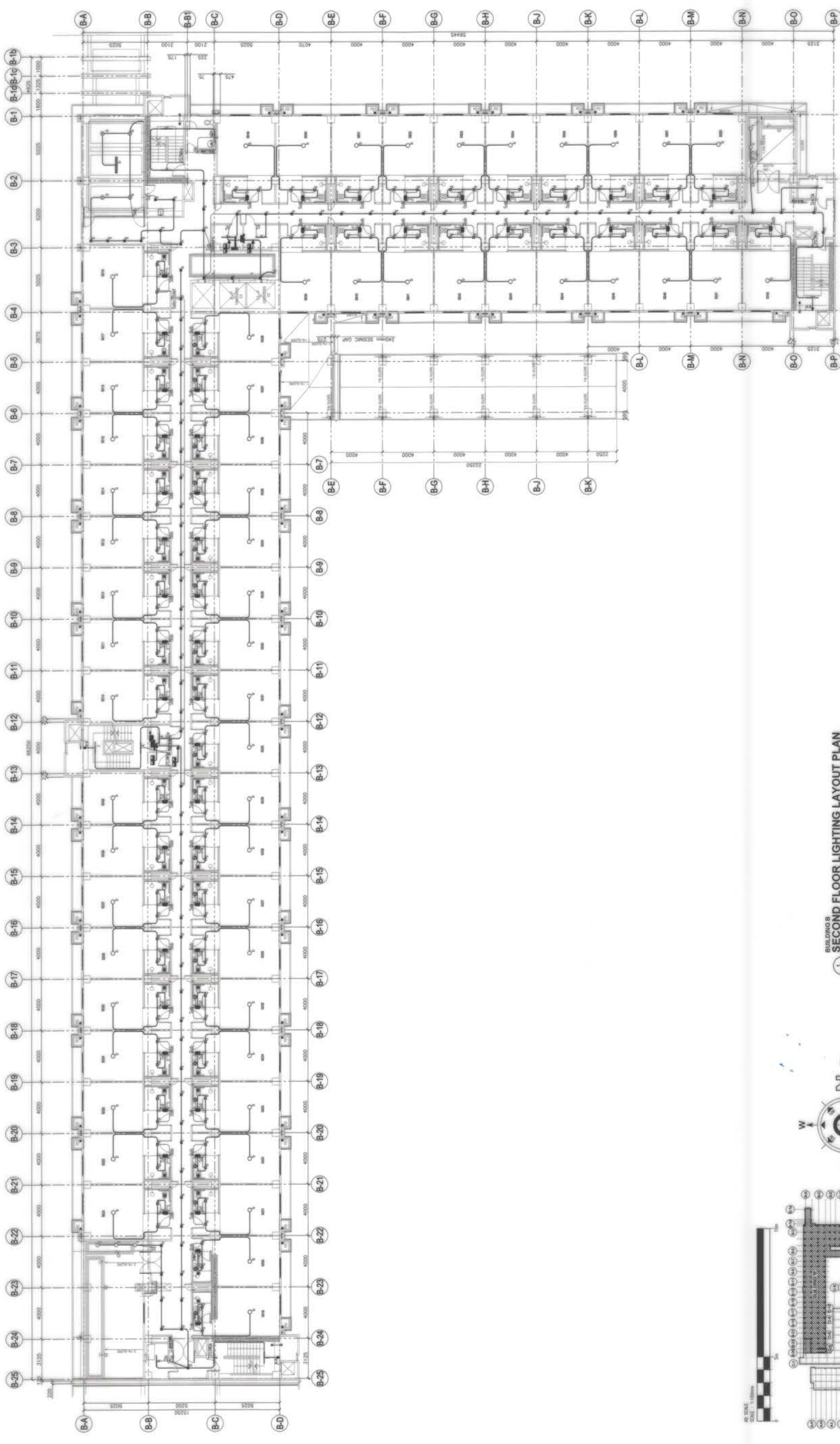


**BUILDING A**  
**POWER SINGLE LINE DIAGRAM**  
1:20 SCALE

OWNER :	NGAC PHASE 1 JV COMPANY AND BCDA VIVENCIO B. RIZON PRESIDENT	PREPARED BY :	PREY-FIL CORPORATION MARCUS "DANCO" CHEN 133 West 44th Street, Suite 1100 New York, NY 10018 Tel: 212-693-1100 Fax: 212-693-1101 www.prey-fil.com	REVIEWED AND VALIDATED BY :	FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants 10th Floor, 1000 South Wood Avenue, Suite 1000 Pasadena, CA 91106 Tel: 626-799-8888 Fax: 626-799-8889 www.filipinasdravo.com	SUBMITTED BY :	BANDAR HEBAT BUILDERS, INC. ISAC S. DAVID PRESIDENT	CERTIFIED BY :	TCGI ENGINEERS 1000 South Wood Avenue, Suite 1000 Pasadena, CA 91106 Tel: 626-799-8888 Fax: 626-799-8889 www.tcgiengineers.com	PROJECT TITLE :	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	SHEET CONTENTS :	BUILDING "A" POWER SINGLE LINE DIAGRAM	SHEET NO. :	E-26
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<p>OWNER : NGAC PHASE 1 JV COMPANY  <b>BCDA</b>          WENCIO B. DILON          PRESIDENT</p>	<p>PREPARED BY:  <b>FRET-FIL CORPORATION</b>          MANTUA - DAUAY - CEBU - PHILIPPINES          REG. NO. 002857          TIN NO. 104-08-274          DATE: 03.20.19</p>	<p>REVIEWED AND VALIDATED BY:  <b>FIL</b>          FILIPINAS DRAVO CORPORATION          Architectural &amp; Engineering Consultants          10th Floor, 1000 East Ave., Cebu City, Philippines          TEL: 052-200-1000          FAX: 052-200-1001          WWW: www.fil.com.ph</p>	<p>SUBMITTED BY:  <b>Bandar Hebat Builders, Inc.</b>          ISAAC S. DAVID          PRESIDENT</p>	<p>CERTIFIED BY: INDEPENDENT CONSULTANT  <b>TCGI ENGINEERS</b>          2077 North Ave., Suite 100, Cebu City, Philippines          TEL: 052-200-1000          FAX: 052-200-1001          WWW: www.tcgi.com.ph</p>	<p>PROJECT TITLE:  <b>AS-BUILT DRAWING</b>          NGAC PHASE 1A          ATHLETES VILLAGE - BUILDING B          ELECTRICAL          New Clark City, Capas, Tarlac</p>	<p>SHEET NO.  <b>E-27</b></p>
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**OWNER :** NGAC PHASE 1 JV COMPANY  
**AND**  
**BCDA**  
**VENCIO B. OZON**  
 PRESIDENT

**PREPARED BY:**  
**FF**  
**FREY-FIL CORPORATION**  
 MANILA - DAVAO - CEBU - ALABON  
 45 North Alabon Road, Alabon, Marikina City, Philippines  
 TEL. No. 893-8938, 893-8939 FAX. No. 893-8938  
 www.frey-fil.com

**REVIEWED AND VALIDATED BY:**  
**FDG**  
**FILIPINAS DRAGO CORPORATION**  
 Architectural & Engineering Consultants  
 11th Floor, 1105 North Avenue, Suite 1105, Alabon, Marikina City, Philippines  
 TEL. No. 893-8938, 893-8939 FAX. No. 893-8938  
 www.filipinasdrago.com

**SUBMITTED BY:**  
**IS**  
**BANDAR HEBAT BUILDERS, INC.**  
**ISAAC S. DAVID**  
 PRESIDENT

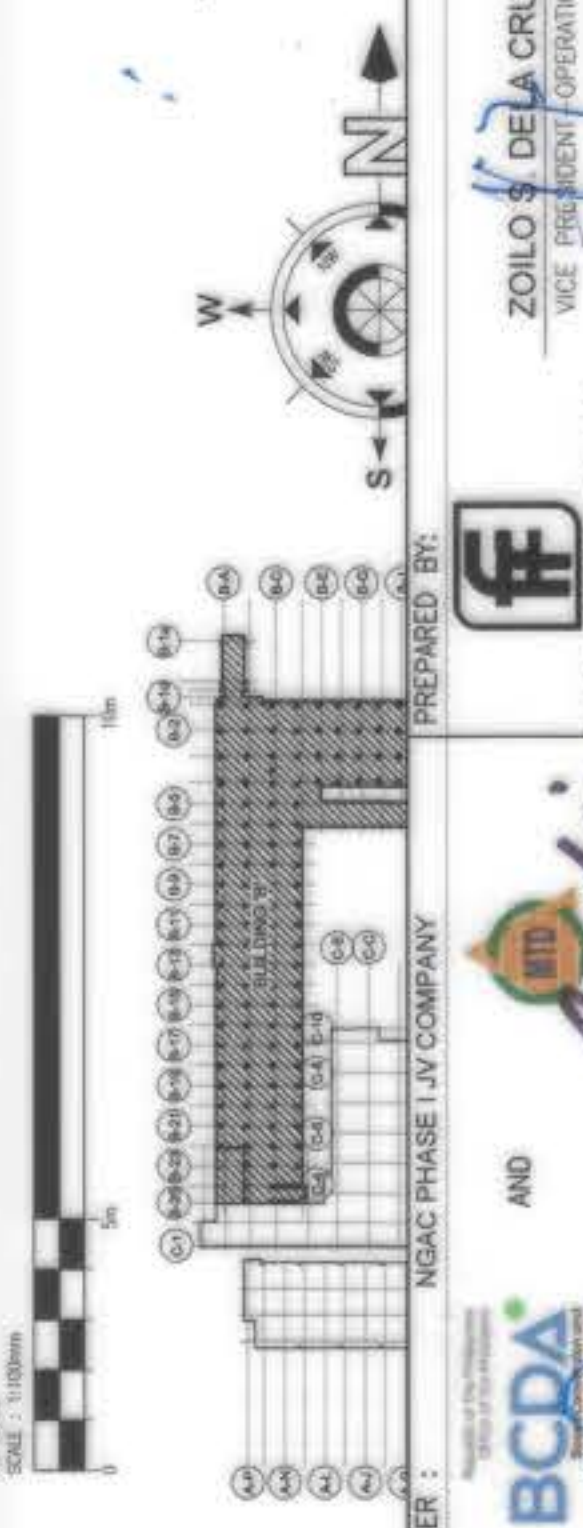
**CERTIFIED BY:** INDEPENDENT CONSULTANT  
**T**  
**TCGI ENGINEERS**  
 1001 Alabon Road, Alabon, Marikina City, Philippines  
 TEL. No. 893-8938, 893-8939 FAX. No. 893-8938  
 www.tcgi.com

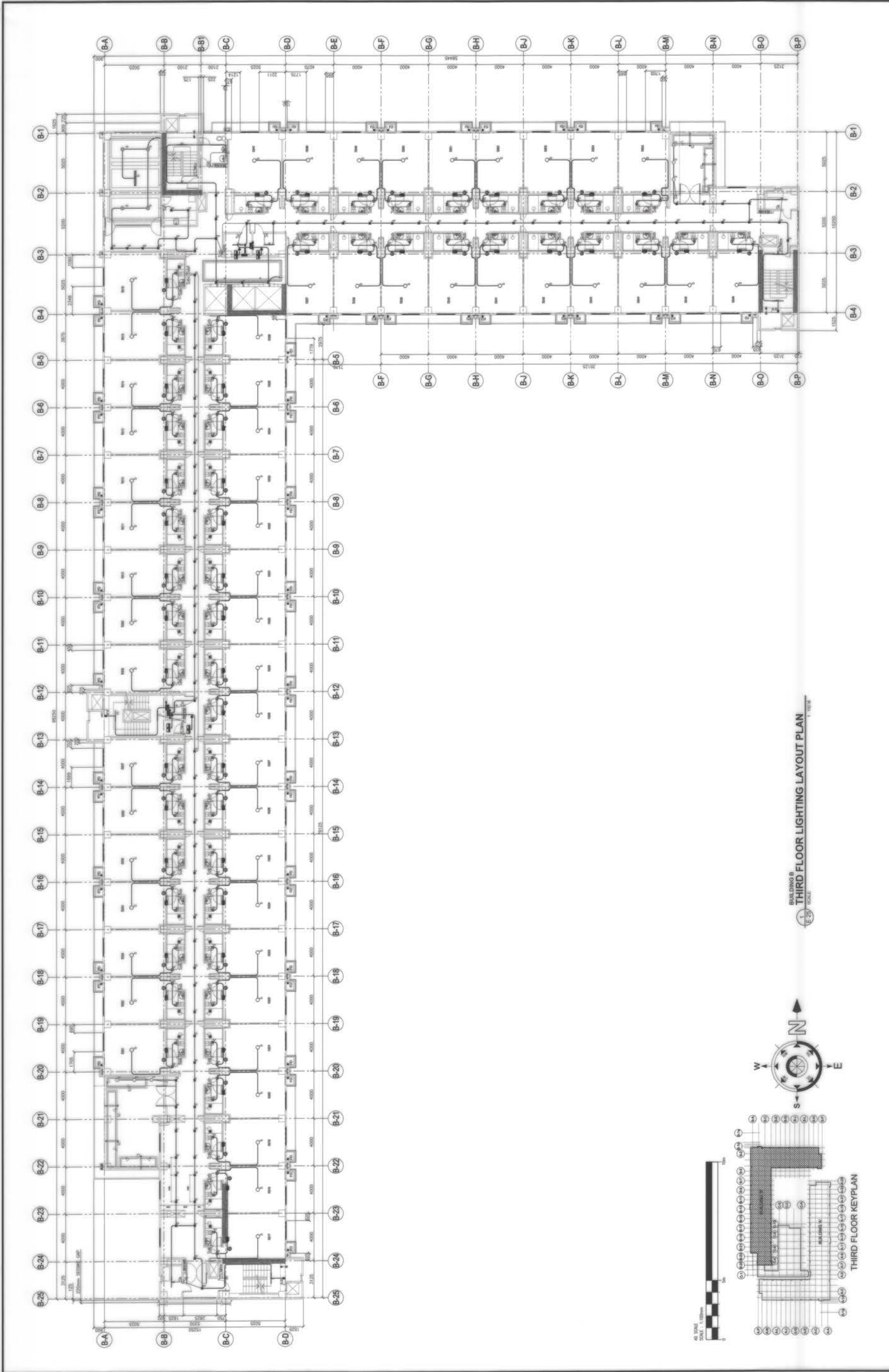
**PRESIDENT/CEO:**  
**VIRGILIO A. MADRAZO**

**PROJECT TITLE:**  
**AS-BUILT DRAWING**  
**NGAC PHASE 1A**  
**ATHLETES VILLAGE - BUILDING B**  
**ELECTRICAL**  
 New Clark City, Capas, Tarlac

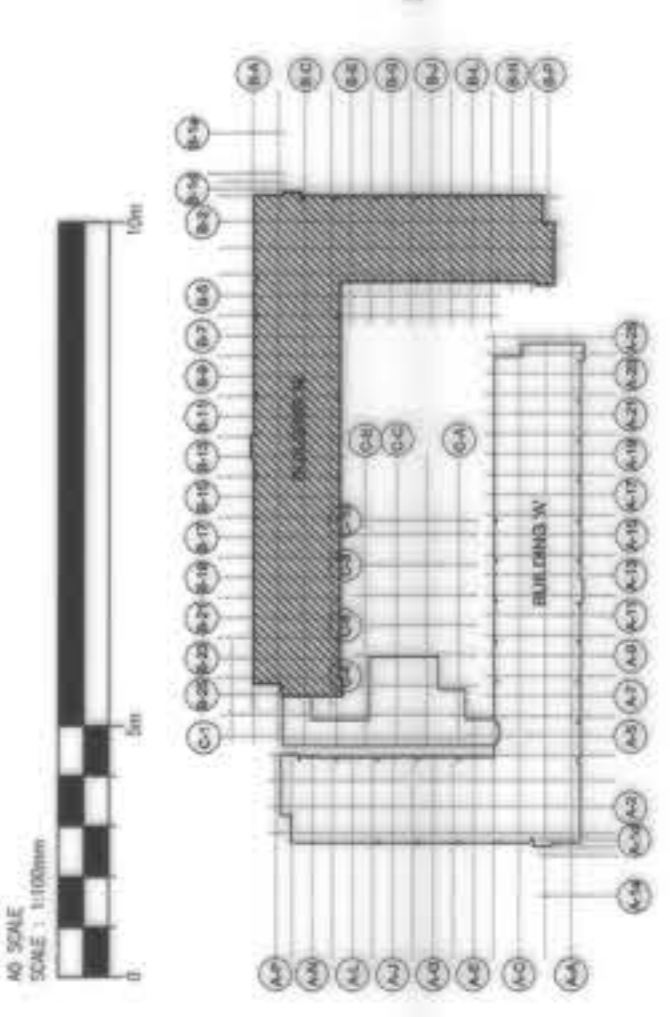
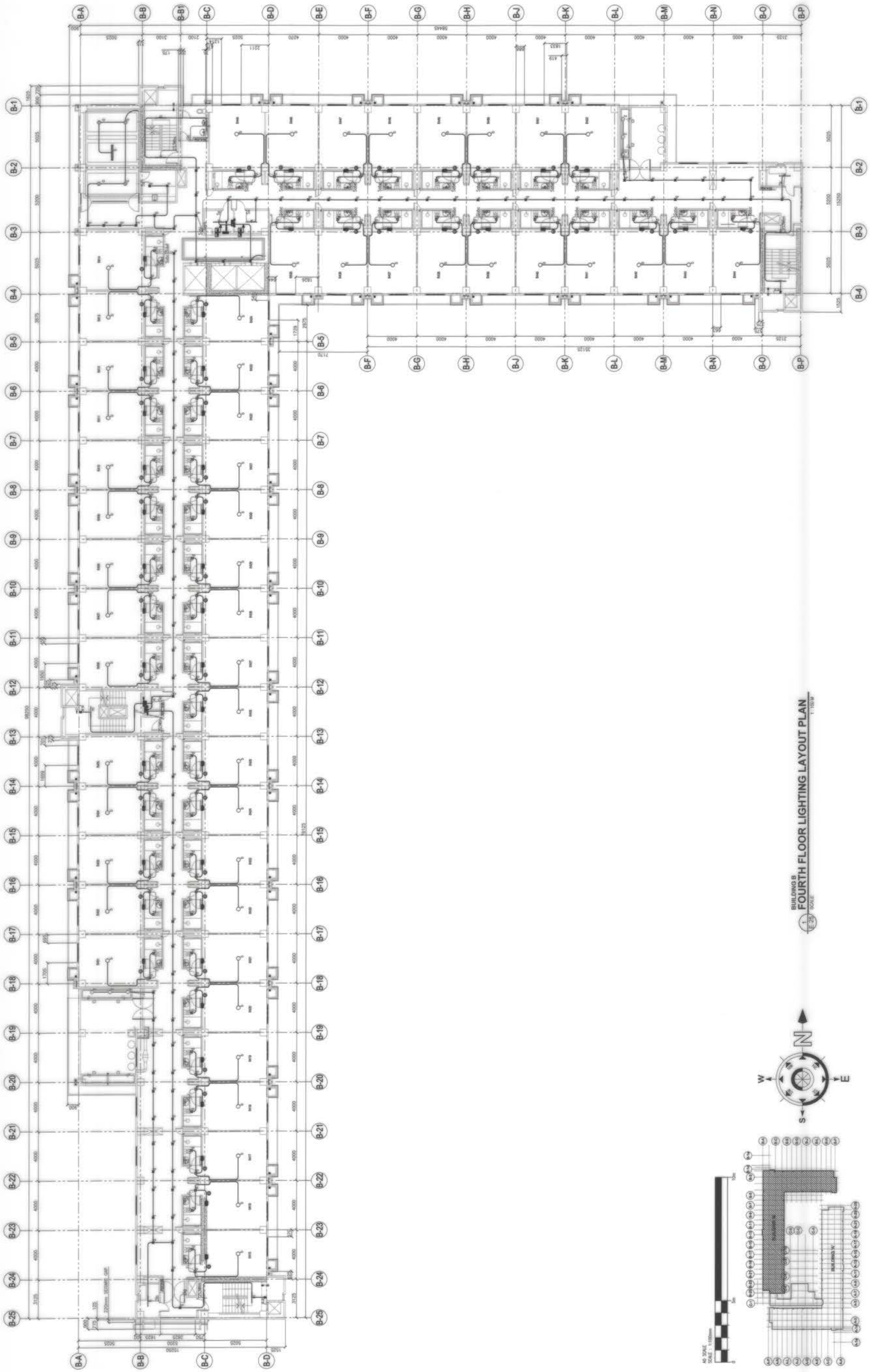
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 BUILDING "B" SECOND FLOOR  
 LIGHTING LAYOUT PLAN

**SHEET NO.:**  
**E-28**



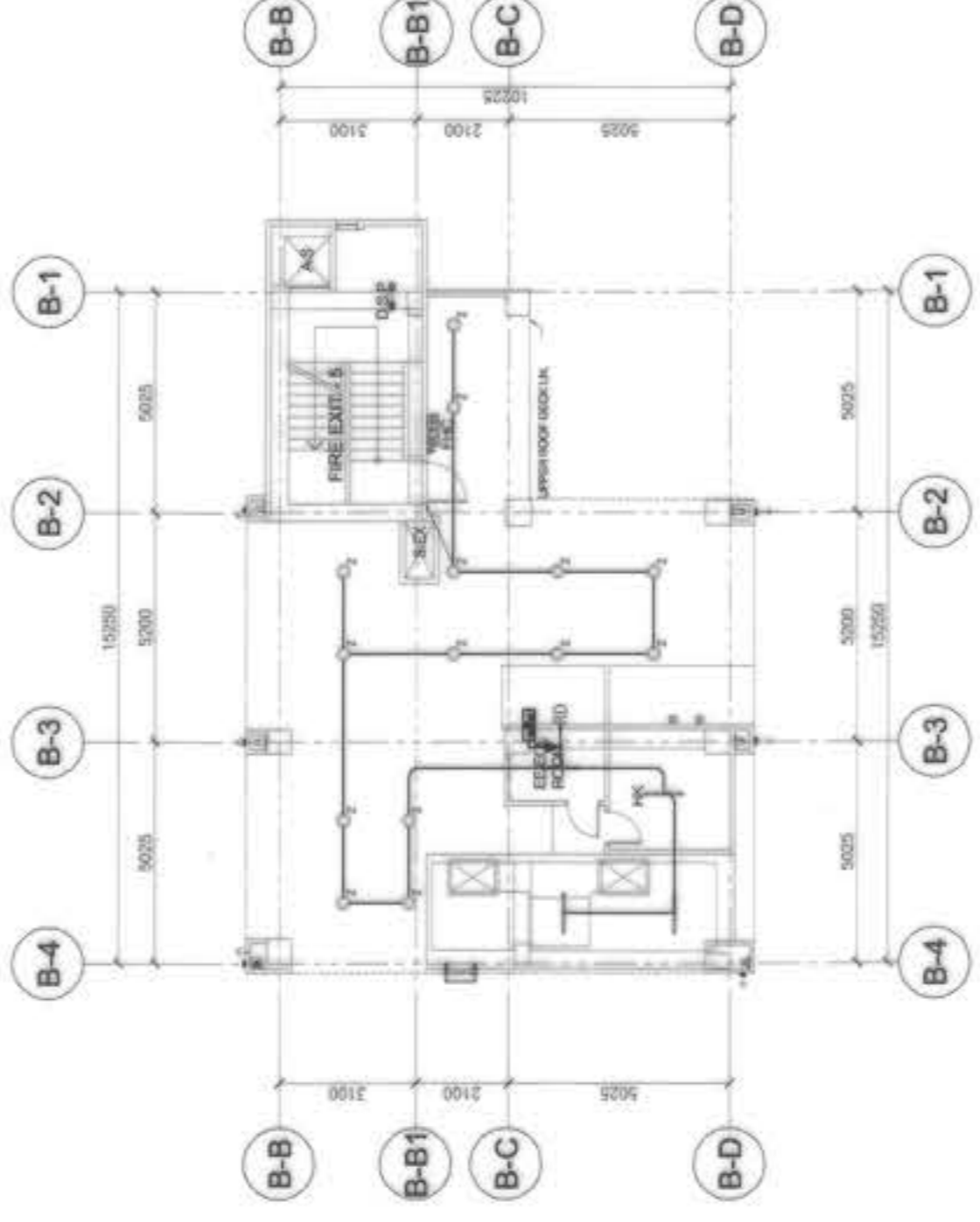
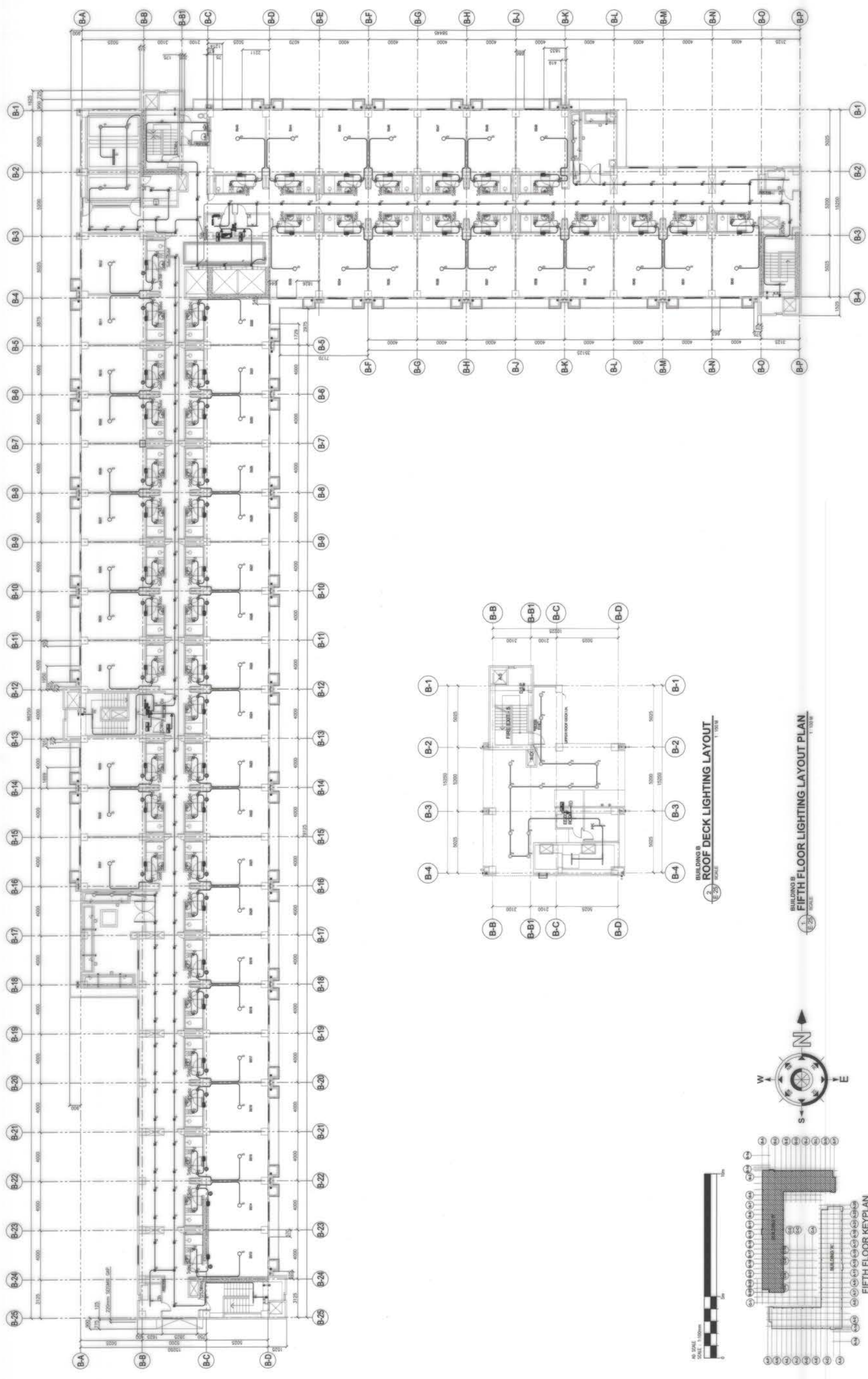


OWNER :	NGAC PHASE 1 JV COMPANY AND BCDA WENGO B. DIZON PRESIDENT	PREPARED BY:	FREY-FIL CORPORATION MANILA - SAIGON - CEBU - ILOILO 1111 11th Street, 11th Floor, Alabang, Muntinlupa City, Philippines Tel: +632 881 8888 www.frey-fil.com	REVIEWED AND VALIDATED BY:	 FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants ALFREDO R. REVILLA PROJECT MANAGER	SUBMITTED BY:	 BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	SHEET NO. E-29
PROJECT TITLE:	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac	CERTIFIED BY:	 TCGI ENGINEERS VIRGILIO A. MADRAZO PRESIDENT/CEO	REVISED AND VALIDATED BY:	 ZOILO S. DELA CRUZ VICE PRESIDENT - OPERATION REC. No.: 000000 PTR No.: 011000 TIN No.: 111-101-014 PLACE: MANILA DATE: 03.26.2018	SHEET CONTENTS:	BUILDING "B" THIRD FLOOR LIGHTING LAYOUT PLAN	



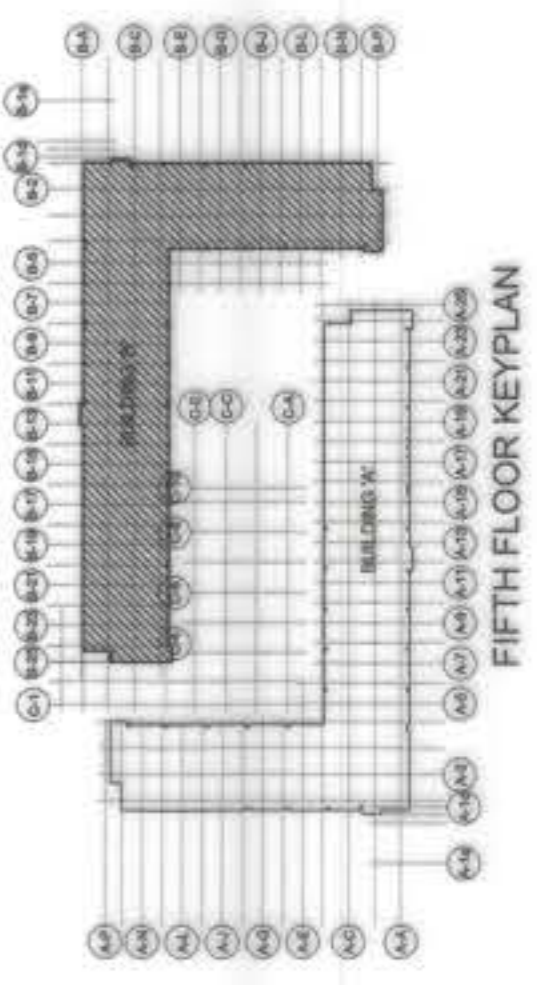
BUILDING B  
FOURTH FLOOR LIGHTING LAYOUT PLAN  
SCALE: 1:250

<p>OWNER : NGAC PHASE 1 JV COMPANY</p> <p>AND</p> <p>BCDA BUREAU OF CONTRACTS, DESIGN AND ADMINISTRATION</p> <p>WENBO B. DZON PRESIDENT</p>	<p>PREPARED BY:</p> <p>FREY-FIL CORPORATION MANILA - DIVISION OFFICE - TELNOY No. 10, Divisoria St., Manila</p> <p>ZOILLO S. DELA CRUZ VICE PRESIDENT - OPERATION REG. No. 002807 TIN No. 114-04-274 PLACE: MANILA DATE: 01.20.2019</p>	<p>REVIEWED AND VALIDATED BY:</p> <p>FILIPINAS DRAVO CORPORATION Architectural &amp; Engineering Consultants 1000 N. RIZAL BLVD., SUITE 1000, QUEZON CITY, PHILIPPINES</p> <p>ALFREDO R. REVILLA PROJECT MANAGER</p>	<p>SUBMITTED BY:</p> <p>BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT</p>	<p>CERTIFIED BY: INDEPENDENT CONSULTANT</p> <p>TCGIENGINEERS 1000 N. RIZAL BLVD., SUITE 1000, QUEZON CITY, PHILIPPINES</p> <p>VIRGILIO A. MADRAZO PRESIDENT/CEO</p>	<p>PROJECT TITLE:</p> <p>AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL</p> <p>New Clark City, Capas, Tarlac</p>	<p>SHEET NO. E-30</p> <p>SHEET CONTENTS: BUILDING "B" FOURTH FLOOR LIGHTING LAYOUT PLAN</p>
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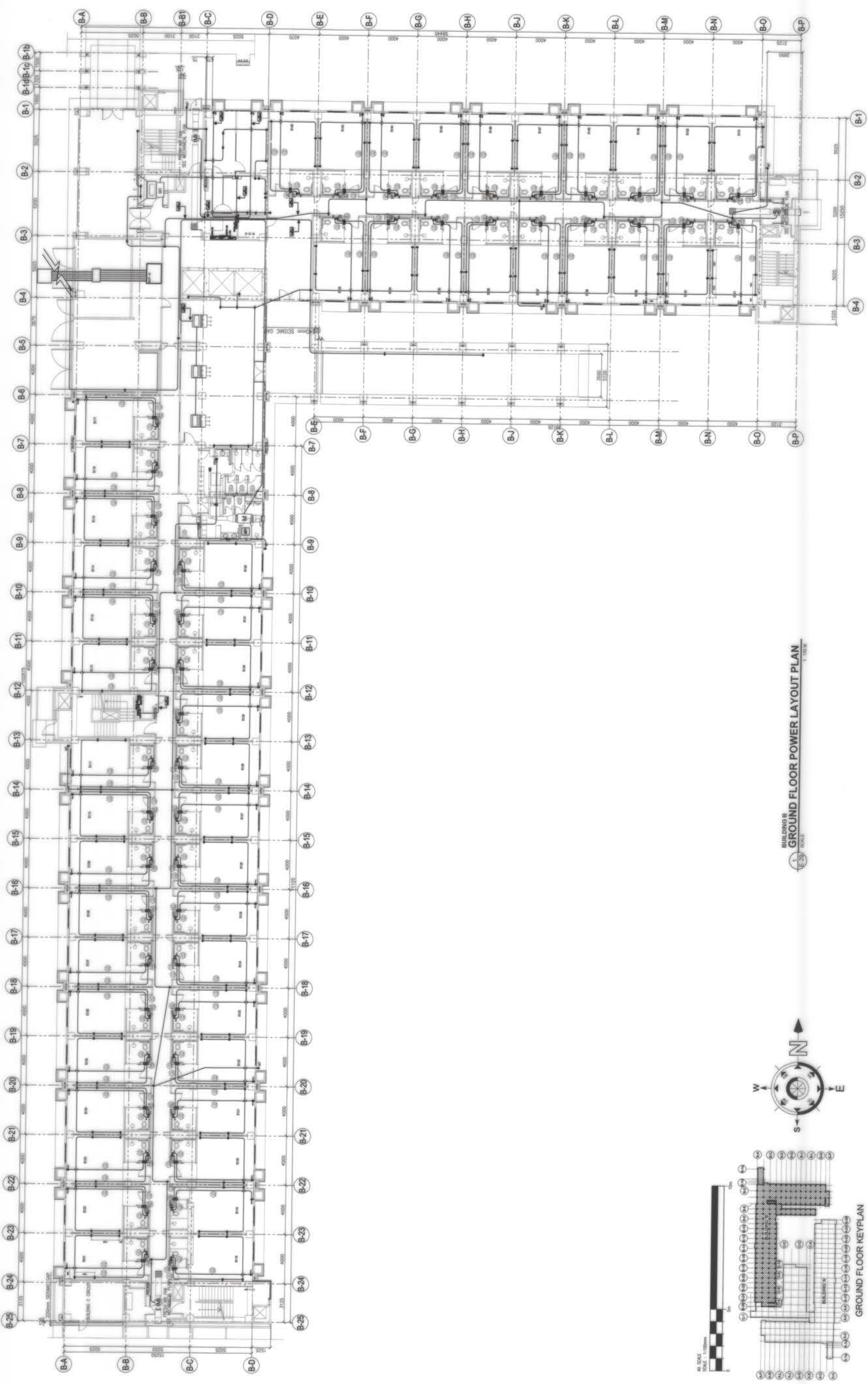
BUILDING B  
ROOF DECK LIGHTING LAYOUT  
SCALE: 1:100

BUILDING B  
FIFTH FLOOR LIGHTING LAYOUT PLAN  
SCALE: 1:100

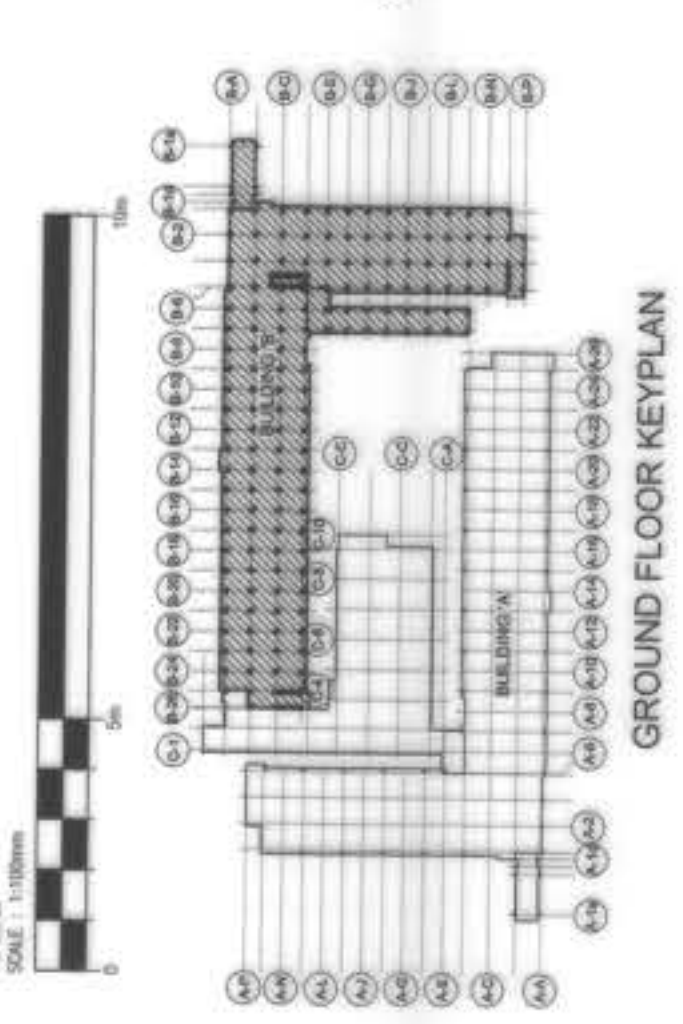


FIFTH FLOOR KEYPLAN

<p><b>OWNER :</b> NGAC PHASE 1 JV COMPANY  <b>BCDA</b>          WENCO B. DION          PRESIDENT</p>	<p><b>PREPARED BY:</b>  <b>PREY-FIL CORPORATION</b>          MANILA - CAYANG - CEBU - ILOILO          118 West McKinley Parkway, 118th Floor          118th Floor, McKinley Park, 118th Floor          118th Floor, McKinley Park, 118th Floor</p> <p><b>ZOILLO S. DELA CRUZ</b>          VICE PRESIDENT - OPERATION          REG. No.: 002807 / PTR No.: 0118408          TIN No.: 118-08-274 / PLACE: MABA          DATE: 01-20-2018</p>	<p><b>REVIEWED AND VALIDATED BY:</b>  <b>F70</b>  <b>FILIPINAS DRAVO CORPORATION</b>          Architectural &amp; Engineering Consultants          118th Floor, McKinley Park, 118th Floor          118th Floor, McKinley Park, 118th Floor</p> <p><b>ALFREDO R. REVILLA</b>          PROJECT MANAGER</p>	<p><b>SUBMITTED BY:</b>  <b>BANDAR HEBAT BUILDERS, INC.</b>  <b>ISAAC S. DAVID</b>          PRESIDENT</p>	<p><b>CERTIFIED BY: INDEPENDENT CONSULTANT</b>  <b>TCGI ENGINEERS</b>          118th Floor, McKinley Park, 118th Floor          118th Floor, McKinley Park, 118th Floor</p> <p><b>VIRGIOLO A. MADRAZO</b>          PRESIDENT/CEO</p>	<p><b>PROJECT TITLE:</b>  <b>AS-BUILT DRAWING</b>          NGAC PHASE 1A          ATHLETES VILLAGE - BUILDING B          ELECTRICAL</p> <p>New Clark City, Capas, Tarlac</p>	<p><b>SHEET CONTENTS:</b>          BUILDING "B" FIFTH FLOOR          LIGHTING LAYOUT PLAN</p> <p><b>SHEET NO.</b>  <b>E-31</b></p>
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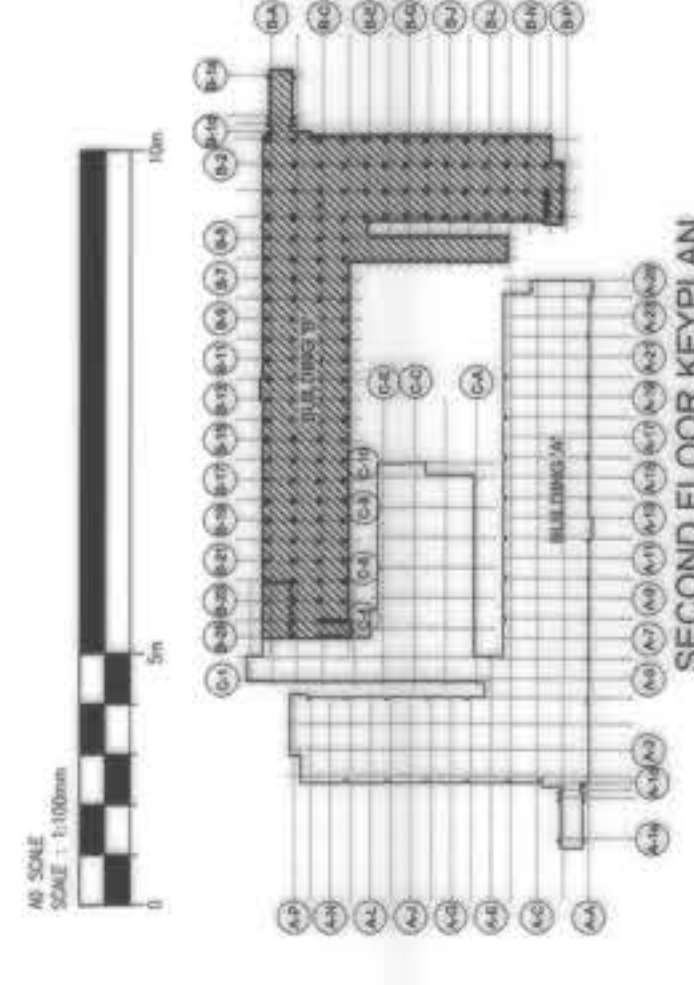
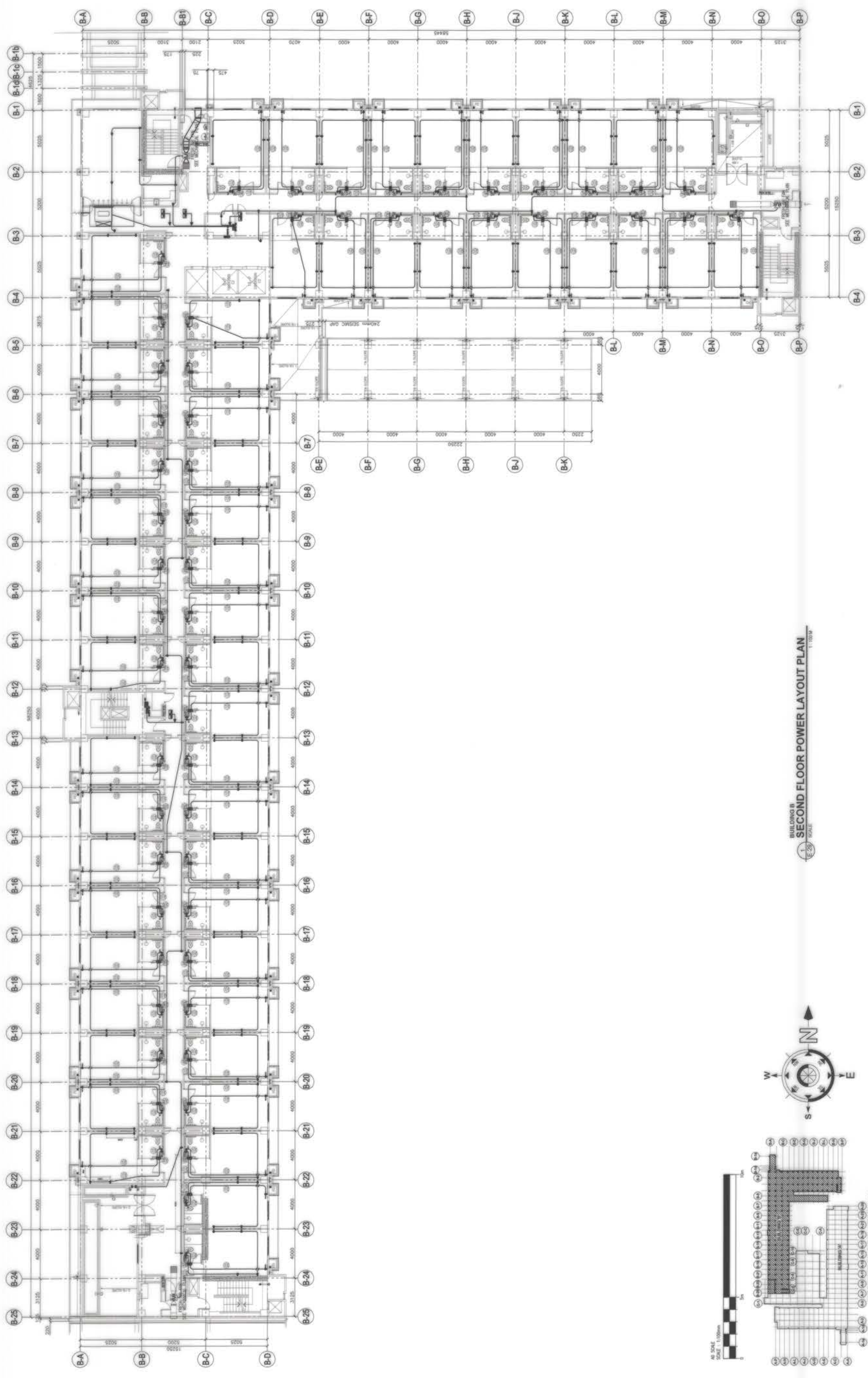


BUILDING B  
GROUND FLOOR POWER LAYOUT PLAN  
1:1000  
E-20 SCALE



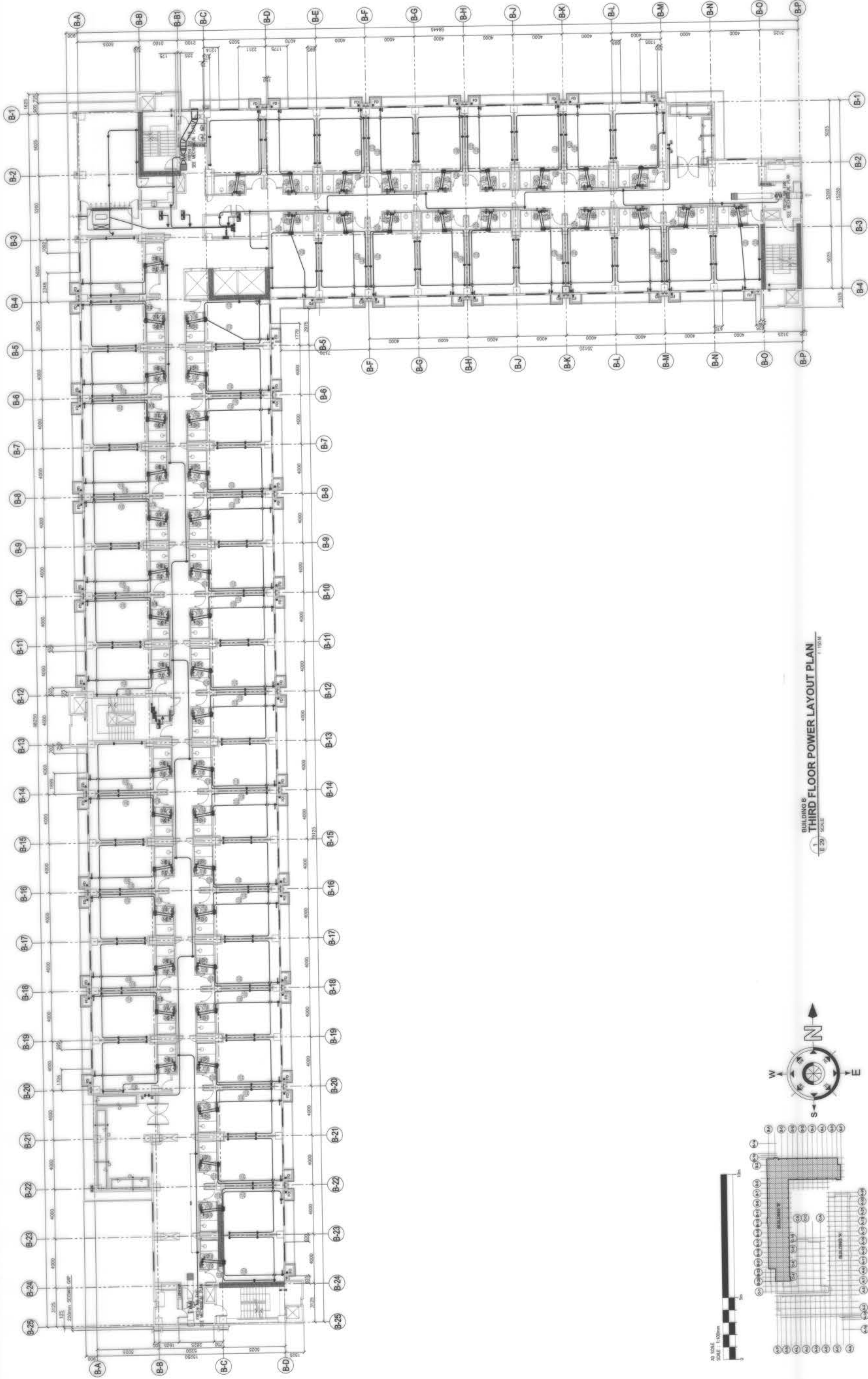
<p>OWNER : BCDA WENCO B. VECON PRESIDENT</p>	<p>PREPARED BY: NGAC PHASE I JV COMPANY AND JTD PTE. LTD. PATEK NICHOLAS P. DAVID PRESIDENT</p>	<p>REVISED AND VALIDATED BY: FID FILIPINAS DRAVO CORPORATION Architectural &amp; Engineering Consultants ALBERTO R. REVILLA PROJECT MANAGER</p>	<p>SUBMITTED BY: BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT</p>	<p>REVIEWED AND VALIDATED BY: TCGIENGINEERS VIRGILIO A. MADRAZO PRESIDENT</p>	<p>CERTIFIED BY: INDEPENDENT CONSULTANT TCGIENGINEERS VIRGILIO A. MADRAZO PRESIDENT</p>	<p>PROJECT TITLE: AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac</p>	<p>SHEET NO. E-32</p>
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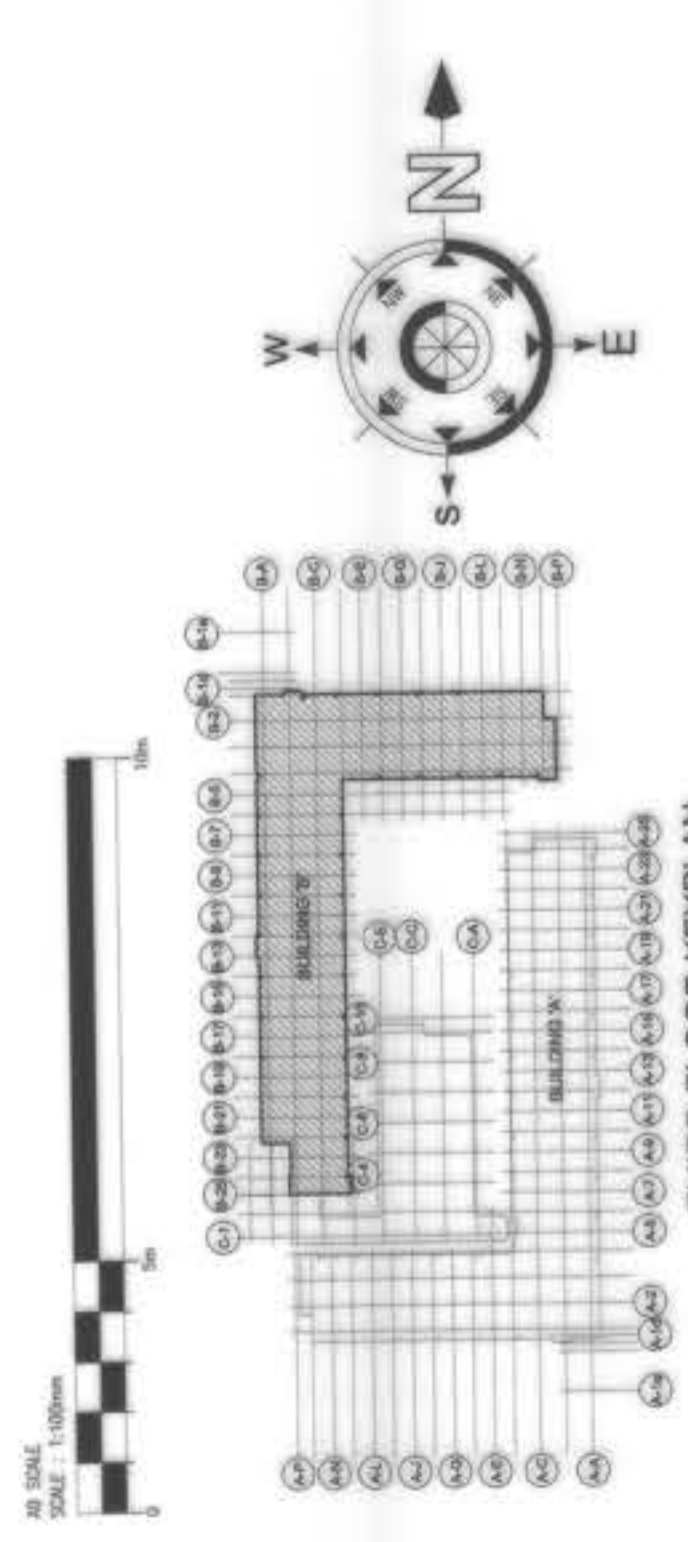


BUILDING B  
SECOND FLOOR POWER LAYOUT PLAN  
SCALE: 1:100

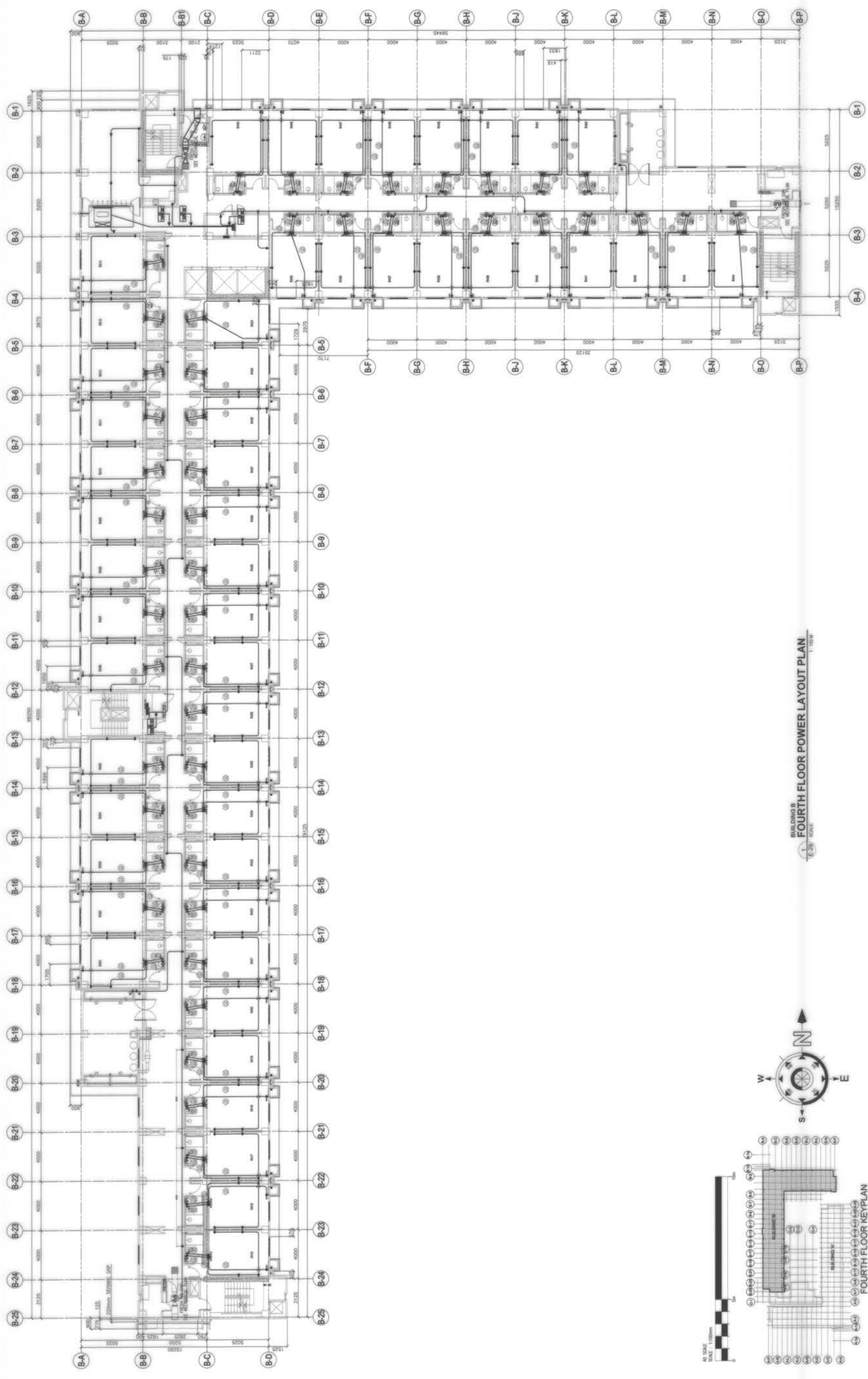
OWNER :	NGAC PHASE 1A COMPANY	PREPARED BY :	  AND  ERICK NICHOLAS P. DAVID PRESIDENT	REVIEWED AND VALIDATED BY :	 FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants 11th Floor, 1155 North Avenue, Suite 1101, North Ave. Cor., Northwood, Manila, Philippines. Tel: 632-8862747 ALFREDO R. REVILLA PROJECT MANAGER	SUBMITTED BY :	 BANDAR HEBAT BUILDERS, INC.  ISAAC S. DAVID PRESIDENT	CERTIFIED BY :	 TCGI ENGINEERS 11th Floor, 1155 North Avenue, Suite 1101, Northwood, Manila, Philippines. Tel: 632-8862747 VIRGIO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE :	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac	SHEET NO. :	E-33
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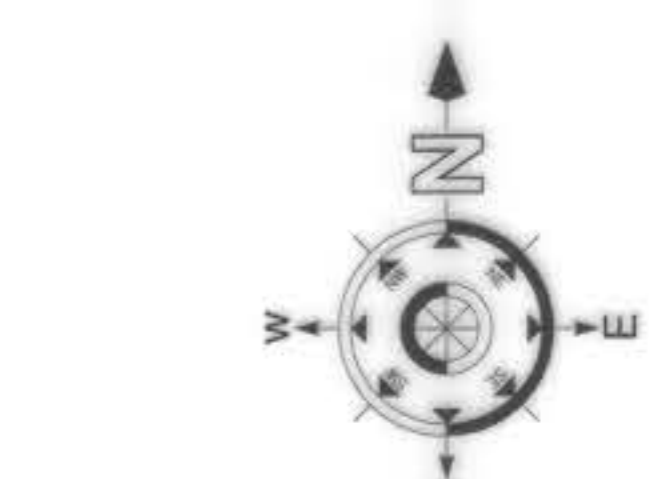
BUILDING B  
THIRD FLOOR POWER LAYOUT PLAN  
SCALE: 1/32" = 1'-0"



OWNER : NGAC PHASE 1 JV COMPANY AND BCDA WENCO B. DIZON PRESIDENT		PREPARED BY: FREY-FIL CORPORATION MARIA A. BAYAN - GERU - LEONID REG. NO.: 002827 TR. NO.: 158-498-274 DATE: 01.20.2019		REVIEWED AND VALIDATED BY: FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants ALFREDO A. REVILLA PROJECT MANAGER		SUBMITTED BY: BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT		CERTIFIED BY: TCGIENGINEERS VIRGIOLO A. MADRAZO PRESIDENT/CEO		PROJECT TITLE: AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac		SHEET NO.: E-34	
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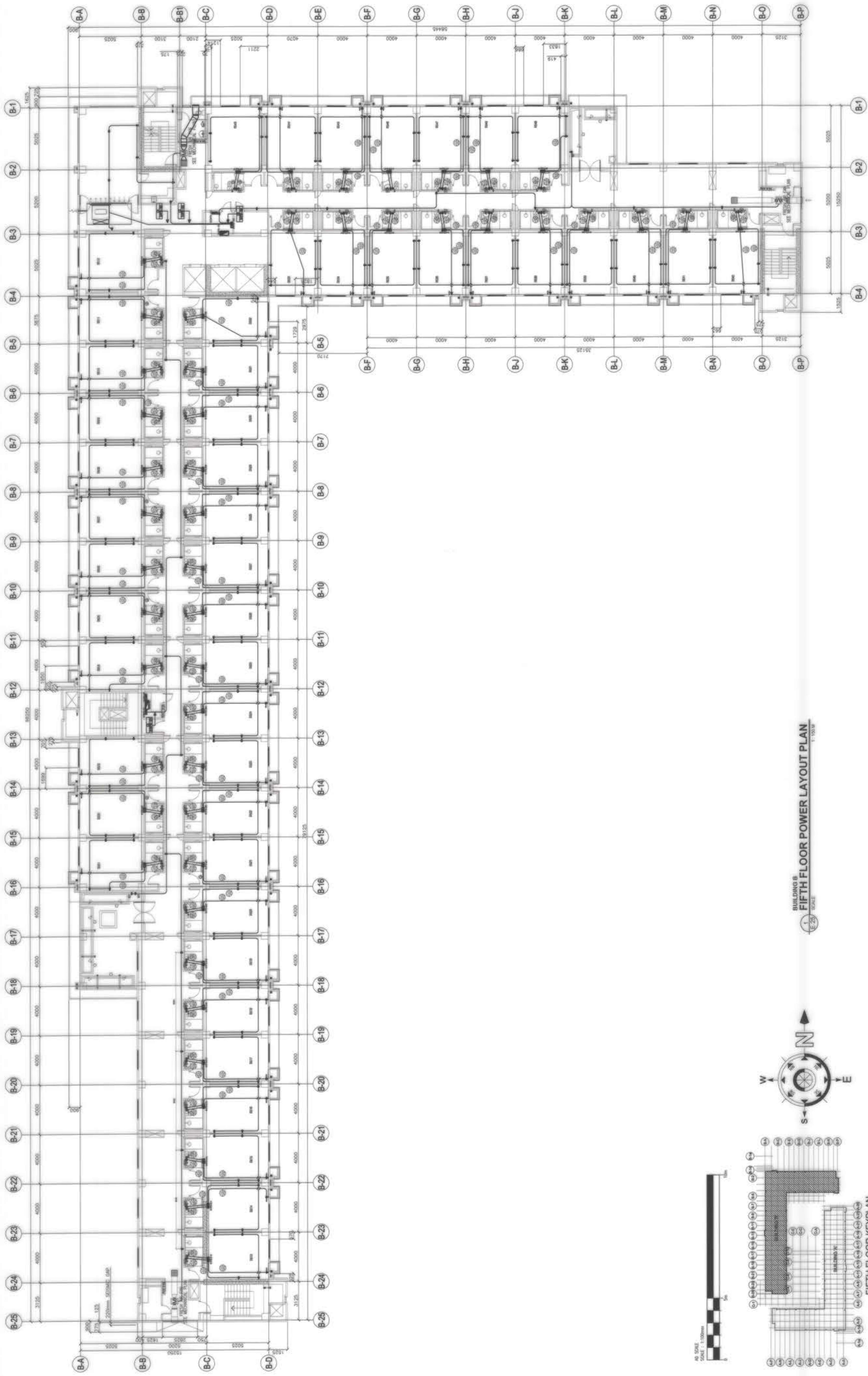


AS BUILT DRAWING  
 NGAC PHASE 1A  
 ATHLETES VILLAGE - BUILDING B  
 ELECTRICAL  
 New Clark City, Capas, Tarlac

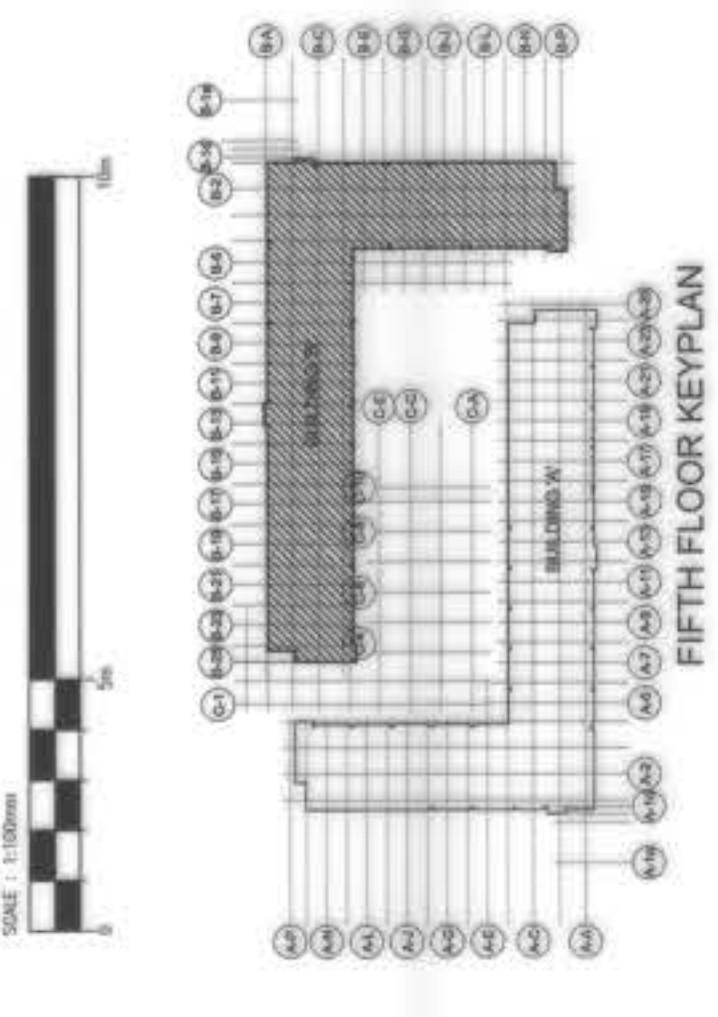


BUILDING B  
 FOURTH FLOOR POWER LAYOUT PLAN  
 1:100.00

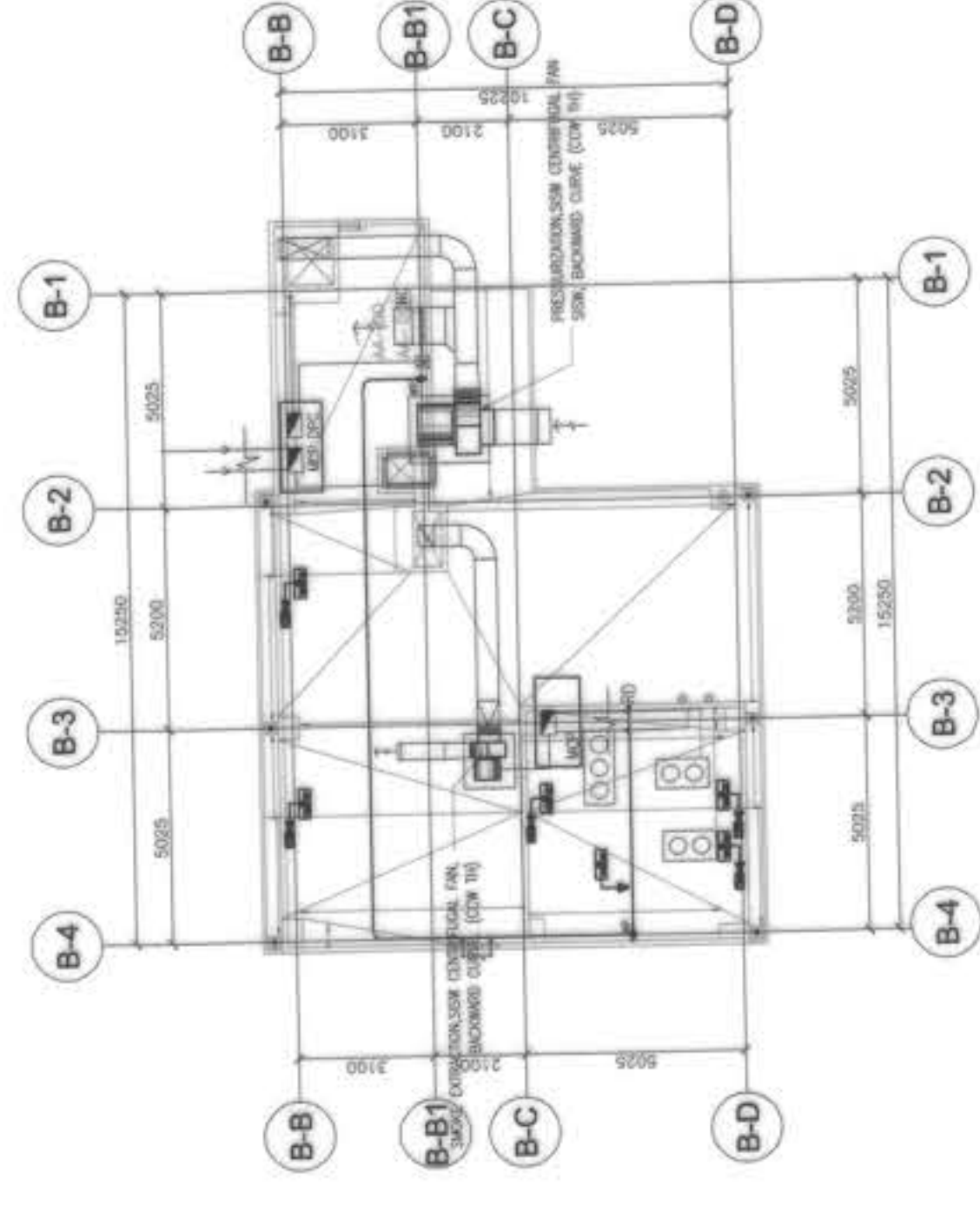
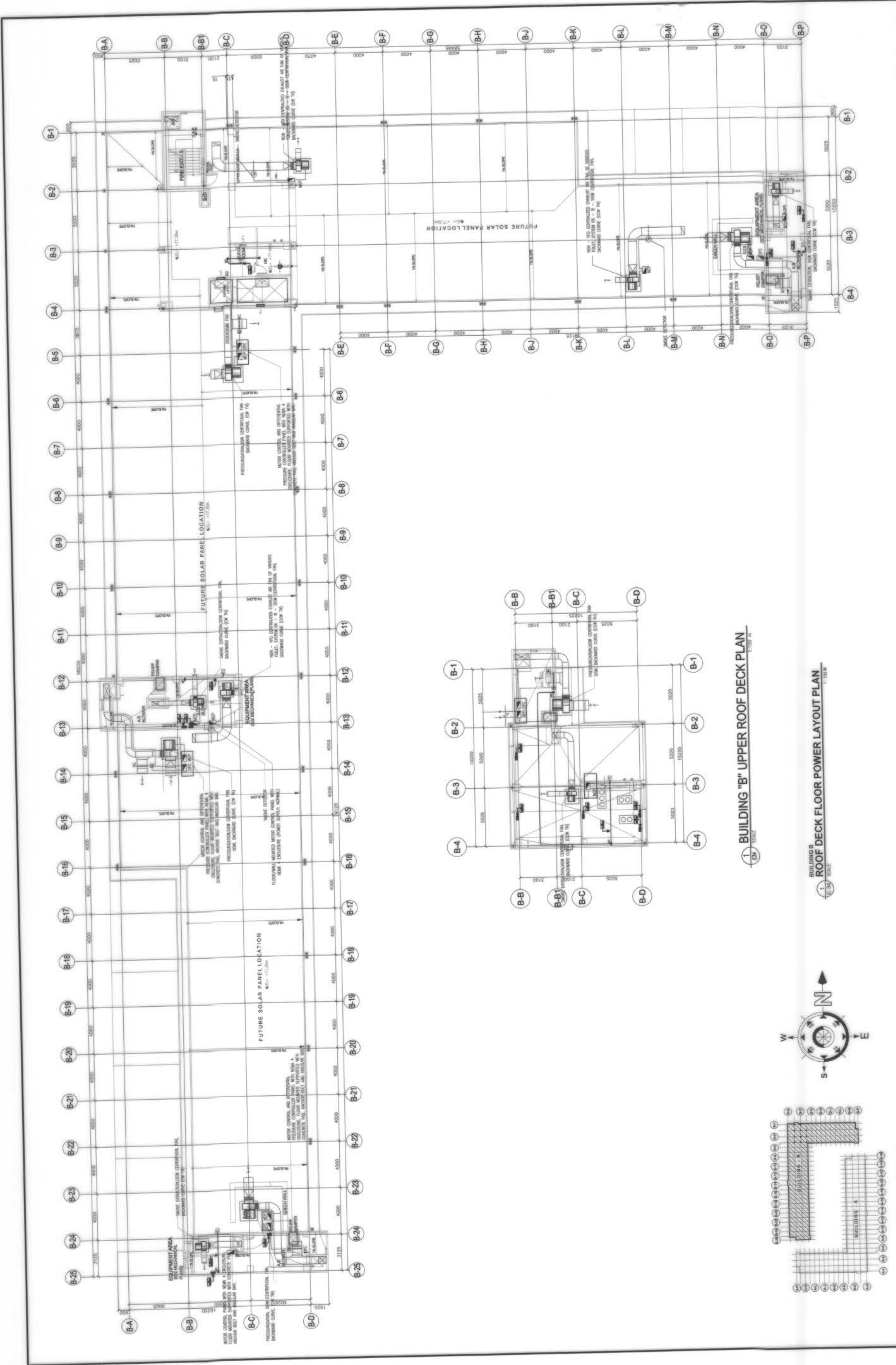
OWNER :	NGAC PHASE I JV COMPANY <b>BCDA</b> WENCIO B. WIZON PRESIDENT	PREPARED BY :	<b>FF</b> <b>FREY-FIL CORPORATION</b> WENILLA - DAVAO - ZEPED - ALLIADO 40 West and Regal Plaza, 2018 Division City, 4th Floor, Alabang	REVIEWED AND VALIDATED BY :	<b>FDG</b> <b>FILIPINAS DRAVO CORPORATION</b> Architectural & Engineering Consultants 10th Floor, 1001 EDSA, Alabang, Muntinlupa City, 1757 10th Floor, 1001 EDSA, Alabang, Muntinlupa City, 1757 <b>ALFREDO R. REYLLA</b> PROJECT MANAGER	SUBMITTED BY :	<b>BH</b> <b>BANDAR HEBAT BUILDERS, INC.</b> <b>ISAAC S. DAVID</b> PRESIDENT	CERTIFIED BY :	<b>T</b> <b>TCCI ENGINEERS</b> 10th Floor, 1001 EDSA, Alabang, Muntinlupa City, 1757 10th Floor, 1001 EDSA, Alabang, Muntinlupa City, 1757 <b>VIRGILIO A. MADRAZO</b> PRESIDENT/CEO	PROJECT TITLE :	<b>AS-BUILT DRAWING</b> <b>NGAC PHASE 1A</b> <b>ATHLETES VILLAGE - BUILDING B</b> <b>ELECTRICAL</b> New Clark City, Capas, Tarlac	SHEET NO. :	<b>E-35</b>
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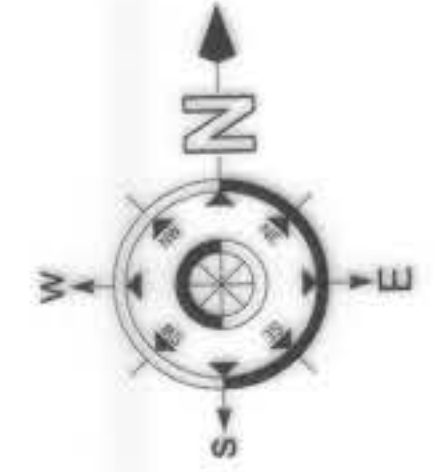
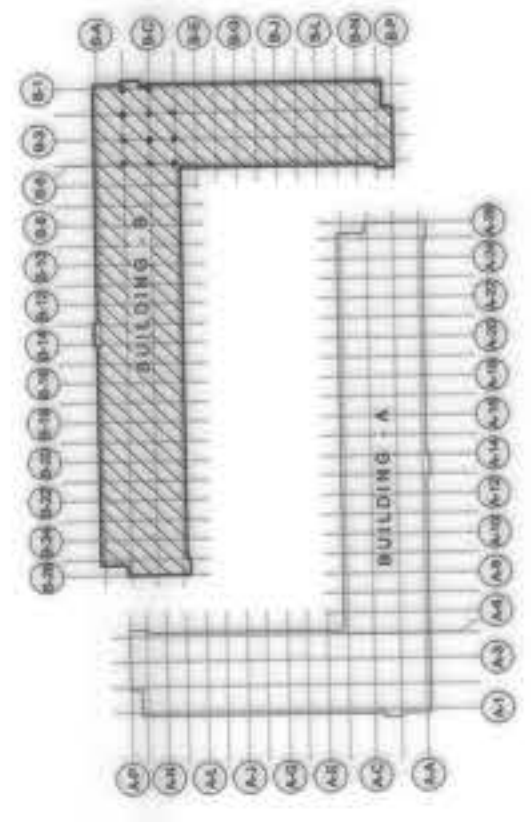
BUILDING B  
FIFTH FLOOR POWER LAYOUT PLAN  
SCALE: 1:100.00



OWNER :	NGAC PHASE I JV COMPANY AND BCDA WENCO B. MZON PRESIDENT	PREPARED BY:	FREY-FIL CORPORATION MANILA - DAVAO - CEBU - ILOILO REG. NO. 002807 IN. NO. 116-08-214 DATE: 01.28.2018	REVIEWED AND VALIDATED BY:	F70 FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants Alfredo Revilla PROJECT MANAGER	SUBMITTED BY:	BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	SHEET NO. E-36	PROJECT TITLE: AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac	CERTIFIED BY: INDEPENDENT CONSULTANT TCGI ENGINEERS VIRGILIO A. MADRAZO PRESIDENT/CEO	SHEET CONTENTS: BUILDING "B" FIFTH FLOOR POWER LAYOUT PLAN
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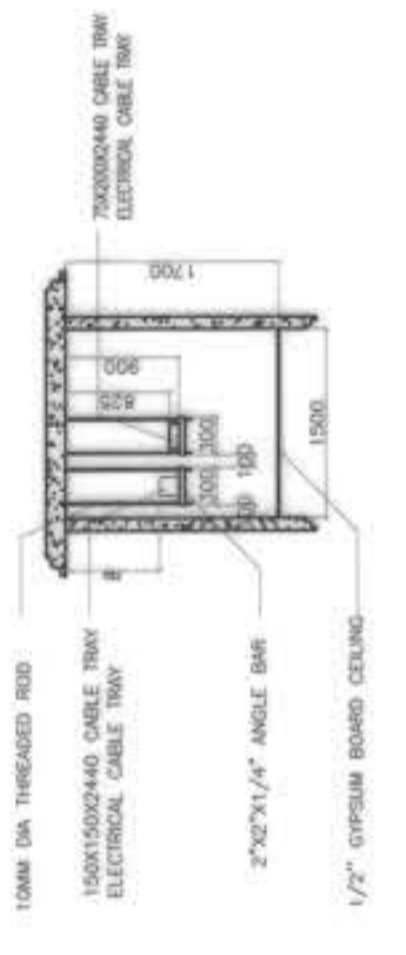
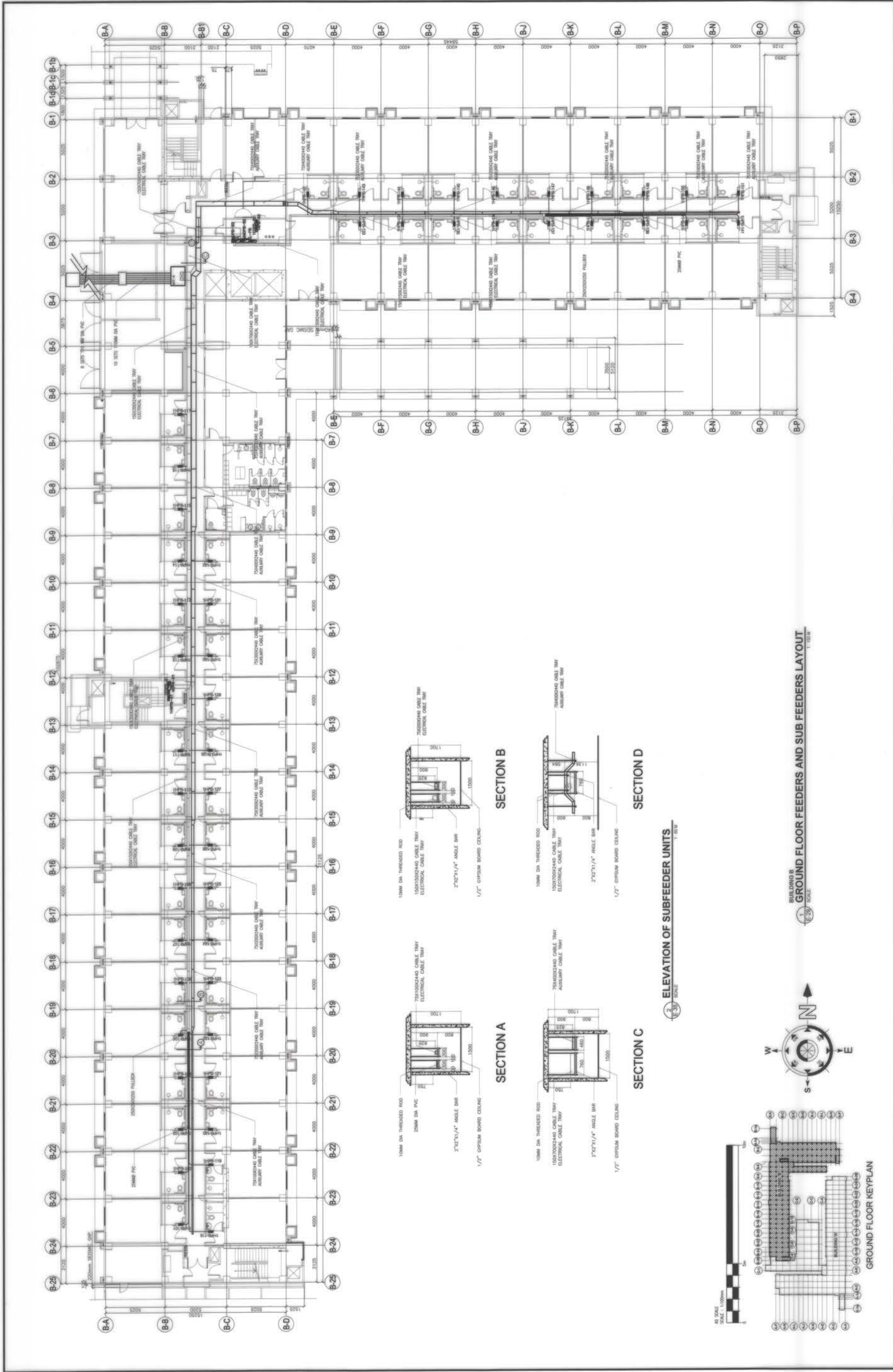


1. BUILDING "B" UPPER ROOF DECK PLAN  
1:1000

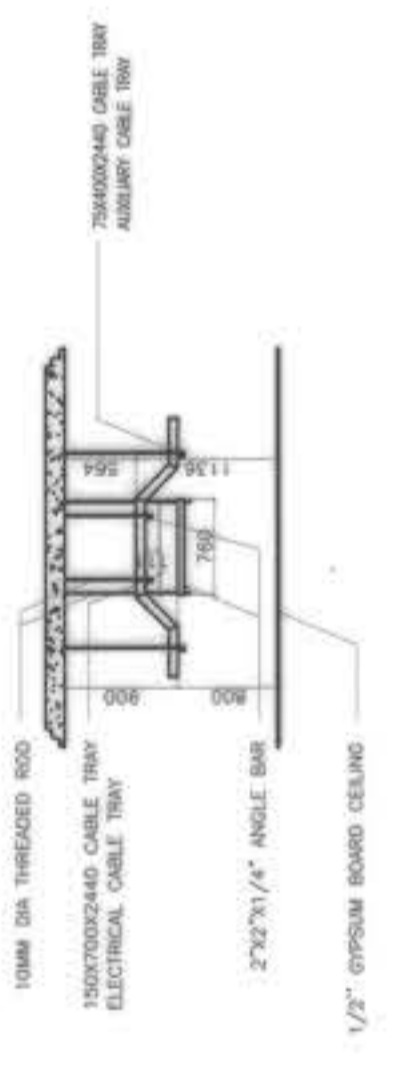


BUILDING B  
ROOF DECK FLOOR POWER LAYOUT PLAN  
1:500

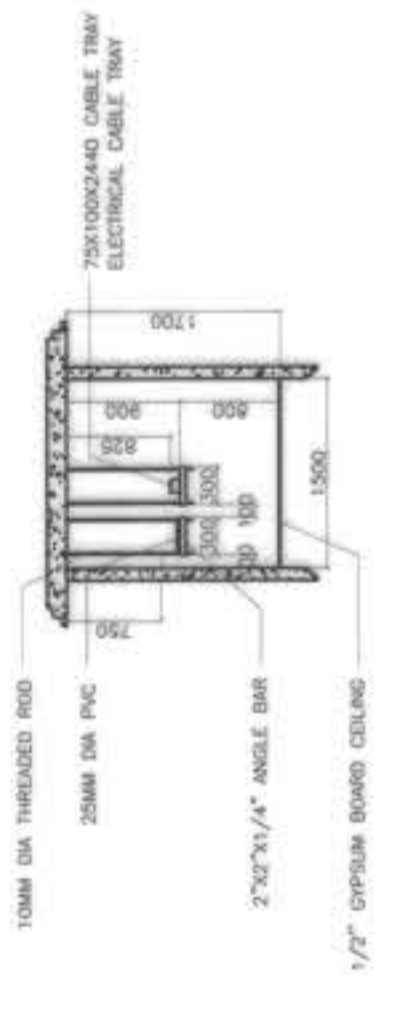
OWNER :	NGAC PHASE 1A COMPANY	PREPARED BY :	NGAC PHASE 1A COMPANY	REVIEWED AND VALIDATED BY :	FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants 11th Floor, 1105 EDSA, Alabang, Muntinlupa City, Philippines	SUBMITTED BY :	BANDAR HERBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	CERTIFIED BY :	INDEPENDENT CONSULTANT TCGI ENGINEERS 11th Floor, 1105 EDSA, Alabang, Muntinlupa City, Philippines VIRGLIO A. MADRADO PRESIDENT/CEO	PROJECT TITLE :	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac	SHEET NO. :	BUILDING "B" ROOF DECK POWER LAYOUT PLAN E-37
	AND		BCDA WENCIO B. OZON PRESIDENT		AND		PRE-FIL CORPORATION MARKEL T. DRAGON PRESIDENT		AND		ZOILLO B. DE LA CRUZ VICE PRESIDENT - OPERATION REG. NO.: 002802 PTR No.: 6115988 TIN No.: 11E-02-214 PLACE: MARIKINA DATE: 01-20-2019		



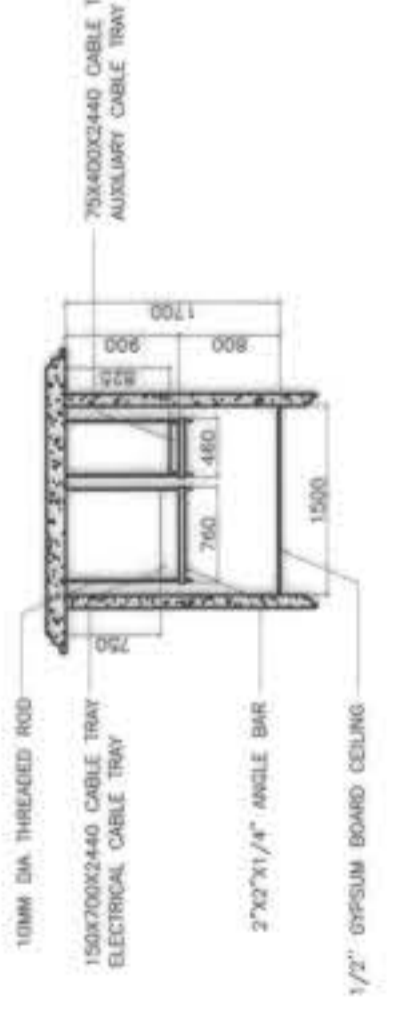
SECTION B



SECTION D



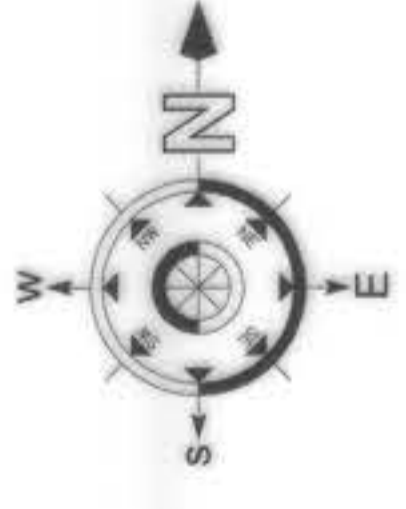
SECTION A



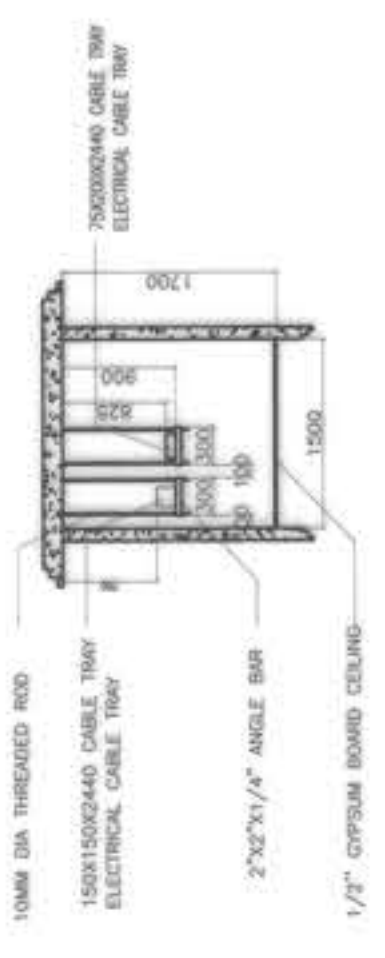
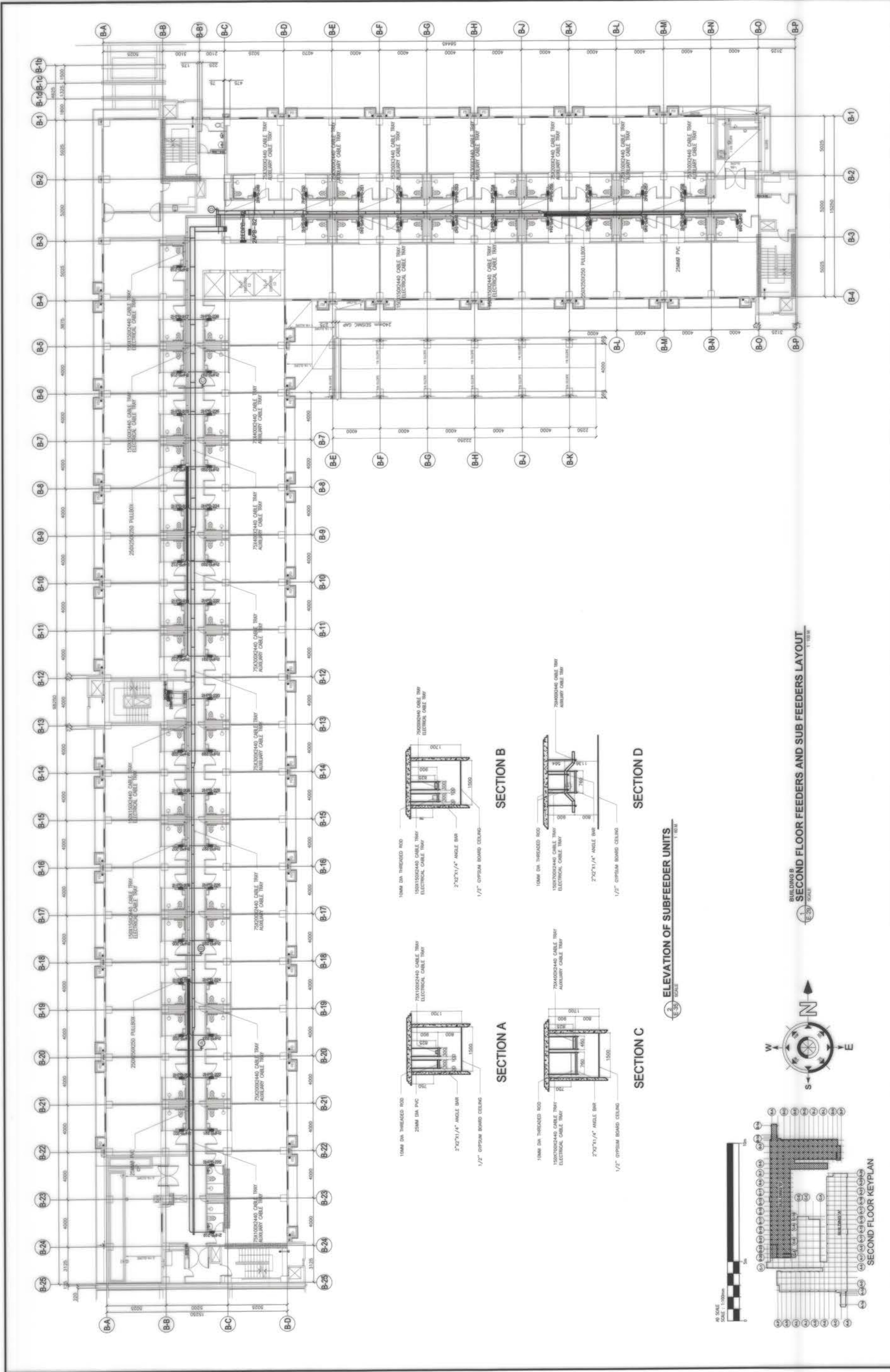
SECTION C

ELEVATION OF SUBFEEDER UNITS  
SCALE: 1:20

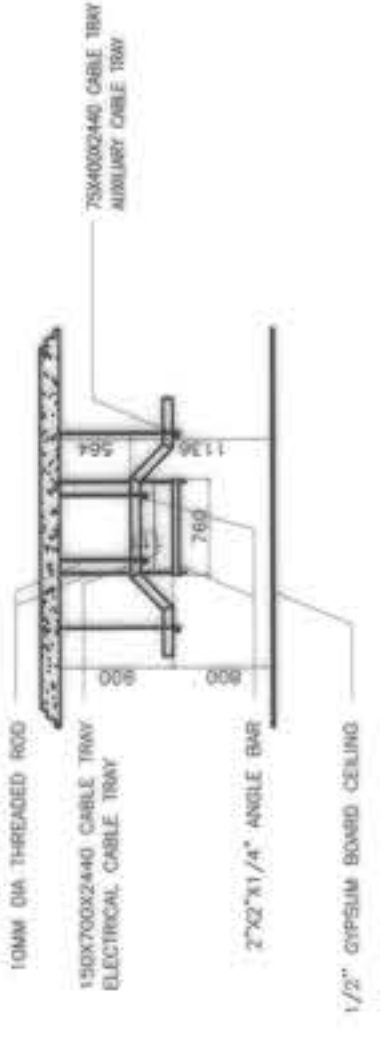
GROUND FLOOR FEEDERS AND SUB FEEDERS LAYOUT  
SCALE: 1:100



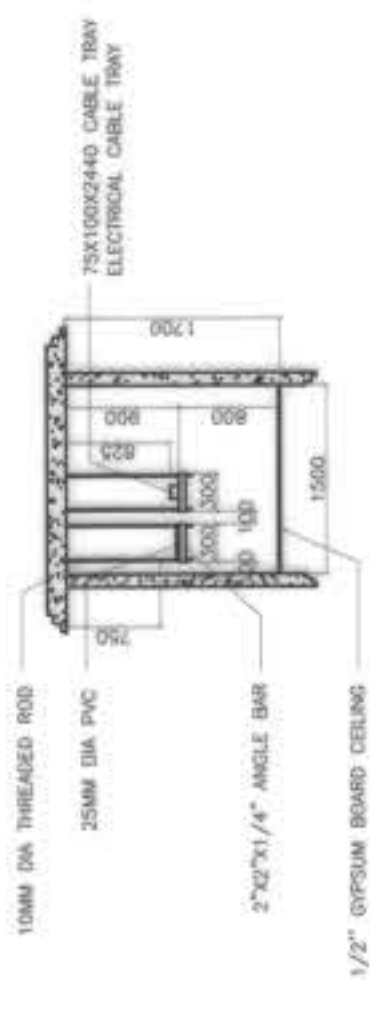
OWNER :	NGAC PHASE 1 JV COMPANY	PREPARED BY :	BCDA VICENTE B. OZUNA PRESIDENT	AND	BCDA VICENTE B. OZUNA PRESIDENT
REVIEWED AND VALIDATED BY :	FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants 2015 Alibon Road, Alibon, Marikina City, Philippines TEL: (02) 8856-1111, 8856-1112, 8856-1113, 8856-1114, 8856-1115 WWW.FILIPINASDRAVO.COM	SUBMITTED BY :	BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	CERTIFIED BY :	T TCGI ENGINEERS 1000 Alibon Road, Alibon, Marikina City, Philippines TEL: (02) 8856-1111, 8856-1112, 8856-1113, 8856-1114, 8856-1115 WWW.TCGIENGINEERS.COM
PROJECT TITLE :	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL	SHEET CONTENTS:	BUILDING "B" GROUND FLOOR FEEDERS AND SUB FEEDERS LAYOUT PLAN	SHEET NO. :	E-38
					New Clark City, Capas, Tarlac



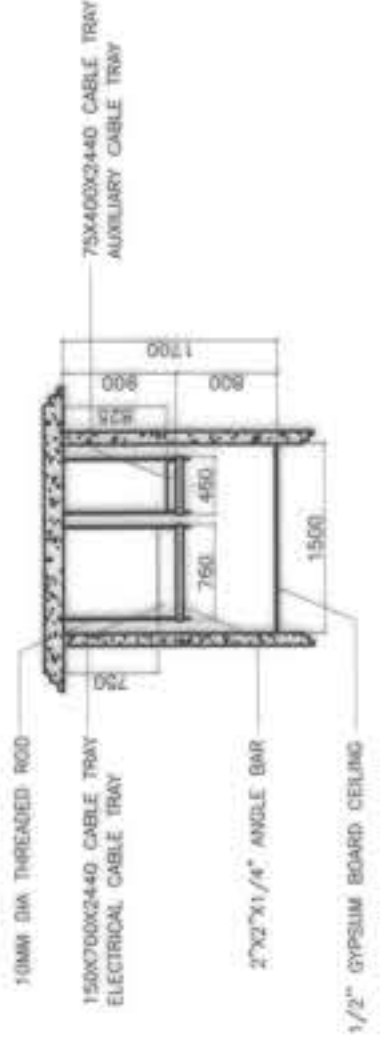
SECTION B



SECTION D

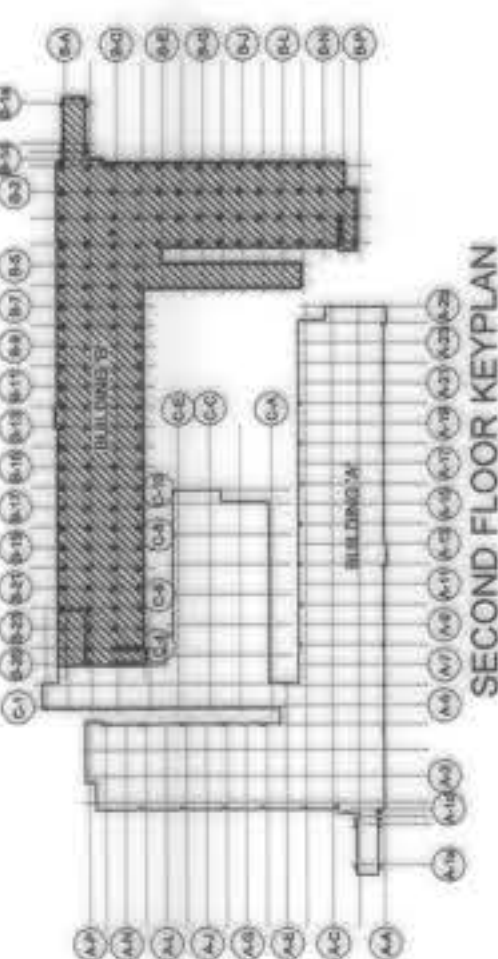


SECTION A



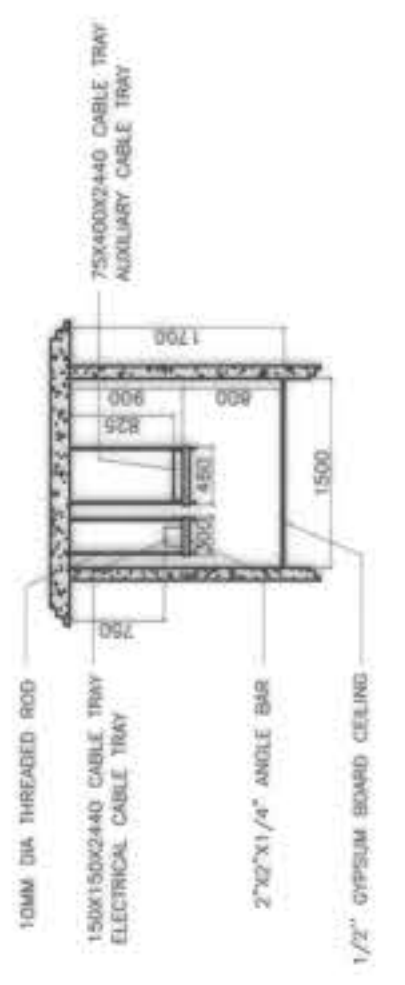
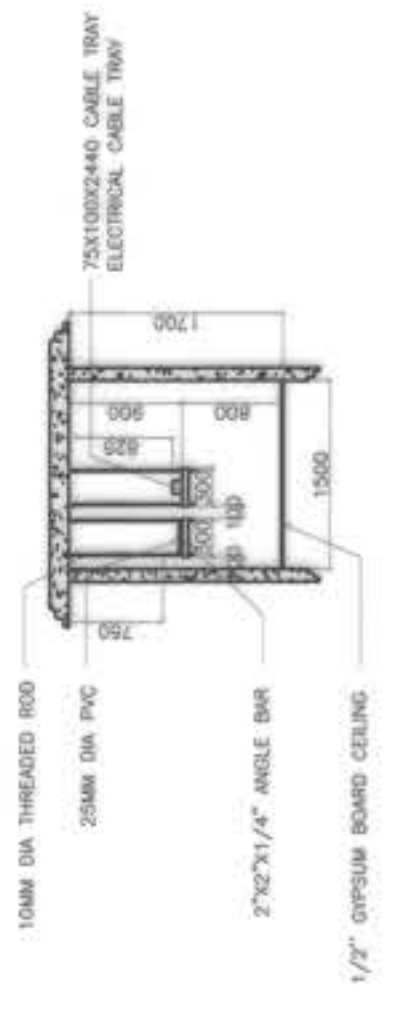
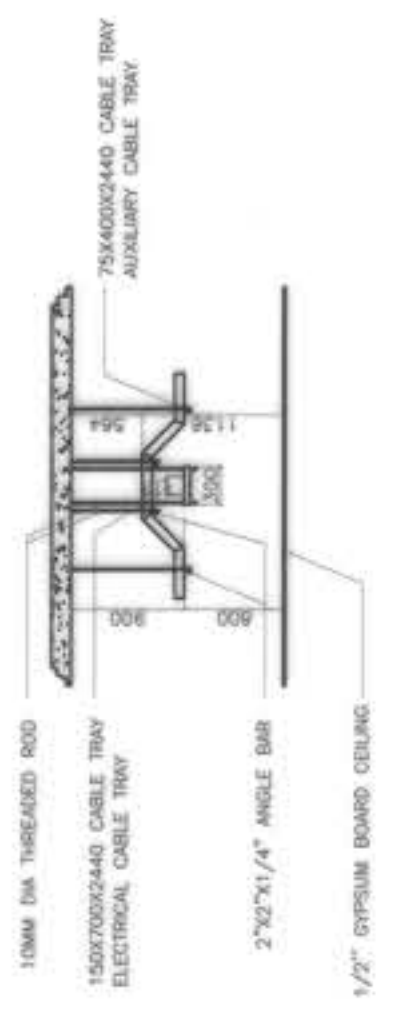
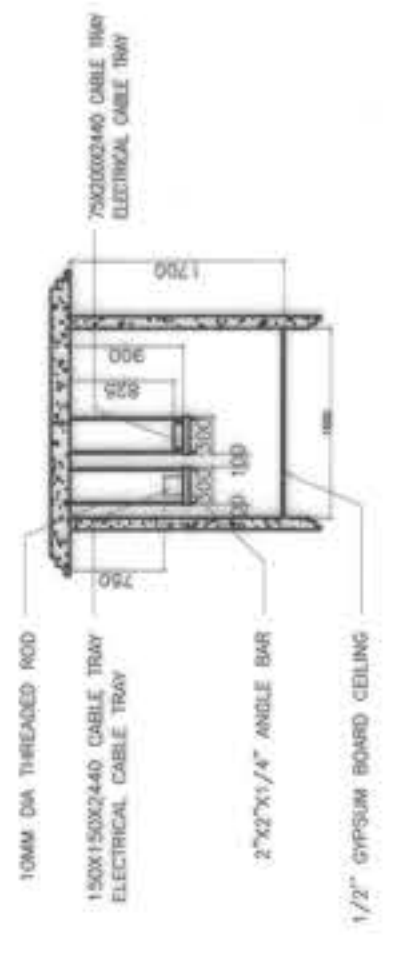
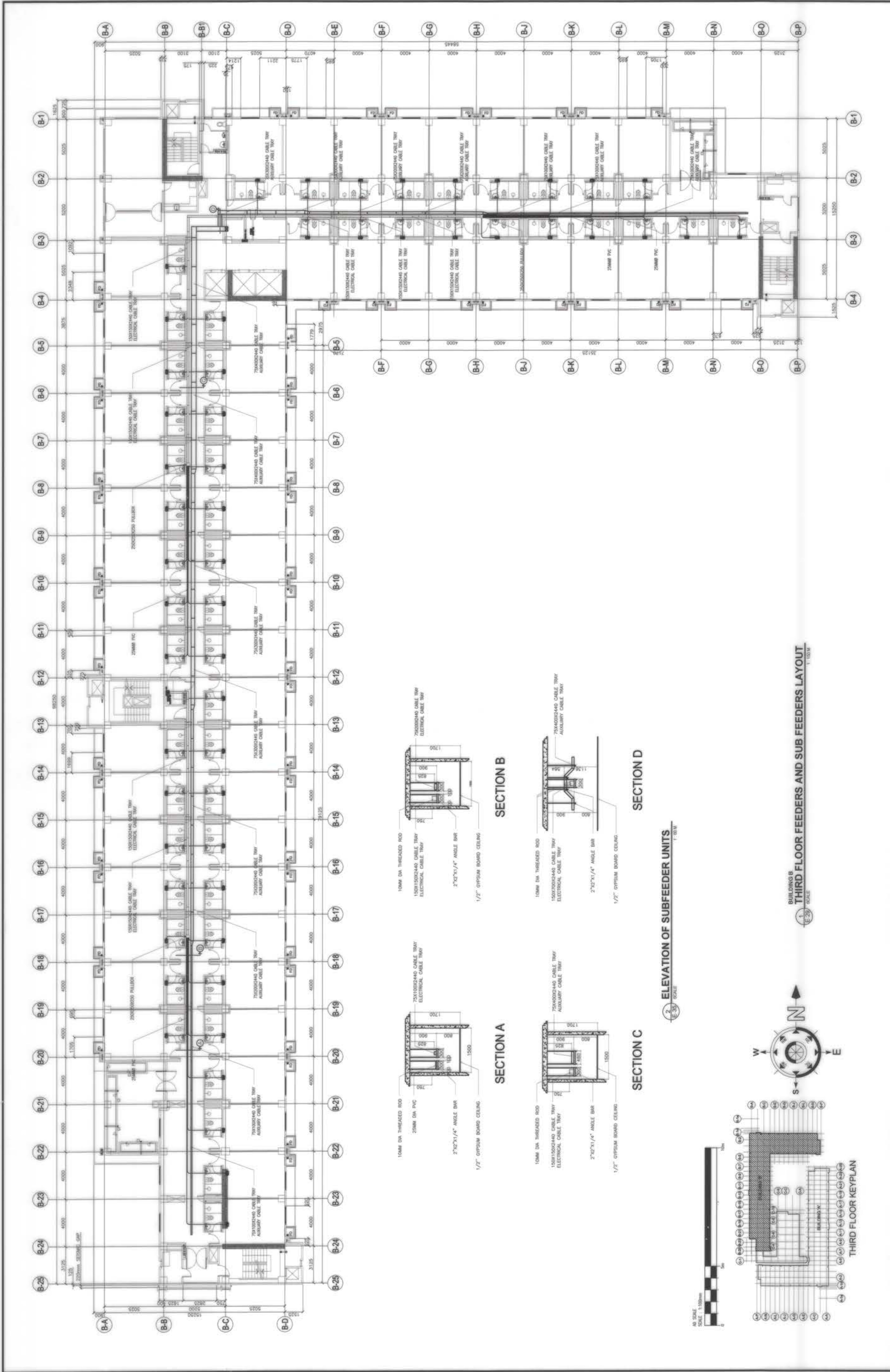
SECTION C

ELEVATION OF SUBFEEDER UNITS



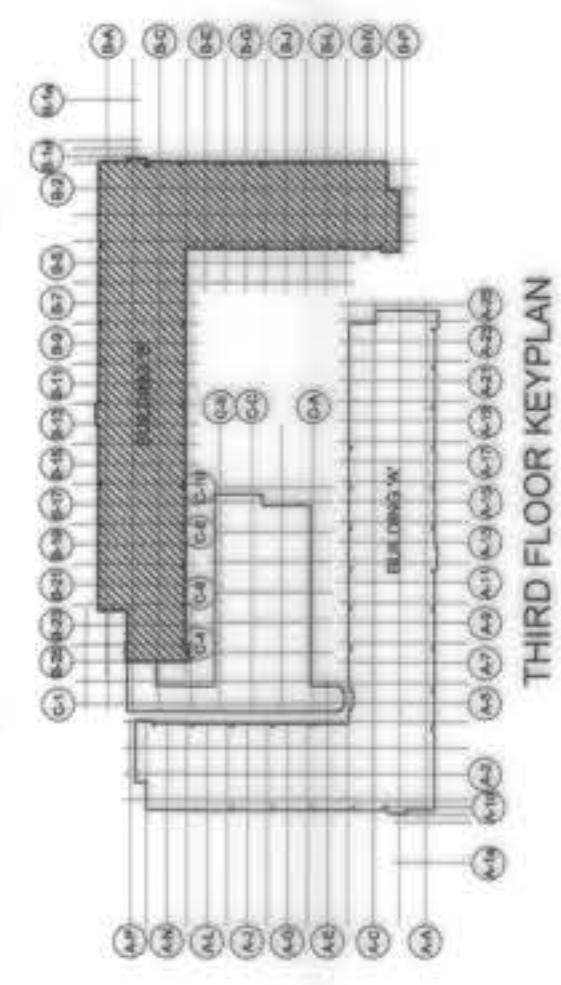
BUILDING B SECOND FLOOR FEEDERS AND SUB FEEDERS LAYOUT

OWNER : NGAC PHASE 1 JV COMPANY  BCDA VICENCO B. DEON PRESIDENT	PREPARED BY: FREY-FIL CORPORATION 1100 S. BAYVIEW, SUITE 100, MIAMI, FL 33134 TEL: 305-555-1100 WWW.FREY-FIL.COM	REVIEWED AND VALIDATED BY: FIDELITY+TYSON ALFREDO R. ARELLANO PROJECT MANAGER	SUBMITTED BY: BANDAR HERBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	CERTIFIED BY: TCGI ENGINEERS 1800 N. W. 107th Ave., Suite 100, Doral, FL 33126 TEL: 305-555-1100 WWW.TCGIENGINEERS.COM	PROJECT TITLE: AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac	SHEET CONTENTS: BUILDING "B" SECOND FLOOR FEEDERS AND SUB FEEDERS LAYOUT PLAN	SHEET NO. E-39



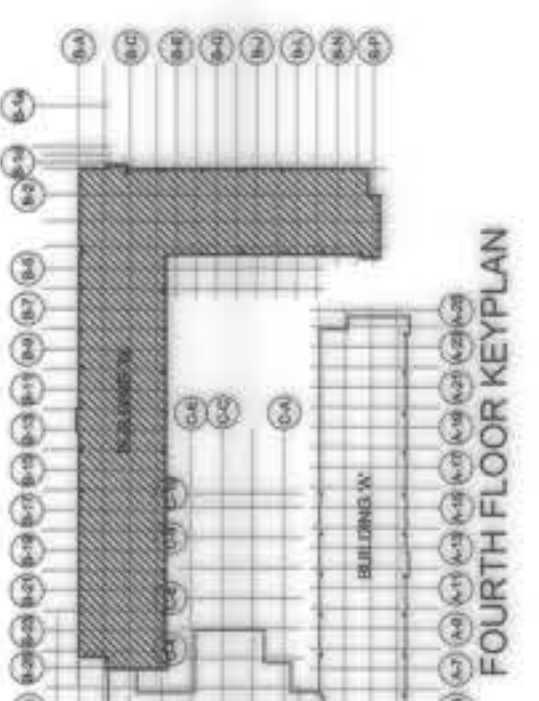
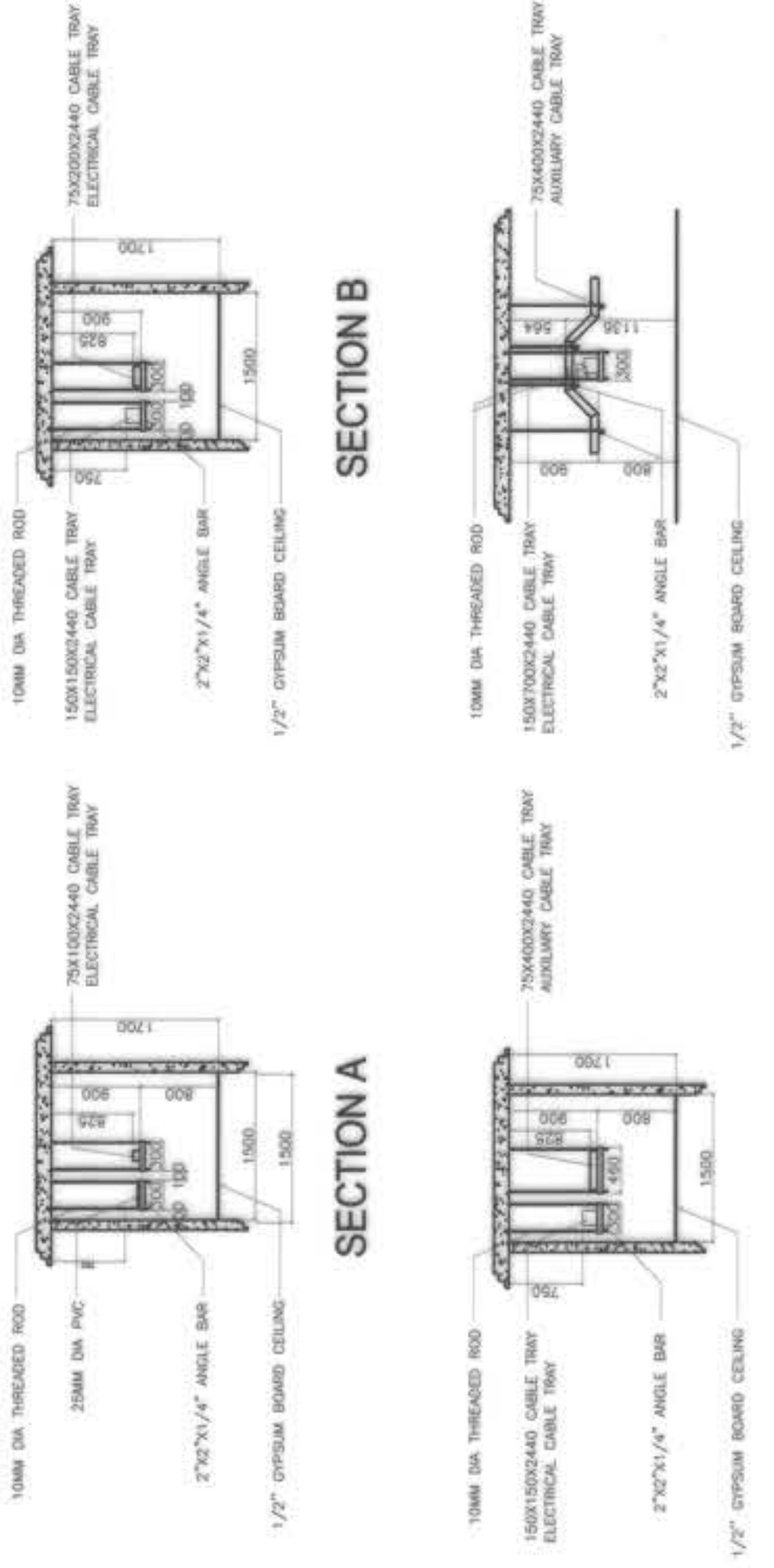
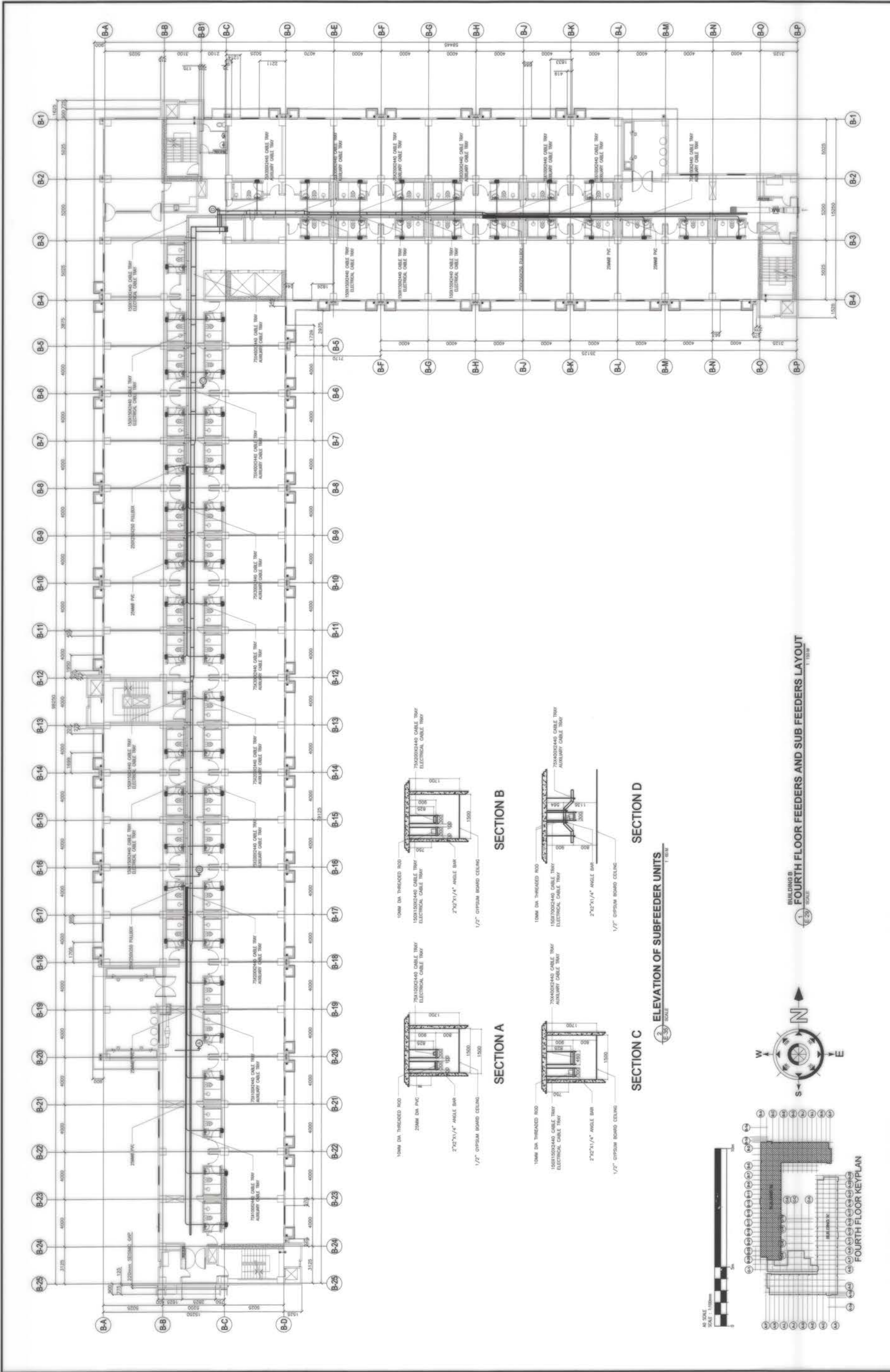
ELEVATION OF SUBFEEDER UNITS  
1:20 SCALE

BUILDING B  
THIRD FLOOR FEEDERS AND SUB FEEDERS LAYOUT  
1:100 SCALE



OWNER :	NGAC PHASE I JV COMPANY	PREPARED BY :	FREY-FIL CORPORATION	REVIEWED AND VALIDATED BY :	FILIPINAS DRAVO CORPORATION	SUBMITTED BY :	BANDAR HEBAT BUILDERS, INC.	CERTIFIED BY :	TCGI ENGINEERS	PROJECT TITLE :	AS-BUILT DRAWING	SHEET NO. :	E-40
AND	PATRICK MICHOULAS P. DAVID	VEE GEN OPERATOR	REC. NO. : 002887	PROJECT MANAGER	ALFREDO R. REVILLA	ISAAC S. DADA	INDEPENDENT CONSULTANT	VIRGILIO A. MADRADO	BUILDING "B" THIRD FLOOR FEEDERS AND SUB FEEDERS LAYOUT PLAN	NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL	NEW CLARK CITY, CAPAS, TARTAG		





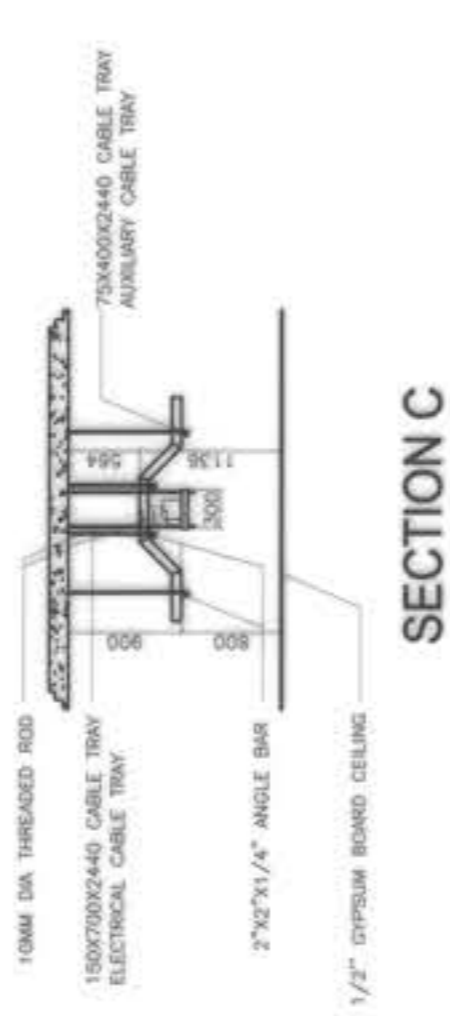
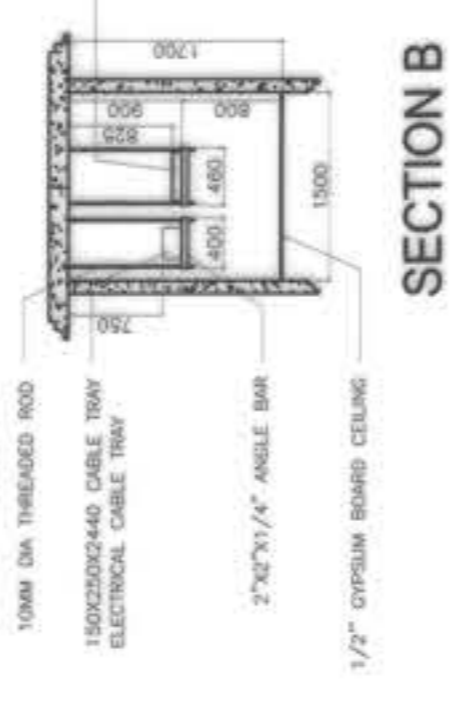
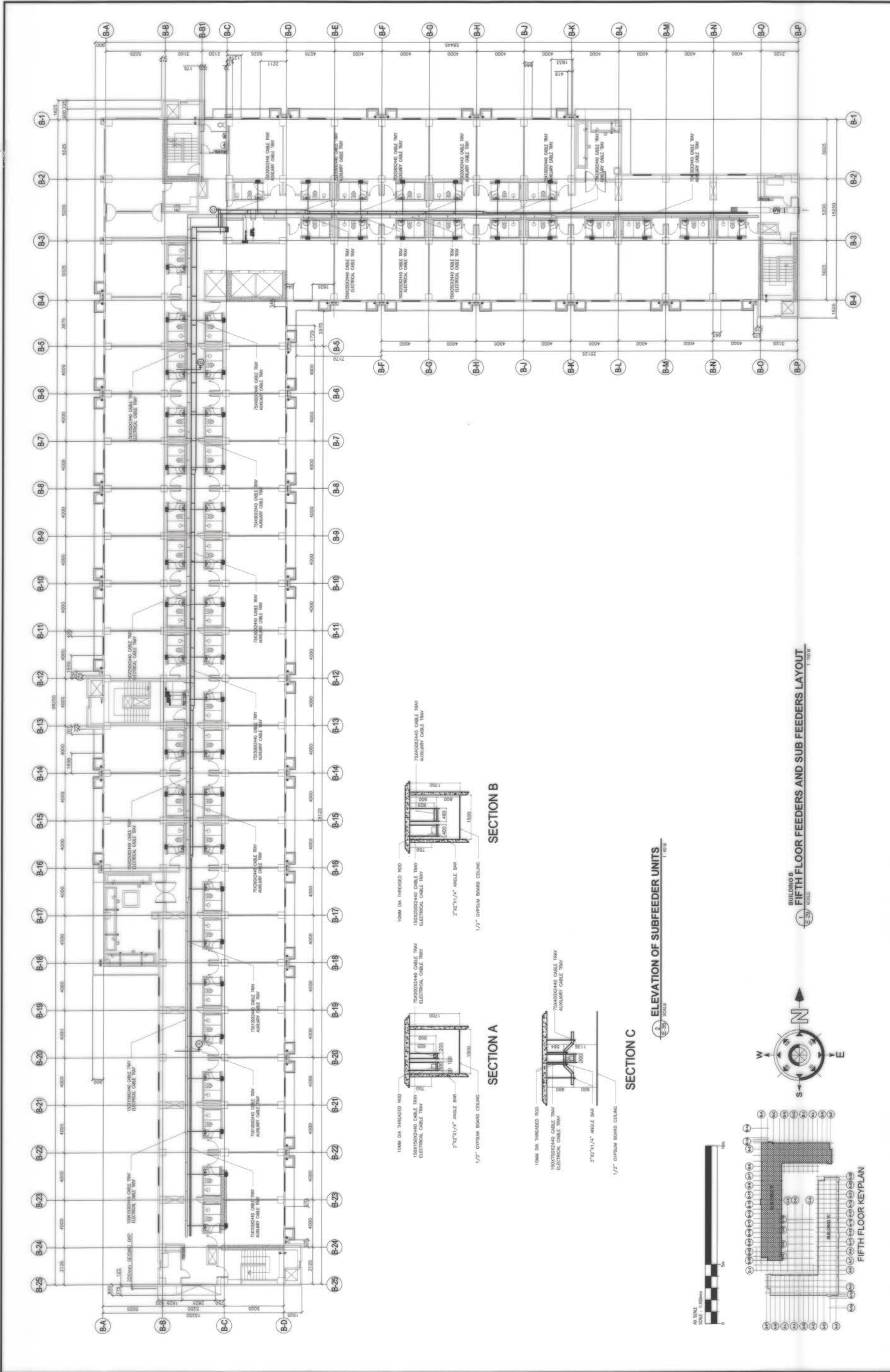
SECTION B  
SECTION D  
SECTION C  
SECTION A

SECTION B  
SECTION D  
SECTION C  
SECTION A

SECTION B  
SECTION D  
SECTION C  
SECTION A

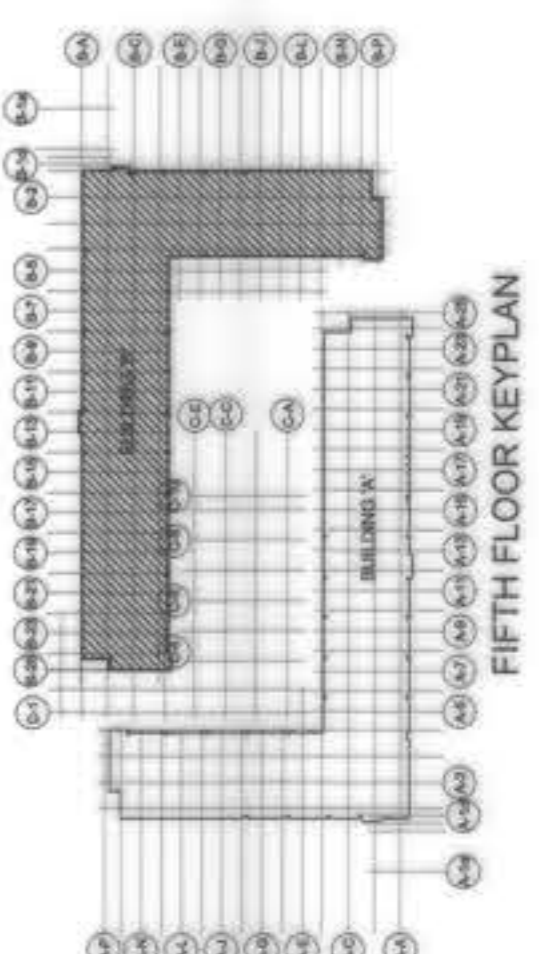
SECTION B  
SECTION D  
SECTION C  
SECTION A

OWNER :	NGAC PHASE I JV COMPANY	PREPARED BY :	FF FREY-FIL CORPORATION MANILA - BAYAN - CEBU - ILOILO 11th Floor, 11th Street, Bldg. 1111, Alabang, Muntinlupa City, Philippines TEL: 639-850-2200 WWW.FREY-FIL.COM	REVIEWED AND VALIDATED BY :	FF FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants 11th Floor, 11th Street, Bldg. 1111, Alabang, Muntinlupa City, Philippines TEL: 639-850-2200 WWW.FILIPINAS-DRAVO.COM	SUBMITTED BY :	Bandar Hebat Builders, Inc. ISAAC S. DAVID PRESIDENT	CERTIFIED BY :	TCGI ENGINEERS 11th Floor, 11th Street, Bldg. 1111, Alabang, Muntinlupa City, Philippines TEL: 639-850-2200 WWW.TCGIENGINEERS.COM VIRGILIO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE :	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac	SHEET NO. :	E-41
			PREPARED BY :	SOLO S. DE LA CRUZ VCE PRESIDENT/OPERATION REG. NO.: 002069 PIR No.: 811808 TIN No.: 118-08-274 PLACE: MANILA DATE: 03/20/2019									



ELEVATION OF SUBFEEDER UNITS  
SCALE: 1/8" = 1'-0"

BUILDING B  
FIFTH FLOOR FEEDERS AND SUB FEEDERS LAYOUT  
SCALE: 1/8" = 1'-0"



OWNER :	NGAC PHASE 1A COMPANY	PREPARED BY :	FRET-FIL CORPORATION REG. NO.: 022857 TIN NO.: 188-05-274 DATE: 07-20-2019	REVIEWED AND VALIDATED BY :	FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants ALFREDO R. REVILLA PROJECT MANAGER	SUBMITTED BY :	BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	CERTIFIED BY :	INDEPENDENT CONSULTANT	PROJECT TITLE :	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac	SHEET NO. :	E-42
	BCDA VICARIO B. DUTRA PRESIDENT		ZOILLO S. DELA CRUZ VICE PRESIDENT-OPERATION REG. NO.: 022857 TIN NO.: 188-05-274 DATE: 07-20-2019		FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants ALFREDO R. REVILLA PROJECT MANAGER		BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT		TCGI ENGINEERS VIRGILIO A. MADRAZO PRESIDENT/CEO		AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac		SHEET CONTENTS:

**PANEL "HPB"**  
GROUND FLOOR ELECTRICAL ROOMS BLDG B  
EMERGENCY DISTRIBUTION PANEL BOARD  
PHASE 3P  
VOLTAGE 200V  
WIRES 2+0  
MAIN FEEDER: 4.0 mm<sup>2</sup> x 14 Con. 20mm PVC GYR/CABLE TRAY  
MAIN BREAKER: 50MT, 250A, 3P+N, 15.0kV, MCCB  
WIRES 2+0  
CONDUIT MM DIA  
20mm Ø PVC PIPE

NO.	LOAD DESCRIPTION	LOAD	AMPS PER PHASE			CONDUIT MM DIA
			AN	BN	CN	
1	200WATT INCANDESCENT LED LIGHTING	70	0.30			20mm Ø PVC PIPE
2	200WATT INCANDESCENT LED LIGHTING	70	0.30			20mm Ø PVC PIPE
3	200WATT INCANDESCENT LED LIGHTING	70	0.30			20mm Ø PVC PIPE
4	200WATT INCANDESCENT LED LIGHTING	70	0.30			20mm Ø PVC PIPE
5	200WATT INCANDESCENT LED LIGHTING	70	0.30			20mm Ø PVC PIPE
TOTAL =			2.10			

TOTAL CONNECTED LOAD  
FL = 15.127 (100%)  
IR = 1.5 + 27.47  
OVER CURRENT PROTECTION  
IR = 1.5 + 27.47  
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**PANEL "HPB"**  
GROUND FLOOR ELECTRICAL ROOMS BLDG B  
EMERGENCY DISTRIBUTION PANEL BOARD  
PHASE 3P  
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MAIN FEEDER: 4.0 mm<sup>2</sup> x 14 Con. 20mm PVC GYR/CABLE TRAY  
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20mm Ø PVC PIPE

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VOLTAGE 200V  
WIRES 2+0  
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MAIN BREAKER: 50MT, 250A, 3P+N, 15.0kV, MCCB  
WIRES 2+0  
CONDUIT MM DIA  
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5	200WATT INCANDESCENT LED LIGHTING	70	0.30			20mm Ø PVC PIPE
TOTAL =			2.10			

TOTAL CONNECTED LOAD  
FL = 15.127 (100%)  
IR = 1.5 + 27.47  
OVER CURRENT PROTECTION  
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OWNER: NGAC PHASE 1 JV COMPANY  
PREPARED BY: FREY-FIL CORPORATION  
SUBMITTED BY: BANDAR HEBAT BUILDERS, INC.  
CERTIFIED BY: TCGI ENGINEERS  
INDEPENDENT CONSULTANT: VIRGILIO A. MADRAZO  
PROJECT MANAGER: ALFREDO R. REVILLA  
REVIEWED AND VALIDATED BY: ZOILO DELA CRUZ  
VICE PRESIDENT - PERATION  
DATE: 01-20-2019  
PLACE: MANILA

PROJECT TITLE: BUILDING "B" LOAD SCHEDULE 1  
SHEET NO. E-43

AS-BUILT DRAWING  
ATHLETES VILLAGE - BUILDING B  
ELECTRICAL  
New Clark City, Capas, Tarlac





**PANEL "MCP-BIATES-B"**  
GROUND FLOOR TRANSFORMER ELECTRICAL ROOM BLDG. B  
MAIN DISTRIBUTION PANEL BOARD

VOLTAGE : 400/230  
PHASE : 3-P

NO.	LOAD DESCRIPTION	AMPS PER PHASE			CMT. BREAKER	P	A/F	A/T	KVA/C	CONDUIT MM DIA.
		AN	BN	CN						
C1	(MCPB-B2) PANEL BOARD	146.629	-	-	1000	3	1200	1000	50	3-110 mm PVC pipe/Cable Tray
C2	(MCPB-B3) PANEL BOARD	1,027.547	1,572.85	1,448.16	0	3	800	700	50	2-110 mm PVC pipe/Cable Tray
C3	(MCPB-B1) PANEL BOARD	486.790	682.56	710.35	647.17	3	400	400	50	2-75 mm PVC pipe/Cable Tray
C4	S P A R E	1,534.736	2,325.45	2,383.19	2,065.33	-	-	-	-	-
TOTAL =		3,195.752	4,580.86	4,541.69						

Wires : 4+0  
FREQ. : 60 HZ

MAIN FEEDER (7 SETS : 4 - 250mm<sup>2</sup> THHN WIRE, 1 - 7x20 GROUND, 110 mm PVC PIPE IN CONCRETE ENCASUREMENT  
MAIN BREAKER : 2500A, 2500A, 3P + N, 65 KVA @ 400V MCCB

WIRE & GND. (mm<sup>2</sup>)

THHN/THWN

3-110 mm PVC pipe/Cable Tray

2-110 mm PVC pipe/Cable Tray

2-75 mm PVC pipe/Cable Tray

CONDUIT MM DIA.

3-110 mm PVC pipe/Cable Tray

2-110 mm PVC pipe/Cable Tray

2-75 mm PVC pipe/Cable Tray

CONDUIT MM DIA.

63mm Ø PVC PIPE

USE: 1-1.5 MVA PAD MOUNTED POWER TRANSFORMER  
13.8KV/7MVBV, PRIMARY 3-PHASE, 60HZ  
400Vac LINE TO LINE 230Vac LINE TO NEUTRAL SECONDARY

TRANSFORMER REQUIREMENT:

VOLTAJE : 400/230  
PHASE : 3-P

KVA =  $\frac{646.22 \times (400V) \times (1.732)}{1000}$  = 448.22 A

IFL =  $\frac{646.22 \times (400V) \times (1.732)}{1000}$  = 377.73

TOTAL CONNECTED LOAD:  
IFL = 36.08 (0.25) + 195.38 = 231.46 A

OVER CURRENT PROTECTION:  
IFL = (1.5) \* 195.38 = 293.07 A

**PANEL "MCPB-B2"**  
GROUND FLOOR ELECTRICAL ROOM BLDG. B  
MAIN MECHANICAL PANEL BOARD

VOLTAGE : 400/230  
PHASE : 3-P

NO.	LOAD DESCRIPTION	AMPS PER PHASE			CMT. BREAKER	P	A/F	A/T	KVA/C	CONDUIT MM DIA.
		AN	BN	CN						
C1	(MCPB-B2) PANEL BOARD	96.435	-	-	800	3	800	800	30	3-50mm Ø PVC PIPE/CABLE TRAY
C2	(EL-PB) PANEL BOARD TYPICAL TO (EL-PB) BLDG-A	50.183	-	-	225	3	225	150	30	3-SET OF 4-250mm <sup>2</sup> THHN WIRE & 1-250mm <sup>2</sup> GROUND
C3	SPARE	-	-	-	100	0	0	0	30	3-40mm <sup>2</sup> THHN, 1-4mm <sup>2</sup> GROUND (GREEN)
C4	SPARE	-	-	-	100	0	0	0	30	-
TOTAL =		146.618	-	-	1100	3	1100	950	60	-

Wires : 4+0  
FREQ. : 60 HZ

MAIN FEEDER 3 SETS OF 3 - 250mm<sup>2</sup> & 60 Gnd, 110 mm PVC PIPE  
MAIN BREAKER : 1000A, 1200A, 3P + N, 50 KVA, 400V, MCCB

WIRE & GND. (mm<sup>2</sup>)

THHN/THWN

3-50mm Ø PVC PIPE/CABLE TRAY

3-SET OF 4-250mm<sup>2</sup> THHN WIRE & 1-250mm<sup>2</sup> GROUND

3-40mm<sup>2</sup> THHN, 1-4mm<sup>2</sup> GROUND (GREEN)

CONDUIT MM DIA.

63mm Ø PVC PIPE

USE: 1-1.5 MVA PAD MOUNTED POWER TRANSFORMER  
13.8KV/7MVBV, PRIMARY 3-PHASE, 60HZ  
400Vac LINE TO LINE 230Vac LINE TO NEUTRAL SECONDARY

TRANSFORMER REQUIREMENT:

VOLTAJE : 400/230  
PHASE : 3-P

KVA =  $\frac{646.22 \times (400V) \times (1.732)}{1000}$  = 448.22 A

IFL =  $\frac{646.22 \times (400V) \times (1.732)}{1000}$  = 377.73

TOTAL CONNECTED LOAD:  
IFL = 36.08 (0.25) + 195.38 = 231.46 A

OVER CURRENT PROTECTION:  
IFL = (1.5) \* 195.38 = 293.07 A

**GENERATOR SET REQUIREMENT**

IT = 275A.13 A (23% D.F.) + 411.75 (75 D.F.)

IT = 943.18 A

KVA =  $\frac{943.18 \times 400V \times 1.732}{1,000}$

KVA (TOTAL) = 653.44

KVA = 326.72

USE: 2 SETS OF 500 KW, 60 HZ STAND-BY GENERATOR SET  
VOLTAGE : 400 Vac LINE - LINE / 230 Vac LINE - NEUTRAL  
3 - PHASE, 4 WIRES, 80% PF, 60 HZ

**GENERATOR ( IFL ) FULL LOAD CURRENT :**

IFL =  $\frac{500 ( 1,000 ) / 0.8}{400V ( 1.732 )}$

IFL = 902.14

USE : GENERATOR PANEL BOARD

1.) 3 SETS OF  
3-250mm<sup>2</sup> THW WIRE (1,125 A / 902 A) IN 100mm Ø C (4" Ø)  
1-250mm<sup>2</sup> THW NEUTRAL WIRE ( WHITE )  
1-60mm<sup>2</sup> TW GROUND WIRE ( GREEN )

2.) 1000 AT / 1200 AF, 3P, 50 KA @ 400 V MAIN CB

APPROXIMATE DIMENSION : 3000 mm LENGTH x 1,140 mm WIDTH x 1,841 mm HEIGHT ( OPEN TYPE )  
DRY WEIGHT ( OPEN TYPE ) : 2,500 KG  
FREQUENCY : 60 HZ

**MEDIUM VOLTAGE SWITCH GEAR**

1.5 MVA, 13.8 KV, PRIMARY  
400Vac LINE - LINE / 230 Vac LINE - NEUTRAL SECONDARY

**SHORT CIRCUIT CAPACITY:**

MVA(SC) = 100 @ 3-SEC  
(SC) =  $\frac{100 \times 1,000,000}{(1.732 \times 13,800)^2} = 4183.7 A$

WHERE:

A - WIRE CROSS SECTIONAL AREA 50.9 sq. mm.  
(SC) - CURRENT (AMPERE, rms) 4,183.70 A  
I - CURRENT LET-THROUGH TIME (SEC.) 3.00 SEC  
T(I) - WIRE TEMPERATURE DUE TO SHORT CIRCUIT (°C) 250°C  
T(I) - WIRE OPERATING TEMPERATURE (°C) 90°C

A =  $\frac{((4183.7)^2 \times 3 \text{ sec.})}{50,500 \log(e)^{(234 + 250)(234 + 90))}$   
A = 50.9 sq. mm.

USE:

1.) 1 SET OF (3 - 1 x 50mm<sup>2</sup>) XLPE POWER CABLE, 16 KV ( SHIELDED ) 133% BIL COPPER IN 110mm Ø PVC PIPE SCH-40  
1 SET OF 1-50mm<sup>2</sup> TW GRD WIRE IN 110mm Ø PIPE

2.) 630 AT, 25 KA SHORT TIME WITHSTAND CURRENT  
67.5 KA, RATED PEAK CURRENT, 13.8 KV, RATED VOLTAGE

NOTE: USE 3M MEDIUM VOLTAGE, COLD SHRINK TERMINATION KITS

**BUILDING A  
LOAD SCHEDULE 4**

OWNER : NGAC PHASE I JV COMPANY AND BCDA  
WENCKO B. YZON, PRESIDENT

PREPARED BY: FREY-FIL CORPORATION  
VICENTE DELA CRUZ, VICE PRESIDENT-OPERATION  
REC. NO.: 020207, PTR. NO.: 8118088  
MARBAL - BAYAN - CEBU - 61010  
37 Mar. Ave. Brgy. Poblacion, Marikina City  
www.frey-fil.com

REVIEWED AND VALIDATED BY: FID  
ALFREDO R. REVILLA, PROJECT MANAGER

SUBMITTED BY: BANDAR HEBAT BUILDERS, INC.  
ISAAC S. DAVID, PRESIDENT

CERTIFIED BY: TCGI ENGINEERS  
VIRGILIO A. MADRAZO, PRESIDENT/CEO

PROJECT TITLE: AS-BUILT DRAWING  
NGAC PHASE 1A  
ATHLETES VILLAGE - BUILDING B  
ELECTRICAL  
New Clark City, Capas, Tarlac

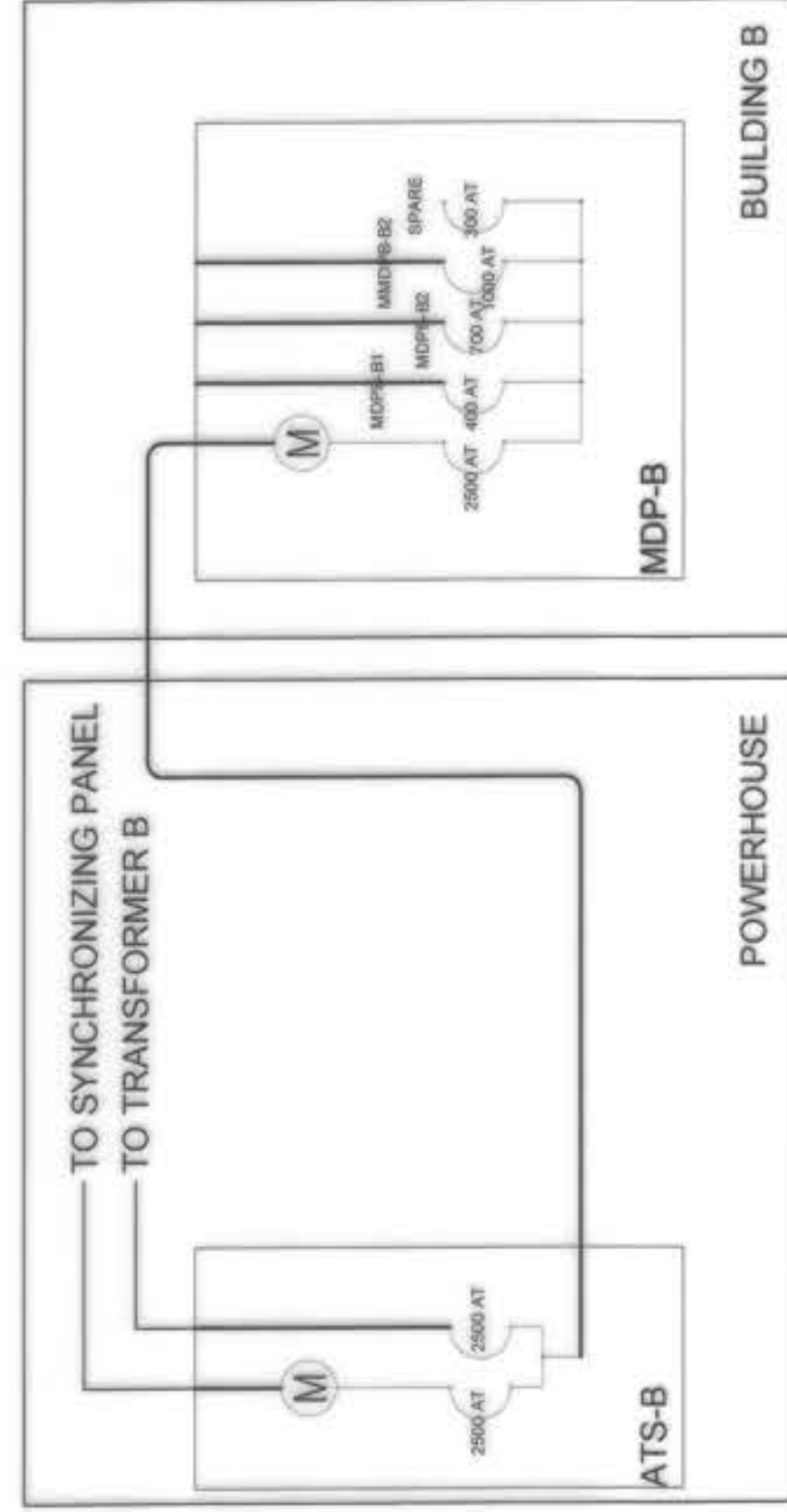
SHEET NO.: BUILDING "B" LOAD SCHEDULE 4  
E-46

**LEGEND:**

- x1 = 1-3.5mm<sup>2</sup> THW WIRE IN 200mm PVC PIPE
- x2 = 2-3.5mm<sup>2</sup> THW WIRE IN 200mm PVC PIPE
- x3 = 3-3.5mm<sup>2</sup> THW WIRE IN 200mm PVC PIPE
- x4 = 4-3.5mm<sup>2</sup> THW WIRE IN 200mm PVC PIPE
- x5 = 5-3.5mm<sup>2</sup> THW WIRE IN 200mm PVC PIPE

**LEGEND FOR ROOF DECK:**

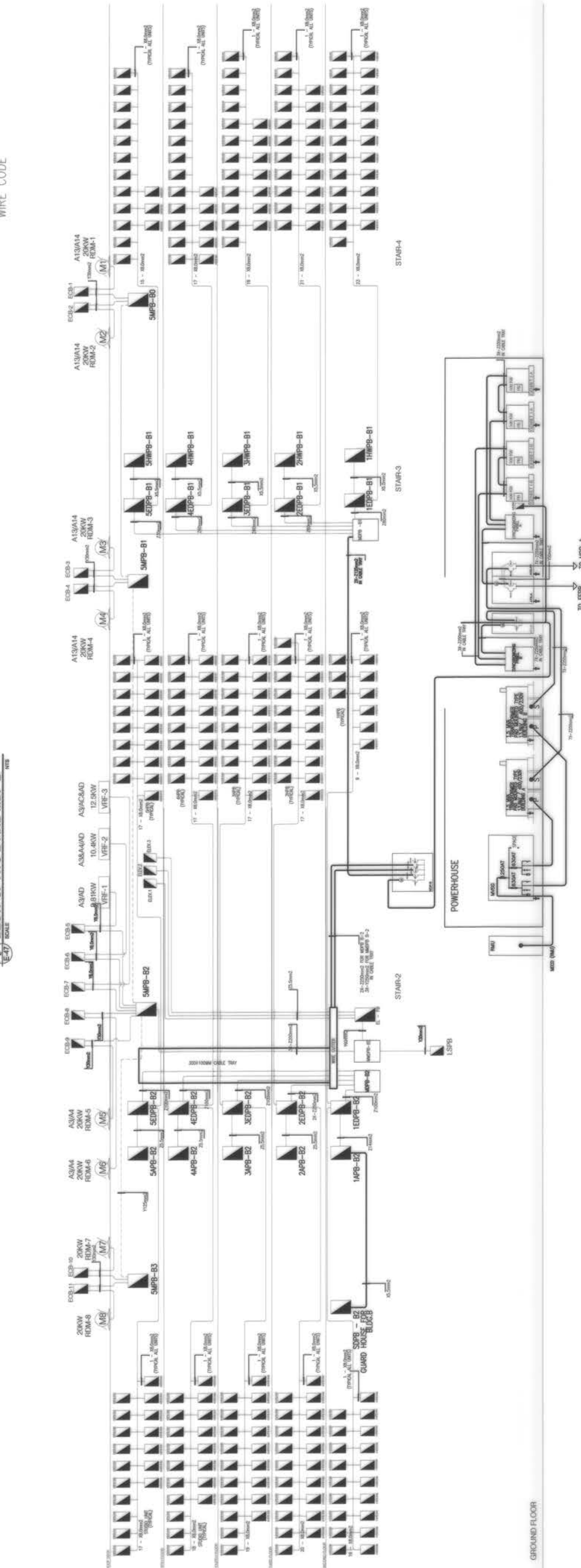
- 1.) RDM-1 = FRESH AIR BLOWER (M-1)
- 1.) RDM-2 = EXHAUST BLOWER (M-2)
- 1.) RDM-3 = FRESH AIR BLOWER (M-3)
- 1.) RDM-4 = EXHAUST BLOWER (M-4)
- 1.) RDM-5 = FRESH AIR BLOWER (M-5)
- 1.) RDM-6 = EXHAUST BLOWER (M-6)
- 1.) RDM-7 = FRESH AIR BLOWER (M-7)
- 1.) RDM-8 = FRESH AIR BLOWER (M-8)



**BUILDING B  
BLOW-UP ATS-B AND MDP-B**  
NETS  
SCALE: 1/2" = 1'-0"

**WIRE CODE**

X1	3.5mm <sup>2</sup>	4	1-3.5mm <sup>2</sup> THW	1	1-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X2	3.5mm <sup>2</sup>	4	2-3.5mm <sup>2</sup> THW	1	2-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X3	3.5mm <sup>2</sup>	4	3-3.5mm <sup>2</sup> THW	1	3-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X4	3.5mm <sup>2</sup>	4	4-3.5mm <sup>2</sup> THW	1	4-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X5	3.5mm <sup>2</sup>	4	5-3.5mm <sup>2</sup> THW	1	5-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X6	3.5mm <sup>2</sup>	4	1-3.5mm <sup>2</sup> THW	1	1-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X7	3.5mm <sup>2</sup>	4	2-3.5mm <sup>2</sup> THW	1	2-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X8	3.5mm <sup>2</sup>	4	3-3.5mm <sup>2</sup> THW	1	3-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X9	3.5mm <sup>2</sup>	4	4-3.5mm <sup>2</sup> THW	1	4-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X10	3.5mm <sup>2</sup>	4	5-3.5mm <sup>2</sup> THW	1	5-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X11	3.5mm <sup>2</sup>	4	1-3.5mm <sup>2</sup> THW	1	1-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X12	3.5mm <sup>2</sup>	4	2-3.5mm <sup>2</sup> THW	1	2-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X13	3.5mm <sup>2</sup>	4	3-3.5mm <sup>2</sup> THW	1	3-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X14	3.5mm <sup>2</sup>	4	4-3.5mm <sup>2</sup> THW	1	4-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X15	3.5mm <sup>2</sup>	4	5-3.5mm <sup>2</sup> THW	1	5-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X16	3.5mm <sup>2</sup>	4	1-3.5mm <sup>2</sup> THW	1	1-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X17	3.5mm <sup>2</sup>	4	2-3.5mm <sup>2</sup> THW	1	2-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X18	3.5mm <sup>2</sup>	4	3-3.5mm <sup>2</sup> THW	1	3-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X19	3.5mm <sup>2</sup>	4	4-3.5mm <sup>2</sup> THW	1	4-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X20	3.5mm <sup>2</sup>	4	5-3.5mm <sup>2</sup> THW	1	5-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X21	3.5mm <sup>2</sup>	4	1-3.5mm <sup>2</sup> THW	1	1-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X22	3.5mm <sup>2</sup>	4	2-3.5mm <sup>2</sup> THW	1	2-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X23	3.5mm <sup>2</sup>	4	3-3.5mm <sup>2</sup> THW	1	3-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X24	3.5mm <sup>2</sup>	4	4-3.5mm <sup>2</sup> THW	1	4-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X25	3.5mm <sup>2</sup>	4	5-3.5mm <sup>2</sup> THW	1	5-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X26	3.5mm <sup>2</sup>	4	1-3.5mm <sup>2</sup> THW	1	1-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X27	3.5mm <sup>2</sup>	4	2-3.5mm <sup>2</sup> THW	1	2-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X28	3.5mm <sup>2</sup>	4	3-3.5mm <sup>2</sup> THW	1	3-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X29	3.5mm <sup>2</sup>	4	4-3.5mm <sup>2</sup> THW	1	4-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X30	3.5mm <sup>2</sup>	4	5-3.5mm <sup>2</sup> THW	1	5-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X31	3.5mm <sup>2</sup>	4	1-3.5mm <sup>2</sup> THW	1	1-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X32	3.5mm <sup>2</sup>	4	2-3.5mm <sup>2</sup> THW	1	2-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X33	3.5mm <sup>2</sup>	4	3-3.5mm <sup>2</sup> THW	1	3-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X34	3.5mm <sup>2</sup>	4	4-3.5mm <sup>2</sup> THW	1	4-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X35	3.5mm <sup>2</sup>	4	5-3.5mm <sup>2</sup> THW	1	5-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X36	3.5mm <sup>2</sup>	4	1-3.5mm <sup>2</sup> THW	1	1-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X37	3.5mm <sup>2</sup>	4	2-3.5mm <sup>2</sup> THW	1	2-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X38	3.5mm <sup>2</sup>	4	3-3.5mm <sup>2</sup> THW	1	3-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X39	3.5mm <sup>2</sup>	4	4-3.5mm <sup>2</sup> THW	1	4-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE
X40	3.5mm <sup>2</sup>	4	5-3.5mm <sup>2</sup> THW	1	5-3.5mm <sup>2</sup> THW	in 200mm PVC PIPE

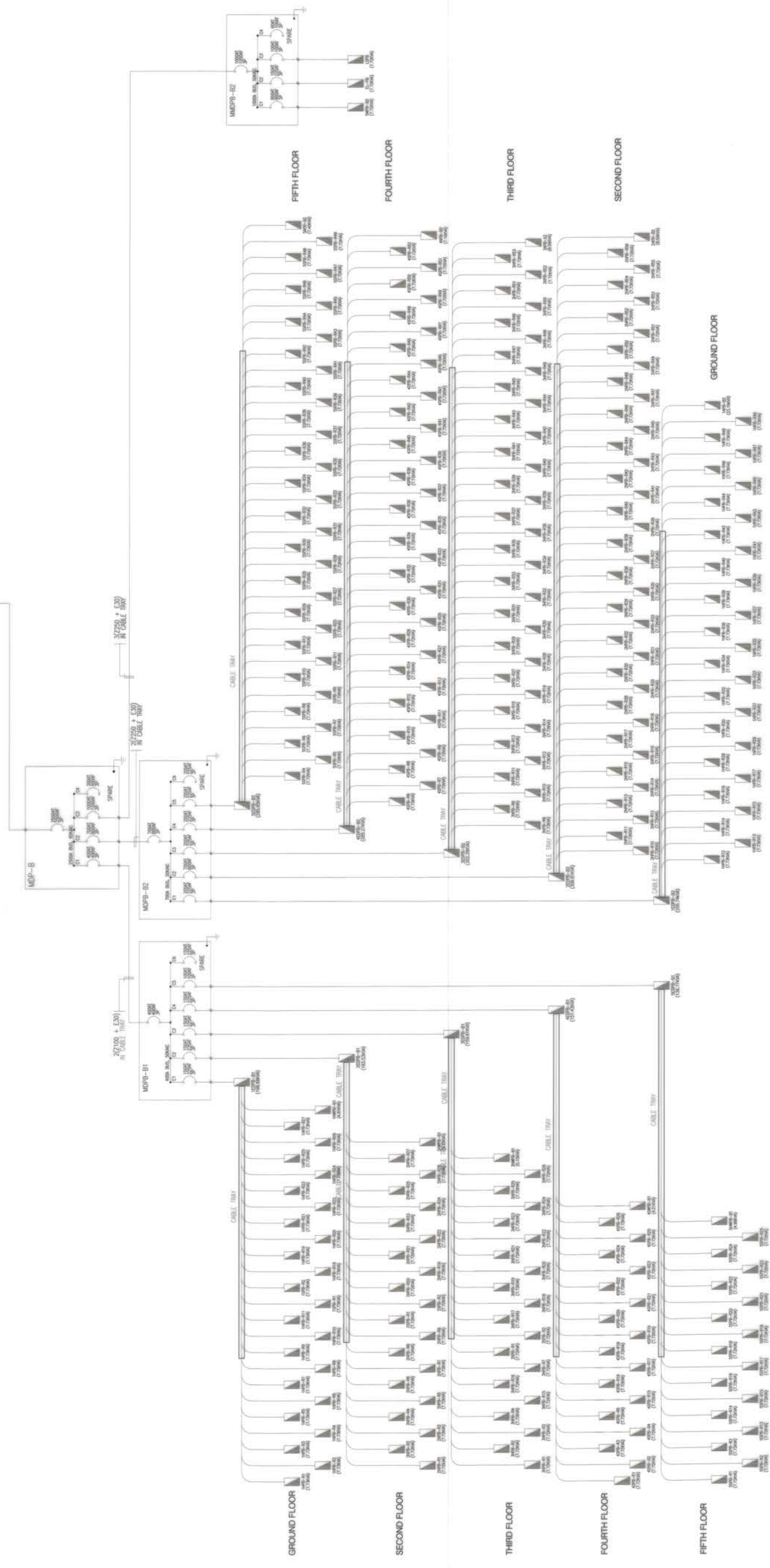


**BUILDING B  
ELECTRICAL RISER DIAGRAM**  
NETS  
SCALE: 1/4" = 1'-0"

<p><b>OWNER :</b></p> <p>BCDA AND WENJO B. YAZON PRESIDENT</p>	<p><b>PREPARED BY:</b></p> <p>FREY-FIL CORPORATION VICE PRESIDENT - OPERATION ZUILO S. DE LA CRUZ RED. No.: 000007 PTR. No.: 011008 TIN. No.: 118-00-014 PLACE: WMLA DATE: 01.20.2018</p>	<p><b>REVIEWED AND VALIDATED BY:</b></p> <p>FILIPINAS DRAVO CORPORATION Architectural &amp; Engineering Consultants ALFREDO R. REVILLA PROJECT MANAGER</p>	<p><b>SUBMITTED BY:</b></p> <p>BANDAR HEBAT BUILDERS, INC. ISAAC S. DRABO PRESIDENT</p>	<p><b>CERTIFIED BY: INDEPENDENT CONSULTANT</b></p> <p>TCGI ENGINEERS VIRGILIO A. MADRAZO PRESIDENT/CEO</p>	<p><b>PROJECT TITLE:</b></p> <p><b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac</p>	<p><b>SHEET CONTENTS:</b></p> <p>BUILDING "B" ELECTRICAL RISER DIAGRAM</p>	<p><b>SHEET NO.</b></p> <p>E-47</p>
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3. TO AS-B (REFER TO ENCL)

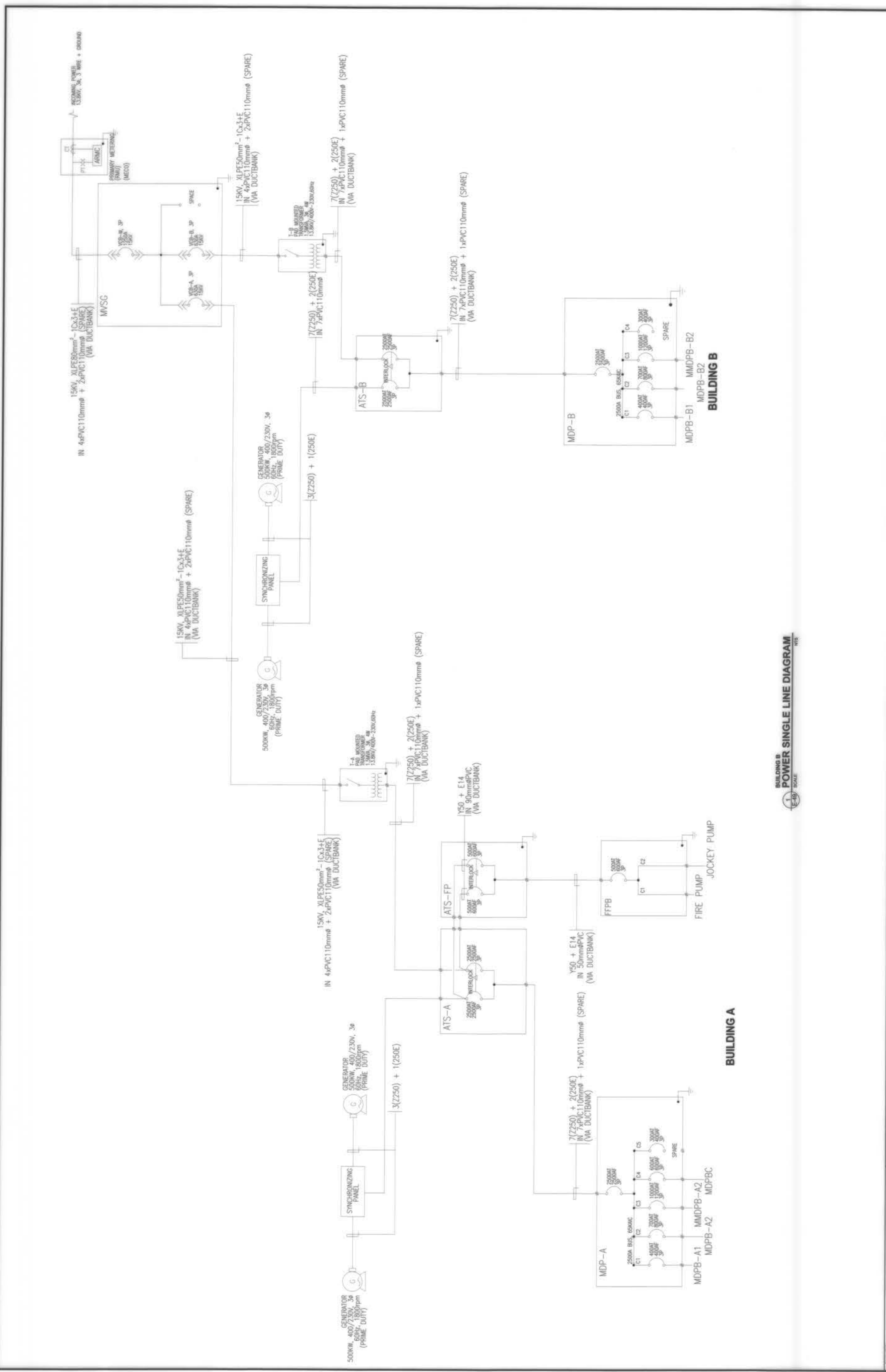
7(250) + (2)(250BCW)  
IN 7xPVC110mm $\phi$  + 1xPVC110mm $\phi$  (SPARE)  
(VIA DUCTBANK)



BUILDING B  
POWER SINGLE LINE DIAGRAM  
E-48 SCALE

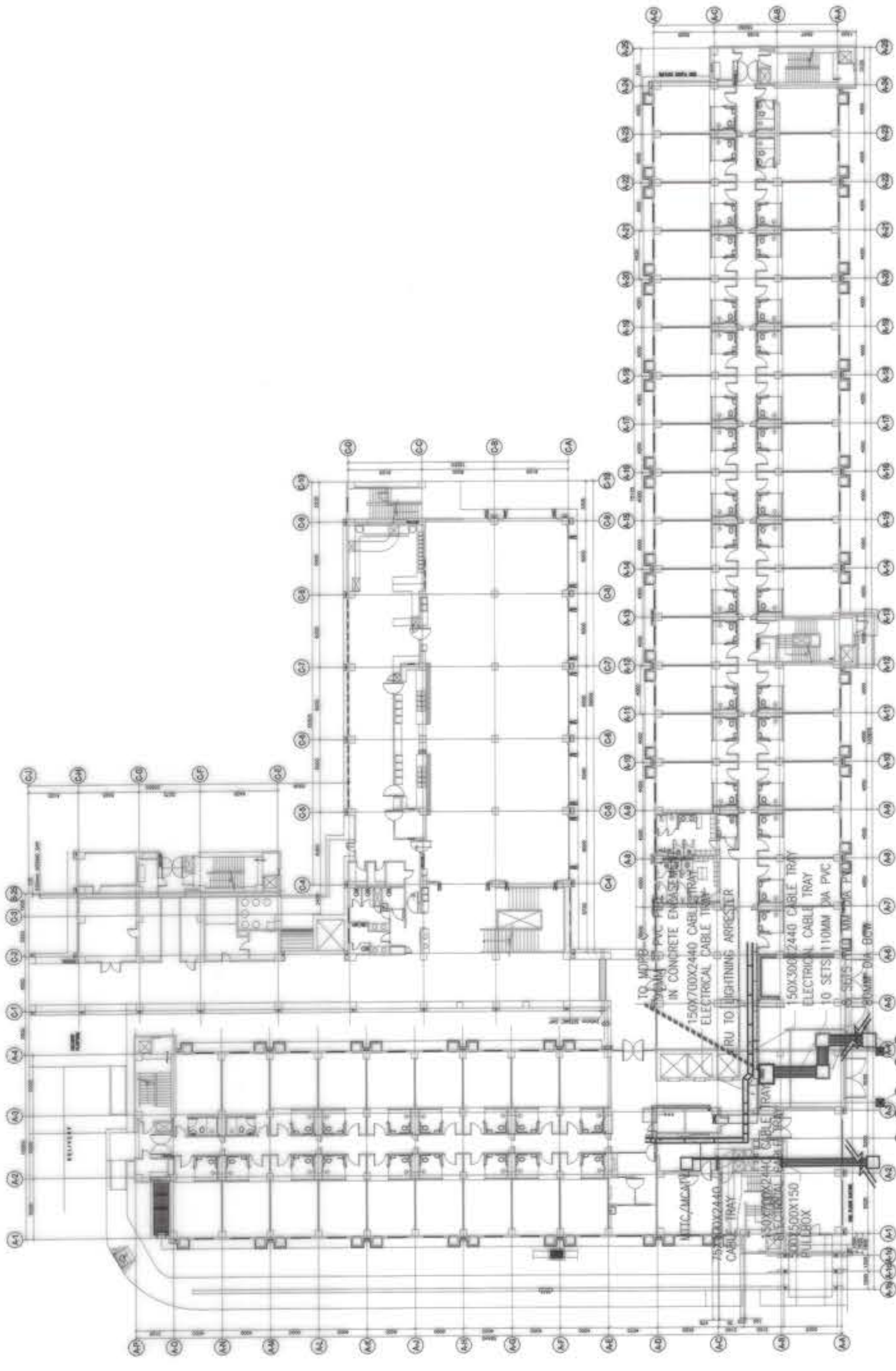
OWNER :	NGAC PHASE I JV COMPANY	PREPARED BY :	FREY-FIL CORPORATION MANILA • DAVAO • CEBU • MINDAO 1000 N. E. Highway 100, Suite 1000, Davao City, Mindanao, Philippines Tel: +63 81 222 2222 • Fax: +63 81 222 2222 www.frey-fil.com	REVIEWED AND VALIDATED BY :	FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants 1000 N. E. Highway 100, Suite 1000, Davao City, Mindanao, Philippines Tel: +63 81 222 2222 • Fax: +63 81 222 2222 www.frey-fil.com	SUBMITTED BY :	BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	CERTIFIED BY :	INDEPENDENT CONSULTANT TCGI ENGINEERS 1000 N. E. Highway 100, Suite 1000, Davao City, Mindanao, Philippines Tel: +63 81 222 2222 • Fax: +63 81 222 2222 www.tcgi.com	PROJECT TITLE :	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac	SHEET CONTENTS:	BUILDING "B" POWER SINGLE LINE DIAGRAM	SHEET NO. :	E-48											
	AND		BCDA VICENTE B. OZON PRESIDENT		AND		SOLO DE LA CRUZ VICE PRESIDENT / OPERATION REC. No.: 002607 PIR. No.: 8119488 TIN. No.: 104-08-214 PLACE: MAMA DATE: 01-20-2018		AND		FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants 1000 N. E. Highway 100, Suite 1000, Davao City, Mindanao, Philippines Tel: +63 81 222 2222 • Fax: +63 81 222 2222 www.frey-fil.com		AND		PREPARED BY :	SOLO DE LA CRUZ VICE PRESIDENT / OPERATION REC. No.: 002607 PIR. No.: 8119488 TIN. No.: 104-08-214 PLACE: MAMA DATE: 01-20-2018	AND	REVIEWED AND VALIDATED BY :	FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants 1000 N. E. Highway 100, Suite 1000, Davao City, Mindanao, Philippines Tel: +63 81 222 2222 • Fax: +63 81 222 2222 www.frey-fil.com	AND	SUBMITTED BY :	BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	AND	CERTIFIED BY :	INDEPENDENT CONSULTANT TCGI ENGINEERS 1000 N. E. Highway 100, Suite 1000, Davao City, Mindanao, Philippines Tel: +63 81 222 2222 • Fax: +63 81 222 2222 www.tcgi.com	AND



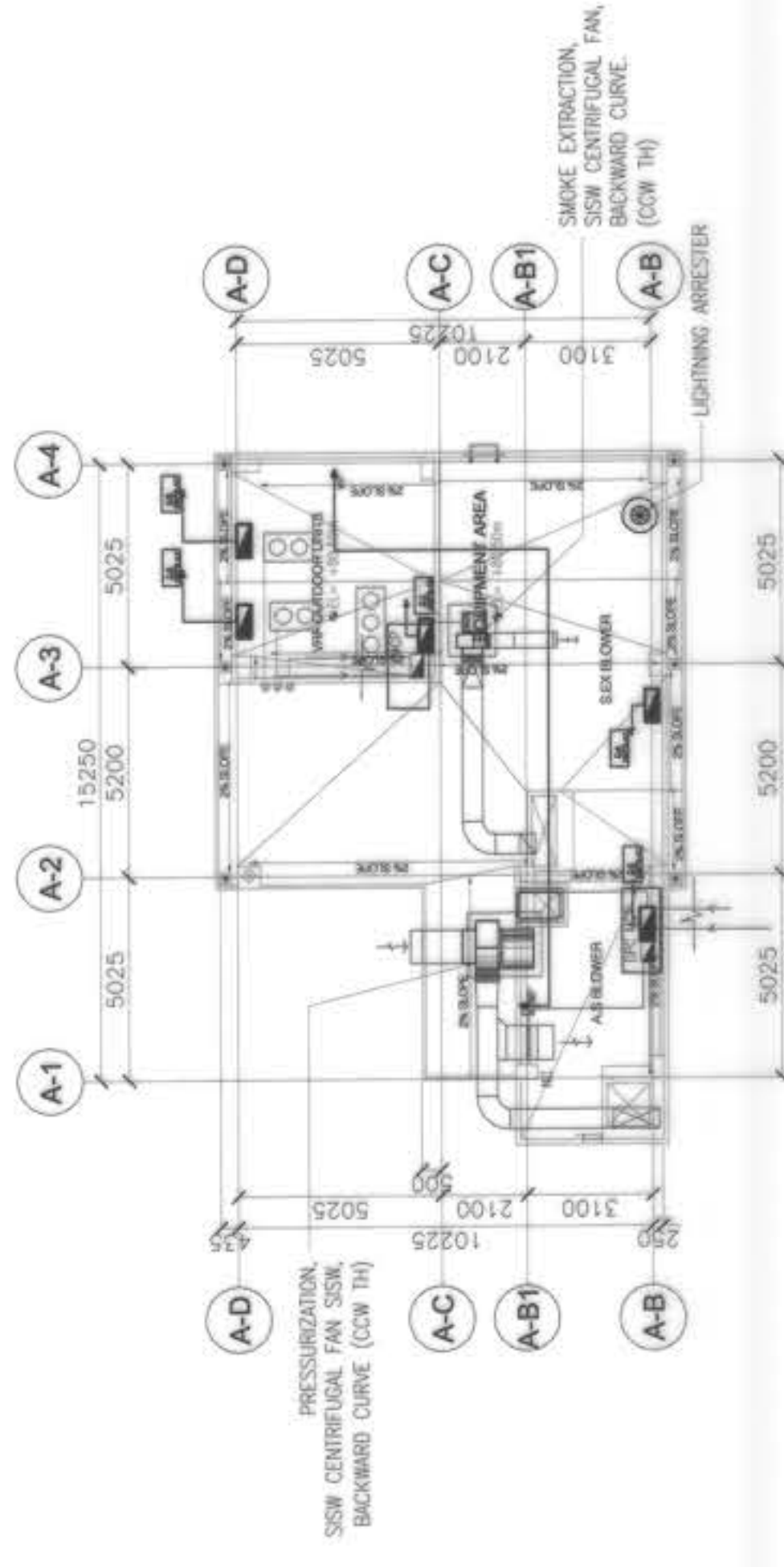
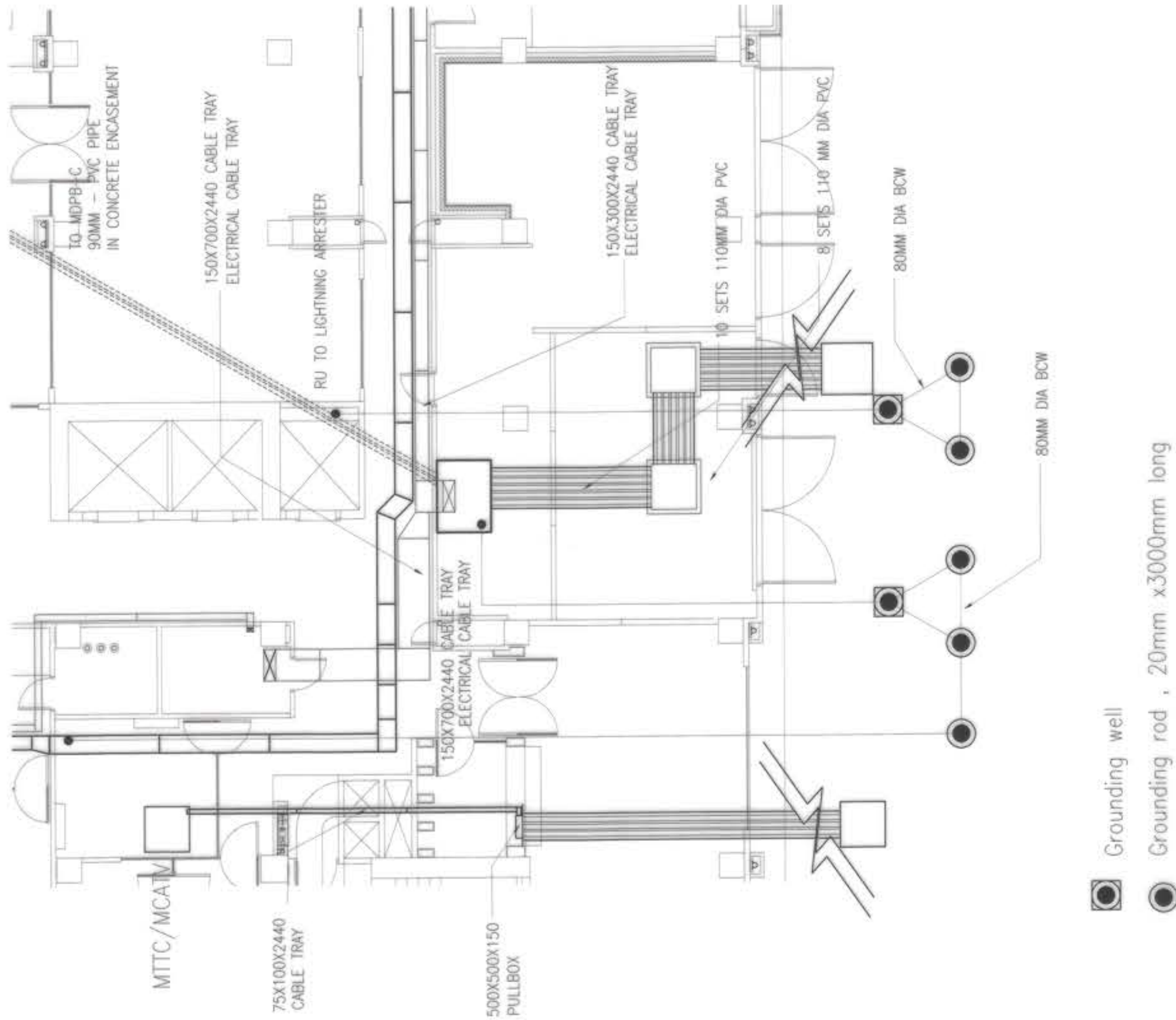


**BUILDING B**  
**POWER SINGLE LINE DIAGRAM**  
 1/8" = 1' SCALE

OWNER :	NGAC PHASE 1 JV COMPANY	PREPARED BY :	<b>FF</b> FREY-FIL CORPORATION <small>113 West 42nd Street, New York, NY 10018    Tel: 212-693-1000</small>	REVIEWED AND VALIDATED BY :	<b>FDC</b> FILIPINAS DRAVO CORPORATION <small>Architectural &amp; Engineering Consultants    11th Floor, 1155 North Avenue, Suite 1100, North Ave. Cor. North Ave. &amp; 115th St., New York, NY 10020    Tel: 212-693-1000</small>	SUBMITTED BY :	<b>AB</b> BANDAR HEBAT BUILDERS, INC. <small>ISAAC S. DAVID    PRESIDENT</small>	CERTIFIED BY :	<b>TCGI</b> TCGI ENGINEERS <small>115 West 42nd Street, New York, NY 10018    Tel: 212-693-1000</small> VIRGLIO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE :	<b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - BUILDING B ELECTRICAL New Clark City, Capas, Tarlac	SHEET CONTENTS:	BUILDING "B" POWER SINGLE LINE DIAGRAM	SHEET NO.	E-49
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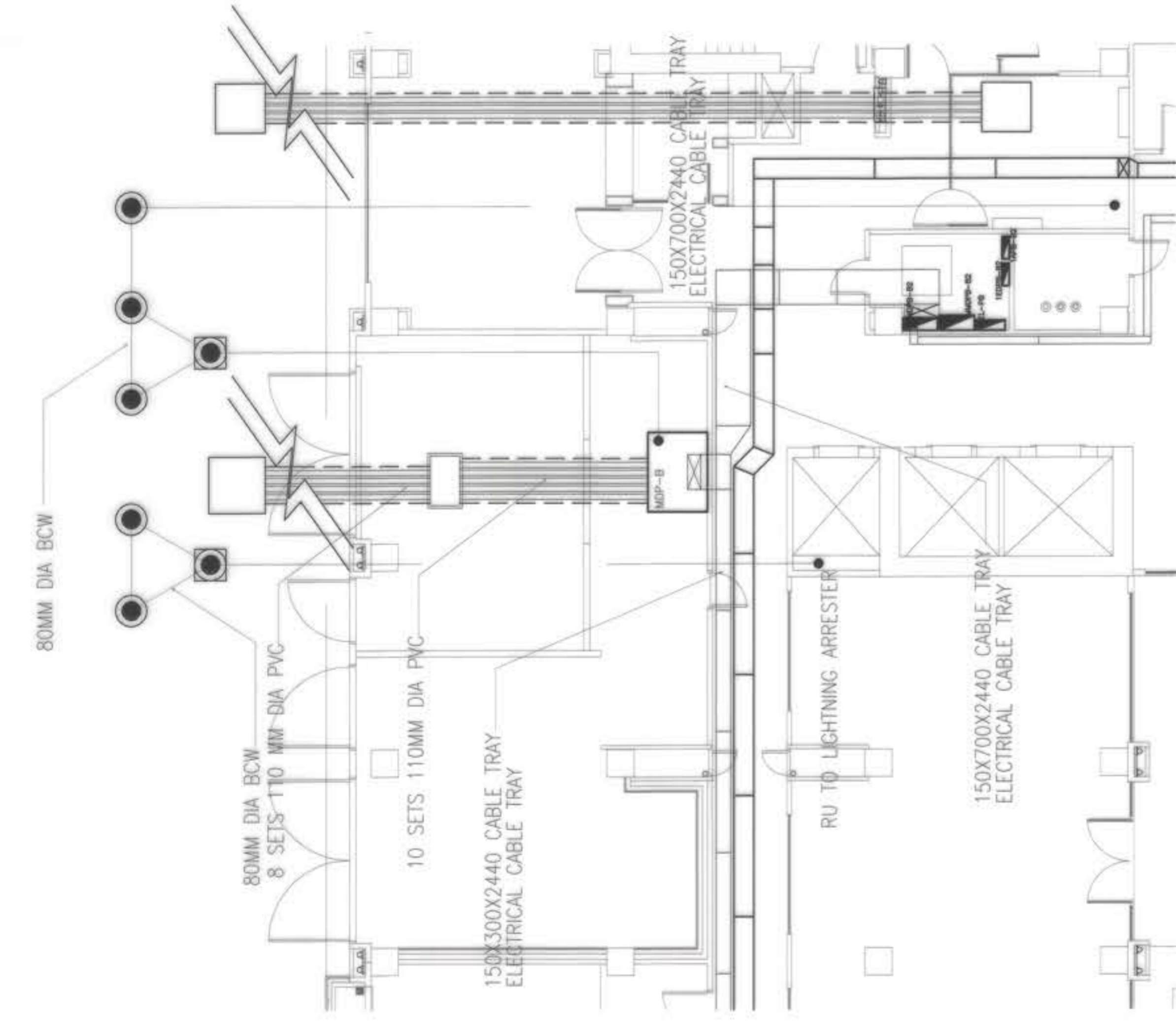
**LIGHTNING ARRESTER GROUNDING LOCATION**



**LIGHTNING ARRESTER LOCATION**

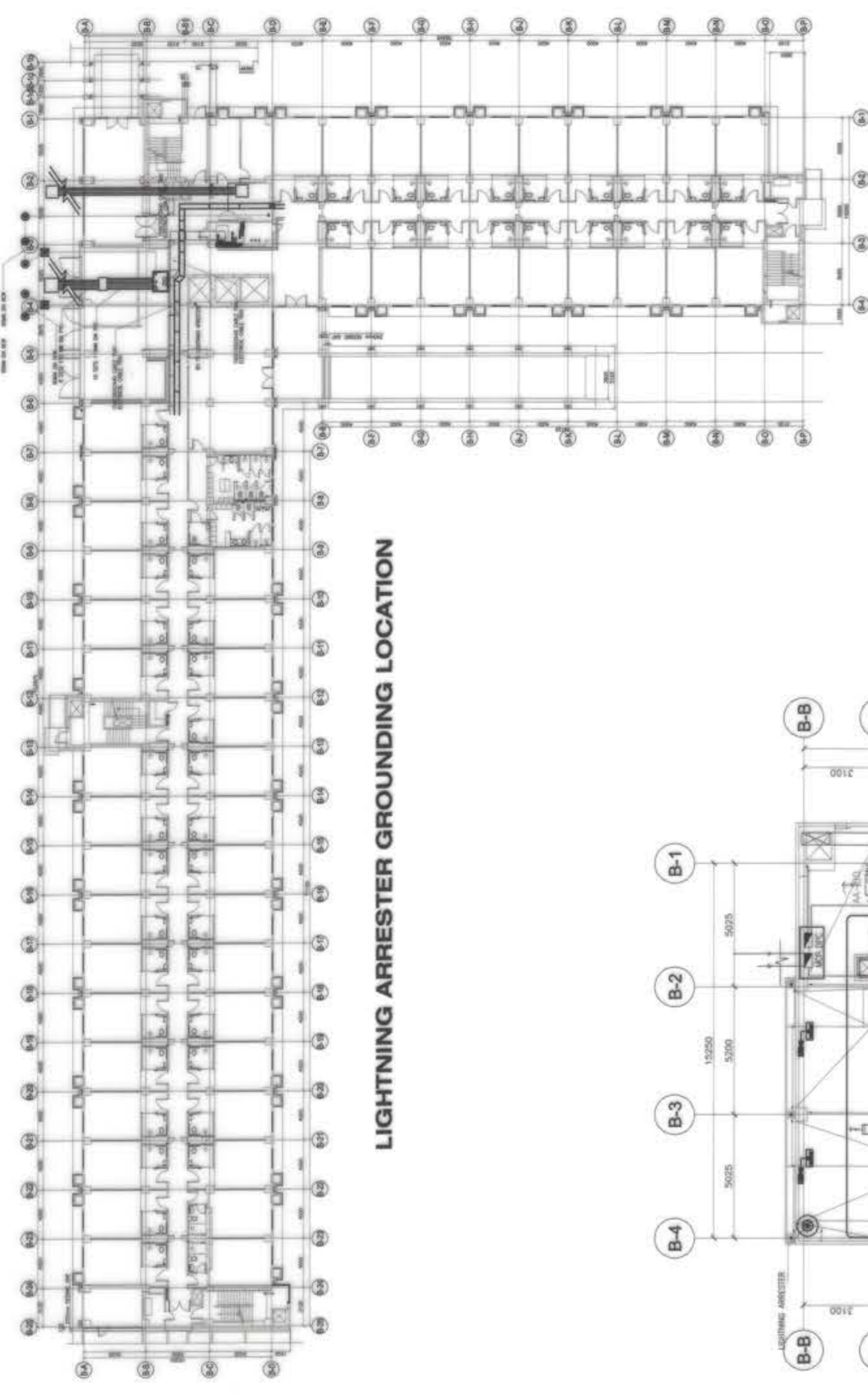
**BUILDING A  
ELECTRICAL ROOM GROUNDING LAYOUT**  
SCALE: 1/E-50 NTS

OWNER : NGAC PHASE 1A COMPANY	PREPARED BY: FREY-FIL CORPORATION VICENTE FREY-FIL 1154-04-274 11/20/2019	REVIEWED AND VALIDATED BY: FIPINAS DRAVO CORPORATION Architectural & Engineering Consultants 1154-04-274 11/20/2019	SUBMITTED BY: BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	CERTIFIED BY: INDEPENDENT CONSULTANT TCGI ENGINEERS VIRGILIO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE: AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - BUILDING A ELECTRICAL New Clark City, Capas, Tarlac	SHEET CONTENTS: BUILDING "A" ELECTRICAL ROOM GROUNDING LAYOUT	SHEET NO. E-50
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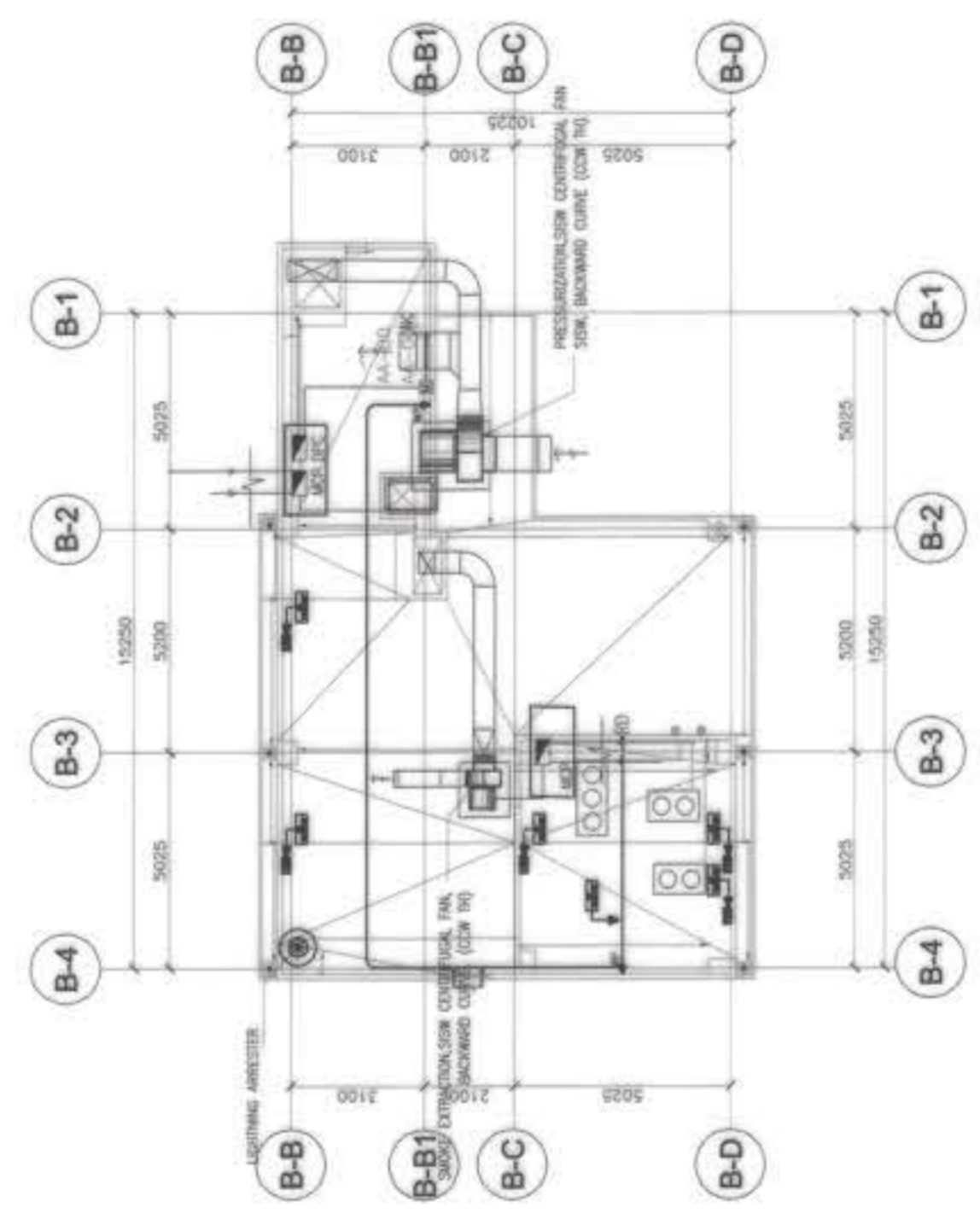


- Grounding well
- Grounding rod , 20mm x3000mm long

**BUILDING B**  
ELECTRICAL ROOM GROUNDING LAYOUT

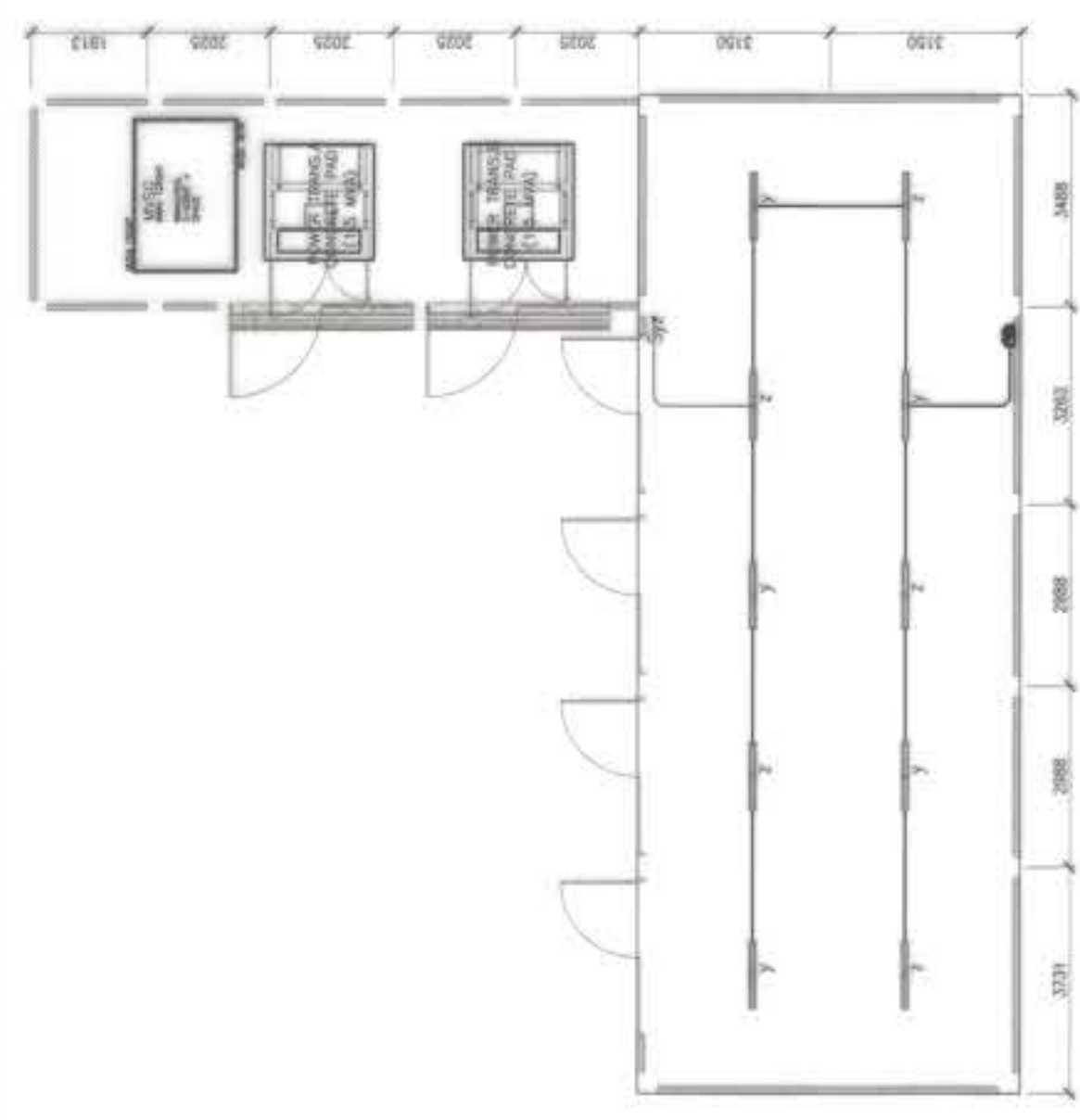
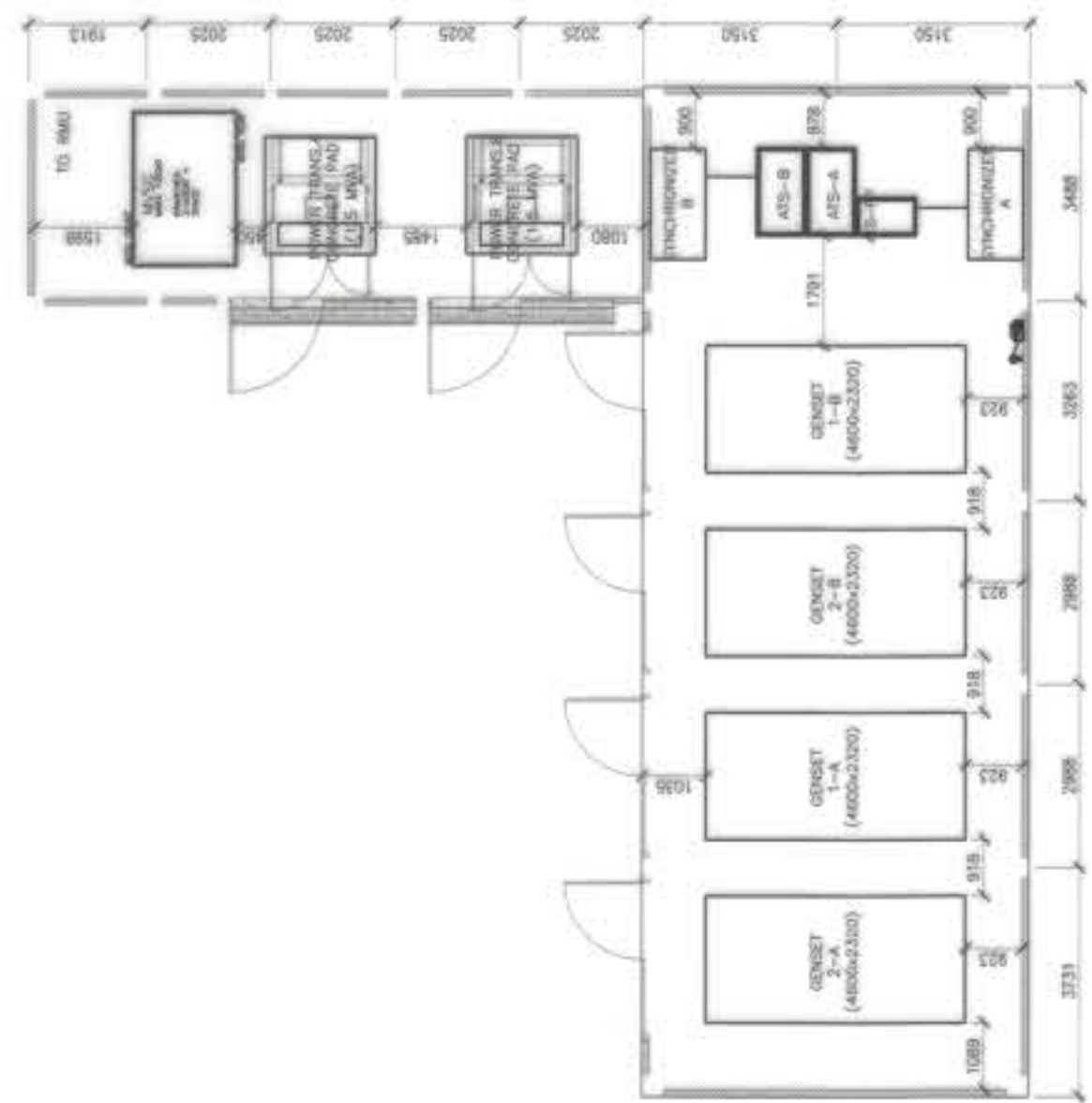
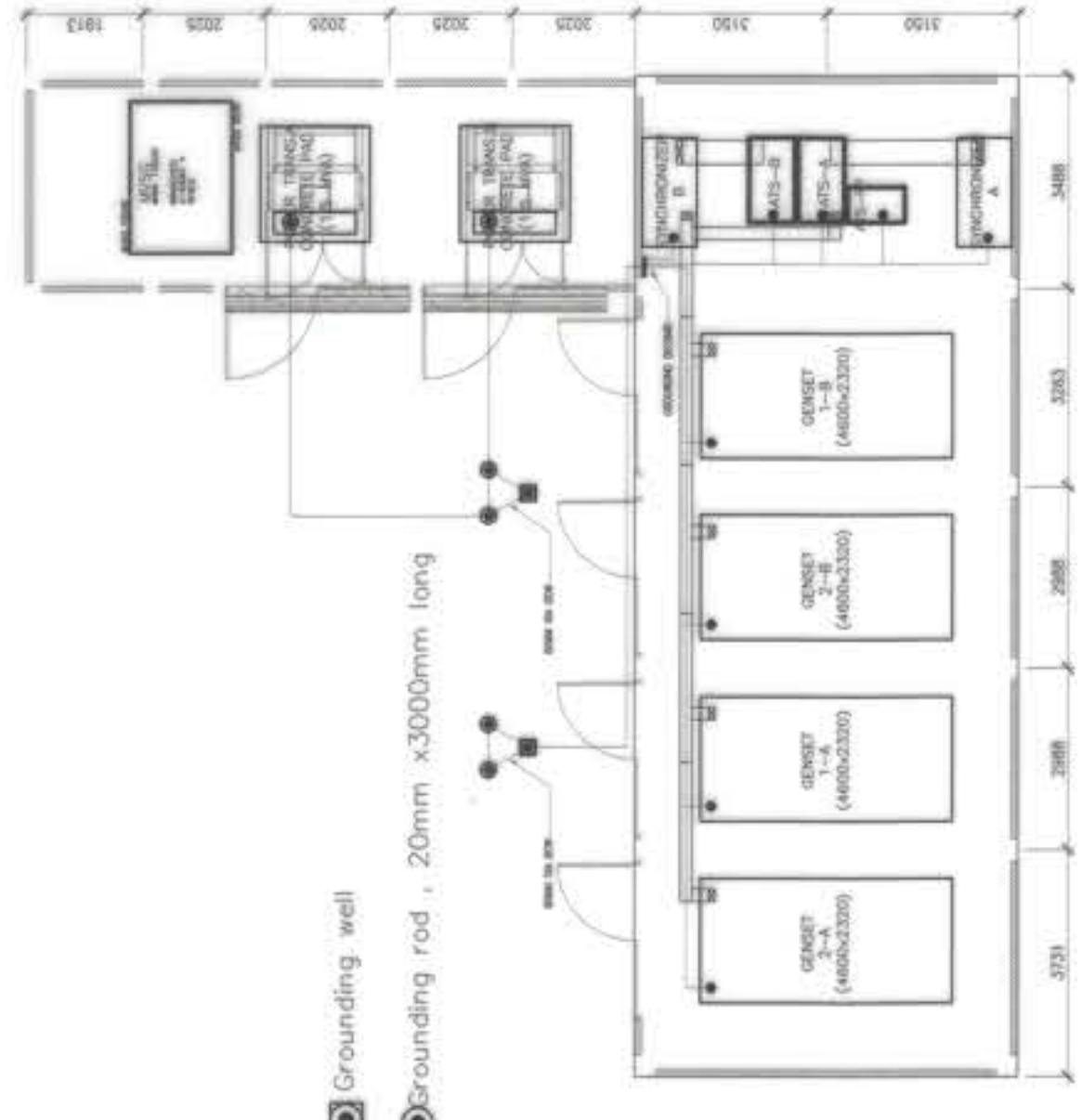


**LIGHTNING ARRESTER GROUNDING LOCATION**

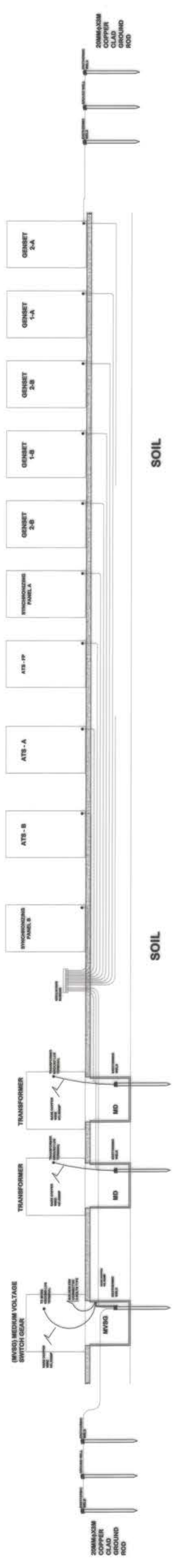


**LIGHTNING ARRESTER LOCATION**

OWNER : NGAC PHASE 1A COMPANY	PREPARED BY: FREY-FIL CORPORATION MARIKA - DAVID - CEO - UGUP REG. No.: 022007 TIN. No.: 116-456-276 DATE: 01-20-2019	REVIEWED AND VALIDATED BY: F70	SUBMITTED BY: BANDAR HEBAT BUILDERS, INC. ISAAC S. DAVID PRESIDENT	CERTIFIED BY: INDEPENDENT CONSULTANT TCGI ENGINEERS VIRGILIO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE: AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - (ELECTRICAL) New Clark City, Capas, Tarlac	SHEET CONTENTS: BUILDING "B" ELECTRICAL ROOM GROUNDING LAYOUT	SHEET NO. E-51
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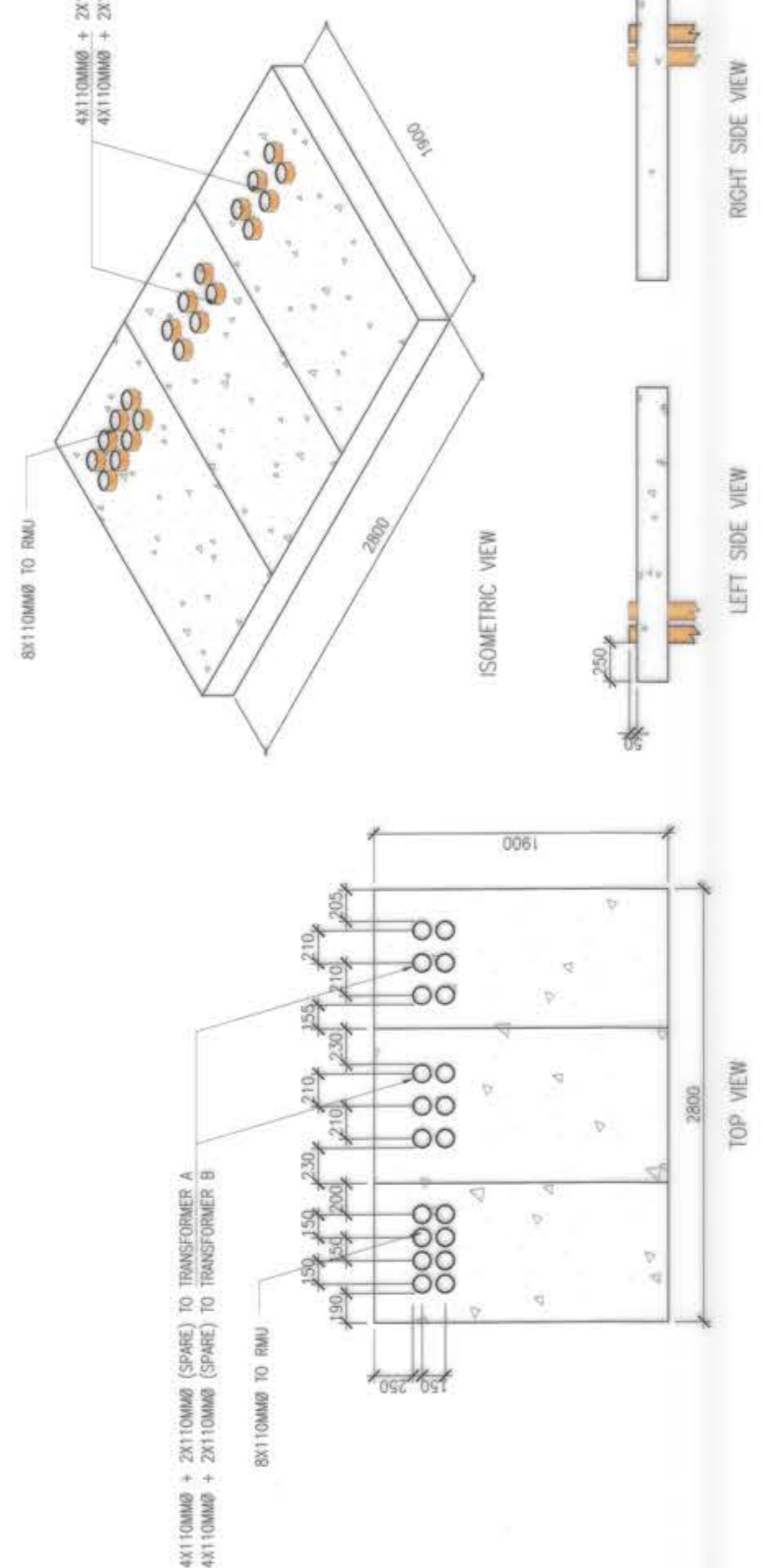
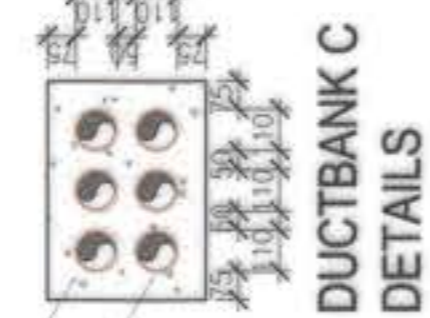
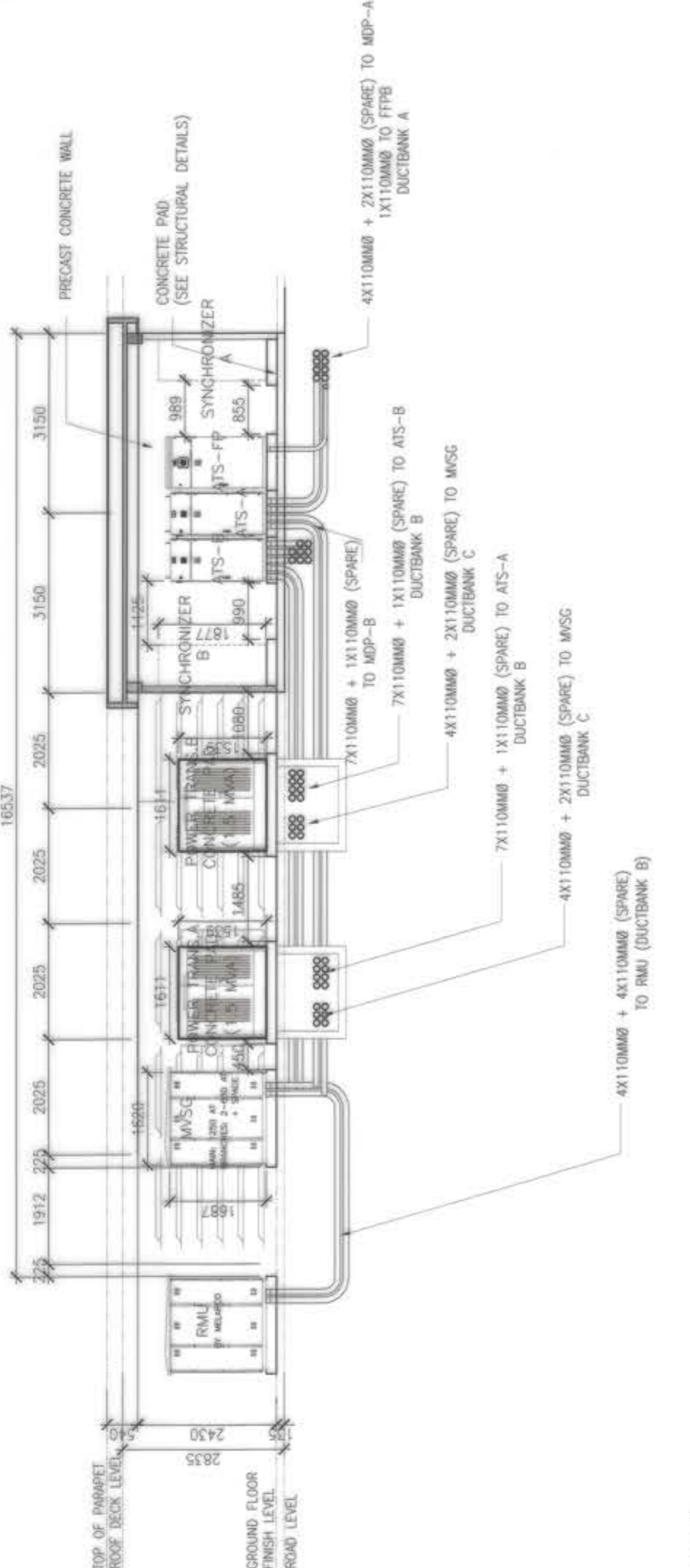
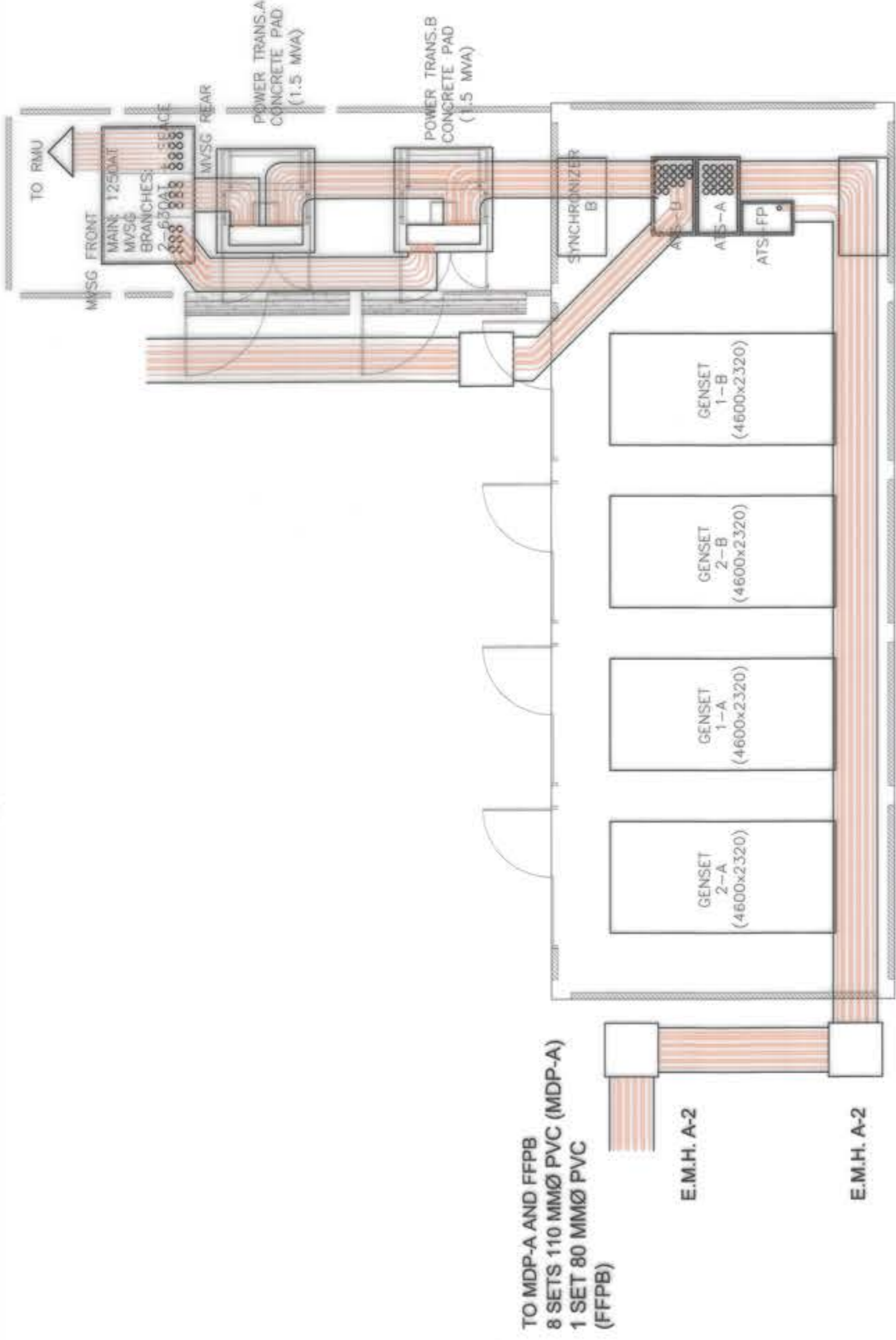


**POWERHOUSE CABLE TRAY, GROUNDING LAYOUT, LIGHTING LAYOUT AND POWER LAYOUT**



POWERHOUSE  
**POWERHOUSE CABLE TRAY, GROUNDING LAYOUT, LIGHTING LAYOUT AND POWER LAYOUT**  
 SCALE  
 NTS

OWNER : <b>BCDA</b> VICENTE B. OZON PRESIDENT	PREPARED BY: <b>FF</b> <b>FREY-FIL CORPORATION</b> MARIETA - CEBU - VISAYAS 118-08-27A PLACE DATE: 01-20-2018	REVIEWED AND VALIDATED BY: <b>FIL</b> <b>FILIPINAS DRAVO CORPORATION</b> Architectural & Engineering Consultants ALFREDO B. REVILLA PROJECT MANAGER	SUBMITTED BY: <b>Bandar Hebat Builders, Inc.</b> ISAAC S. DAVID PRESIDENT	CERTIFIED BY: INDEPENDENT CONSULTANT <b>TCGI ENGINEERS</b> VIRGILO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE: <b>AS-BUILT DRAWING</b> NGAC PHASE 1A ATHLETES VILLAGE - (ELECTRICAL) New Clark City, Capas, Tarlac	SHEET CONTENTS: POWERHOUSE LIGHTING LAYOUT, POWER LAYOUT CABLE TRAY AND GROUNDING LAYOUT SHEET NO. <b>E-52</b>
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**LP-PH POWERHOUSE PANEL BOARD**  
VOLTAGE : 400/230  
PHASE : 3 P

NO.	LOAD DESCRIPTION	LOAD	WIRES			AMPS PER PHASE	CN	CONDUIT MM DIA.
			AN	BN	GN			
C1	500 VA OUTLET	500	0.72			36		CABLE TRAY
C2	3HP EXHAUST FAN		17.00					CABLE TRAY
C3	3HP EXHAUST FAN			17.00				CABLE TRAY
C4	3HP EXHAUST FAN			17.00				CABLE TRAY
C5	3HP EXHAUST FAN			17.00				CABLE TRAY
C6	10X 1200MM TS TUBULAR LED LIGHT WITH CASE	240				17.00		CABLE TRAY
C7	S P A R E					0.36		CABLE TRAY
C8	S P A R E							CABLE TRAY
TOTAL		740	17.72	34.00	17.35			
TOTAL CONNECTED LOAD:			IFL =	17 (0.25) + 34				
				38.25	A			
OVER CURRENT PROTECTION: SOFT START				IFL = 17 (1.5) + 34				
				59.50				

MAIN FEEDER: 4 - 14mm<sup>2</sup> THHN 8.0 mm<sup>2</sup> GND mm<sup>2</sup> CABLE TRAY  
MAIN BREAKER: 70A, 1000F, 3P + N, 30 KAIC, 400V, 1H  
PKT. BREAKER: 30A, 1000F, 3P + N, 30 KAIC, 400V, 1H

**POWERHOUSE TRANSFORMER LAYOUT, SECTION DETAILS AND LOAD SCHEDULE**

OWNER: NGAC PHASE I JV COMPANY

BCDA  
VICENTE B. JASON  
PRESIDENT

AND  
PATRICK NICHOLAS P. DAVID  
PRESIDENT

PREPARED BY: FREY-PIL CORPORATION  
MIRIAM "OLIVE" CEBALLOS-BOGARD  
DATE: 01-20-2019

ZOILLO DELA CRUZ  
VICE PRESIDENT - OPERATION  
PR No: 020007  
TIN No: 118-028-274  
PLACE: WMLA

ALFREDO R. PATILLA  
PROJECT MANAGER

FILIPINAS DRAVO CORPORATION  
Architectural & Engineering Consultants

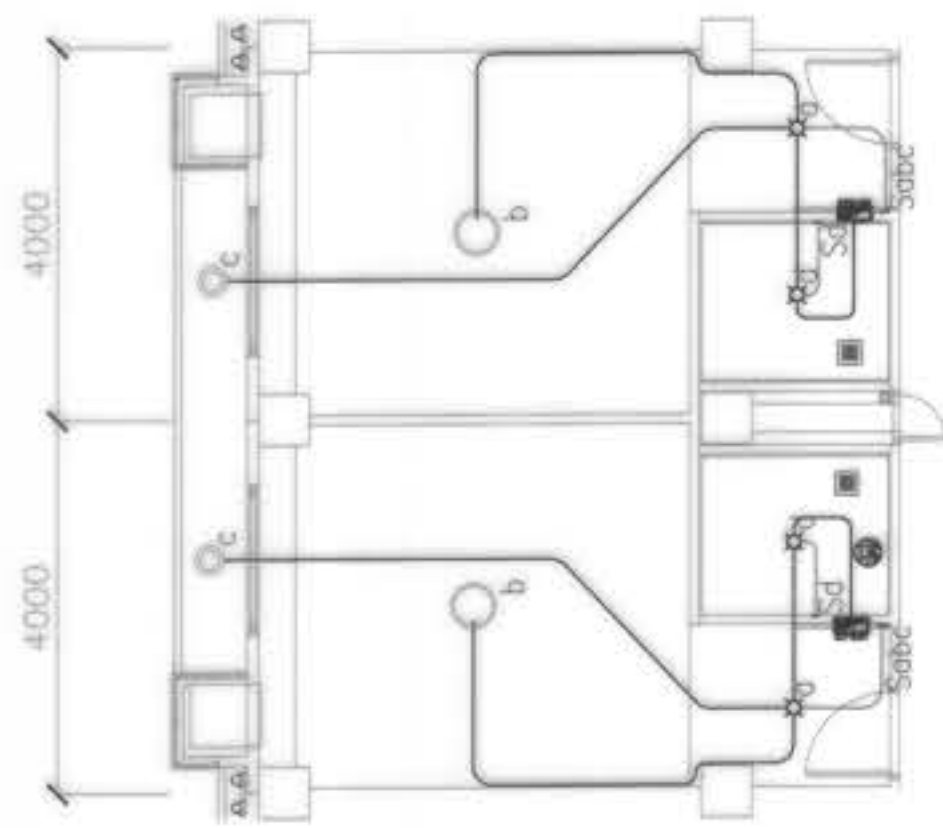
BANDAR HEBAT BUILDERS, INC.  
ISAAC S. DAVID  
PRESIDENT

TCGI ENGINEERS  
VIRGILIO A. MADRAZO  
PRESIDENT/CEO

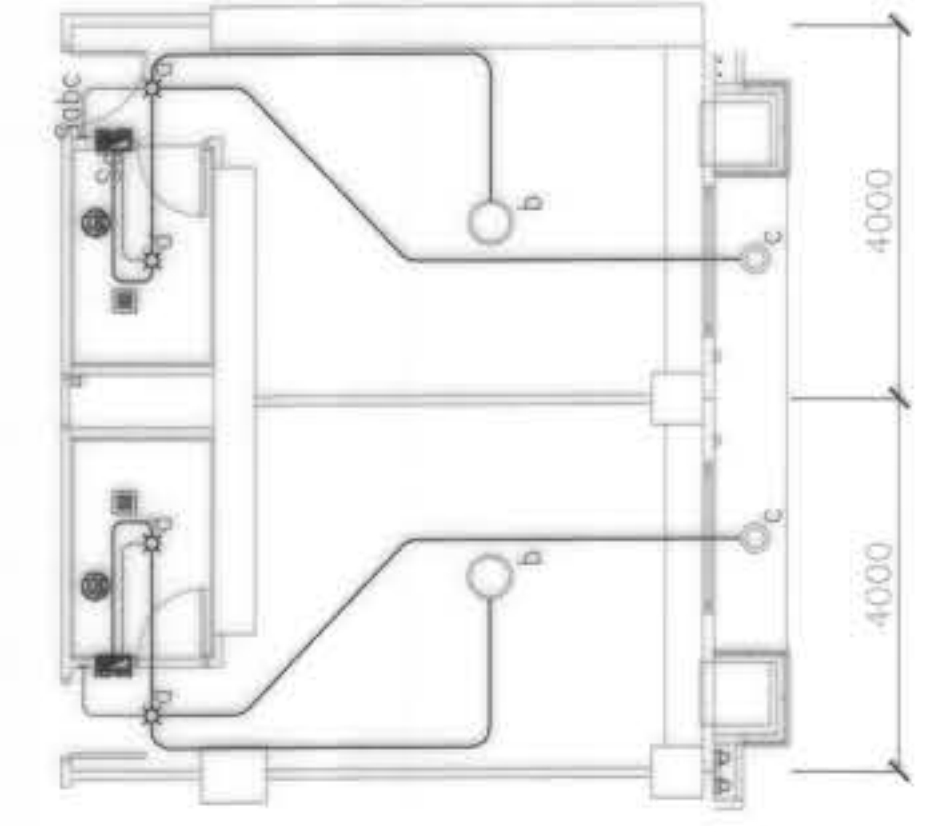
CERTIFIED BY: INDEPENDENT CONSULTANT

AS-BUILT DRAWING  
NGAC PHASE 1A  
ATHLETES VILLAGE -  
(ELECTRICAL)  
New Clark City, Capas, Tarlac

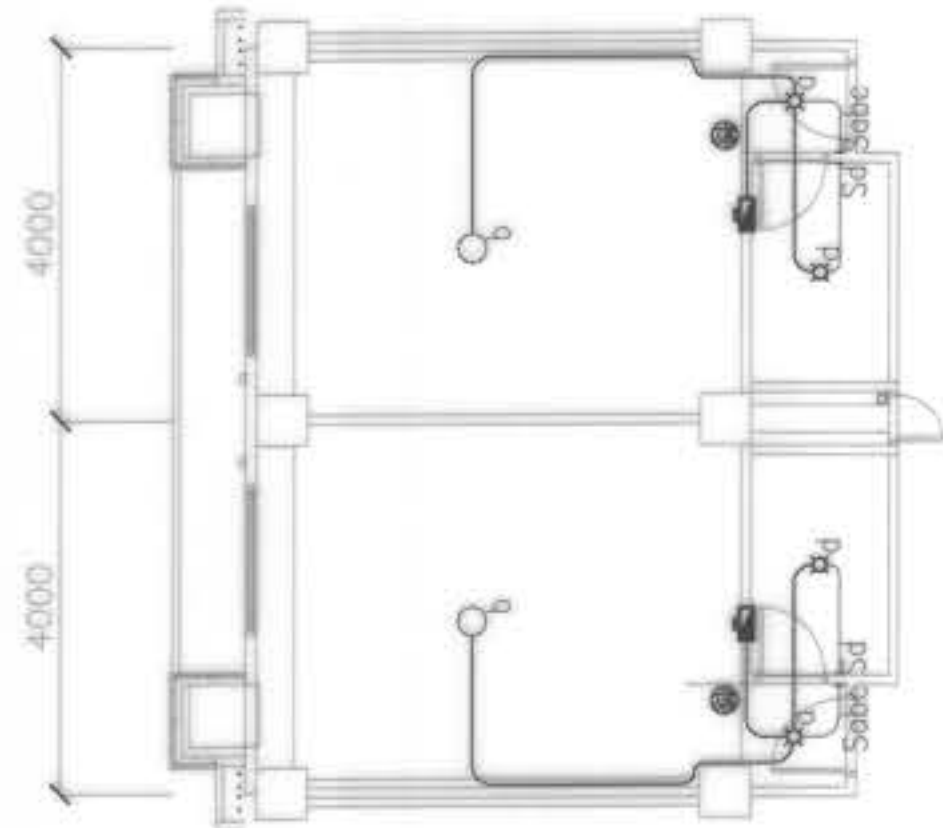
SHEET NO. E-53



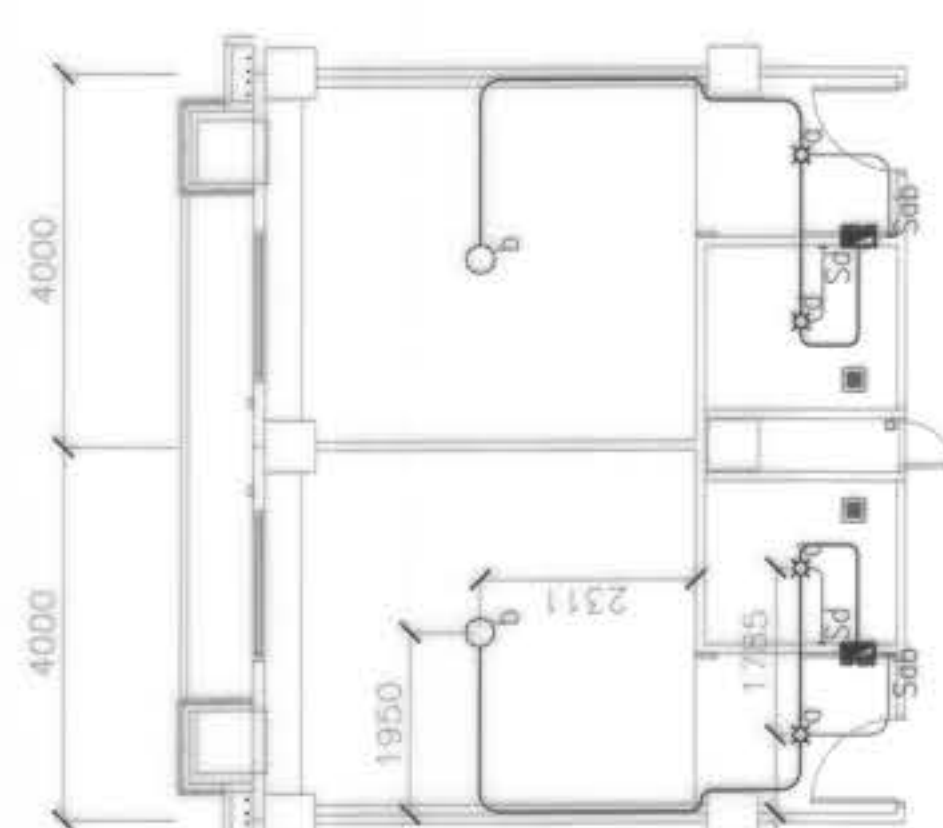
HANDICAPPED STUDIO UNIT LIGHTING LAYOUT GROUND FLOOR



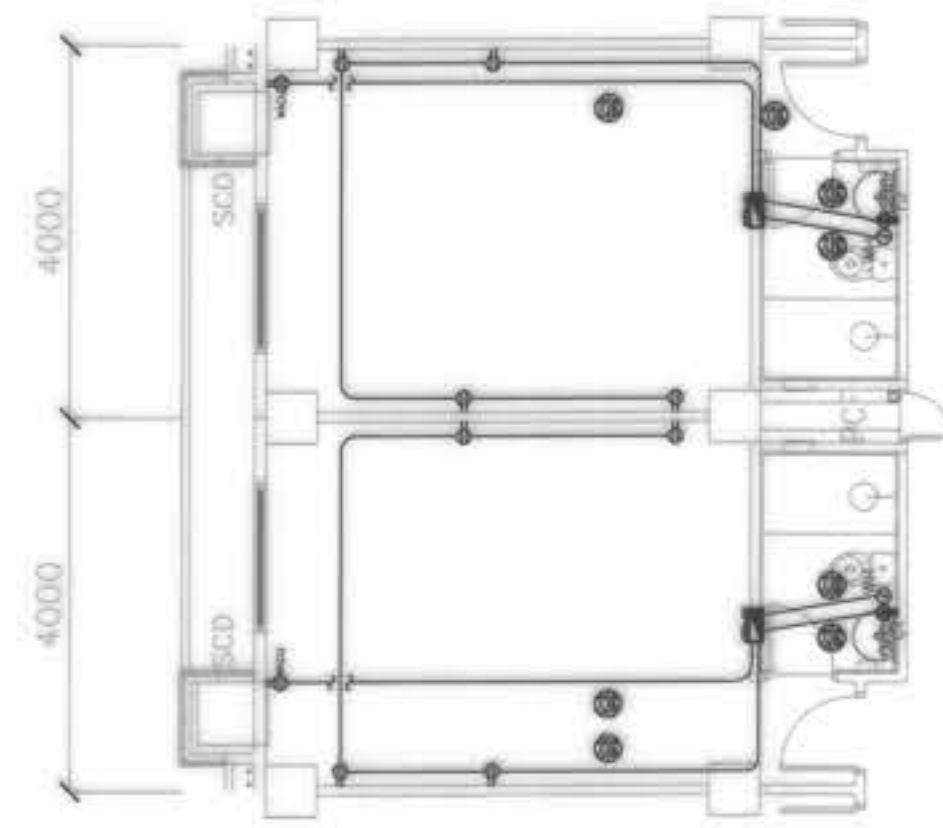
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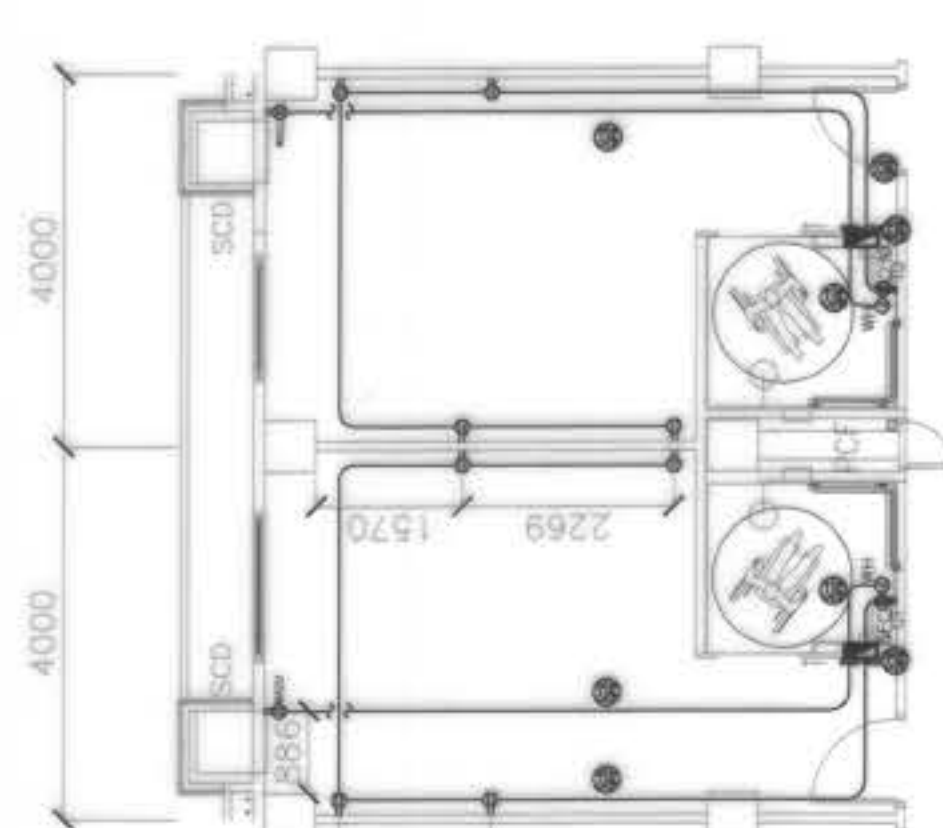
STUDIO UNIT LIGHTING LAYOUT TYPICAL TO FIFTH FLOOR



HANDICAPPED UNIT LIGHTING LAYOUT SECOND FLOOR

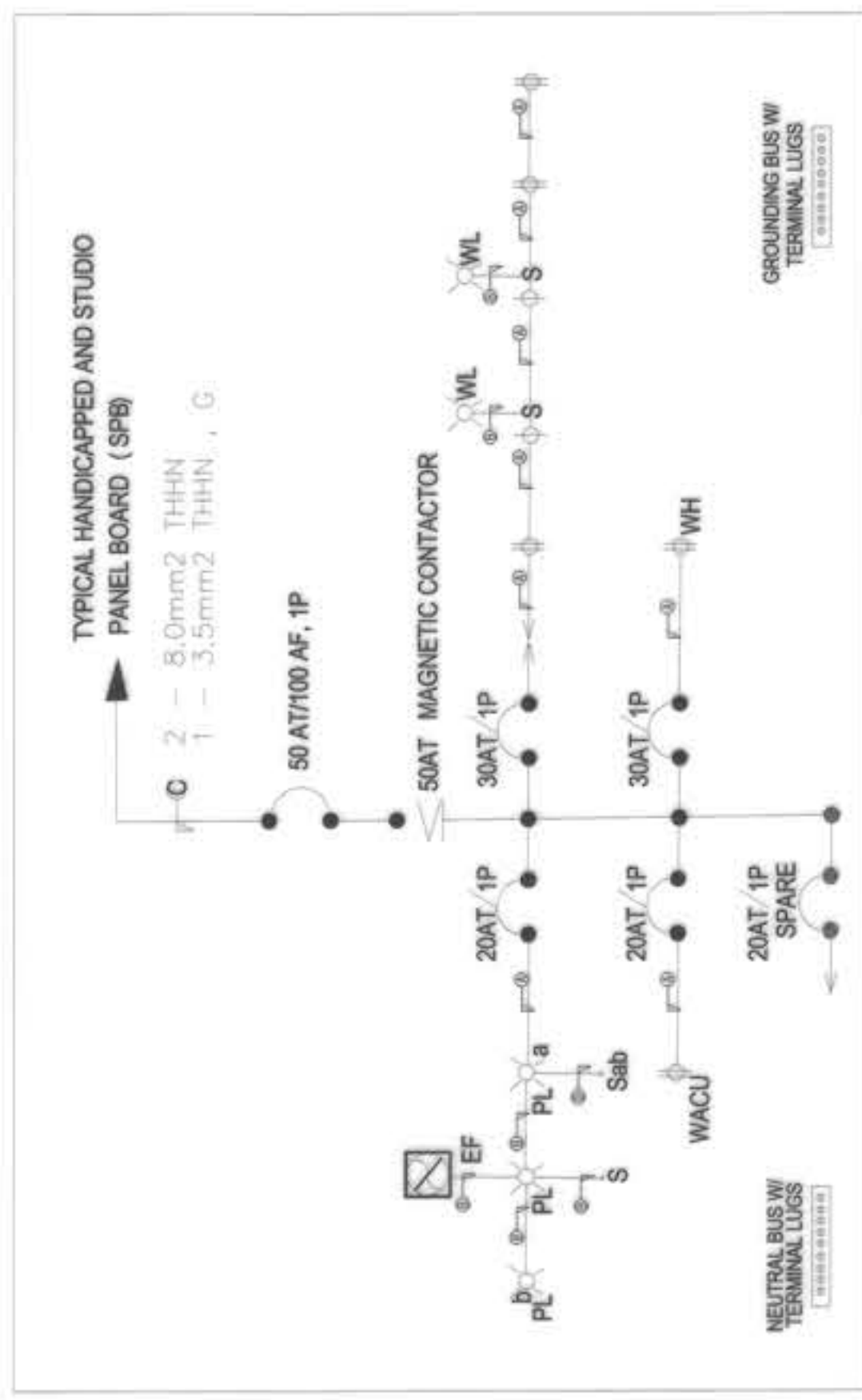


TYPICAL STUDIO UNIT POWER LAYOUT



TYPICAL HANDICAPPED STUDIO UNIT POWER LAYOUT

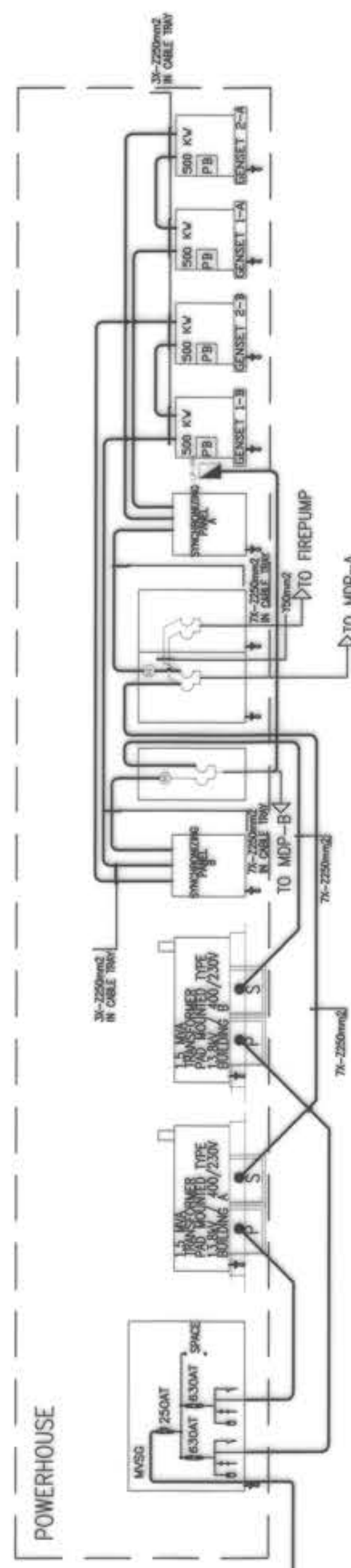
**BLOW-UP PLANS FOR STUDIO/HANDICAPPED UNIT**  
E-54 SCALE



LEGEND:

Symbol	Electrical Description
(A)	2 - 3.5mm <sup>2</sup> THHN 1 - 2.0mm <sup>2</sup> THHN, G 20mm Pvc Pipe
(B)	2 - 2.0mm <sup>2</sup> THHN 20mm Pvc Pipe
(C)	2 - 8.0mm <sup>2</sup> THHN 3 - 5.0mm <sup>2</sup> THHN, G 25mm Pvc Pipe

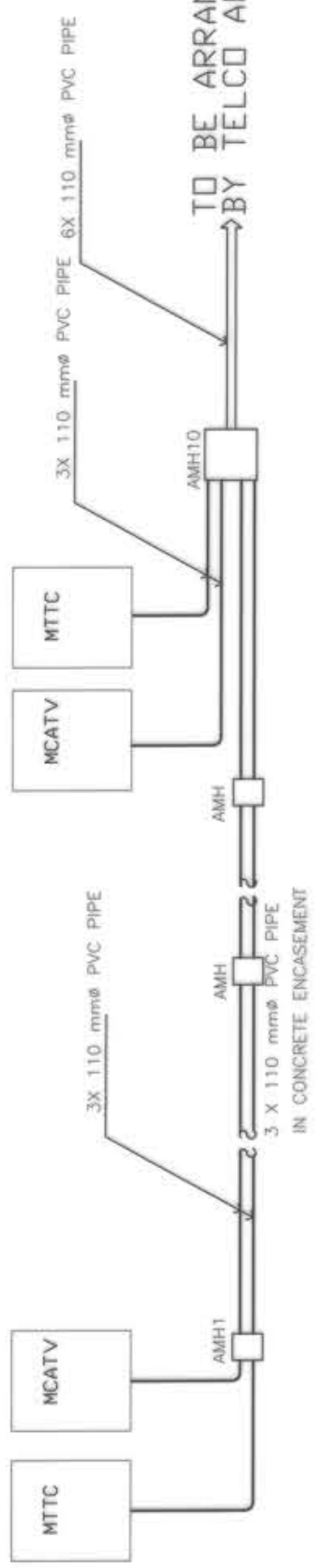
**TYPICAL SCHEMATIC DIAGRAM FOR STUDIO/HANDICAPPED UNIT PANEL BOARD**  
E-54 SCALE



**POWERHOUSE BLOW-UP SCHEMATIC DIAGRAM**

BUILDING A

BUILDING B



**SINGLE LINE SCHEMATIC DIAGRAM FOR TELCO AND CATV**

**SINGLE LINE SCHEMATIC DIAGRAM FOR ELECTRICAL, TELCO AND CATV**  
E-54 SCALE

OWNER: NGAC PHASE I JV COMPANY  
**BCDA**  
 WENCO B. DORR, PRESIDENT

PREPARED BY: **FREY-FIL CORPORATION**  
 MARIETTA, OHIO  
 DATE: 01-20-2018

REVIEWED AND VALIDATED BY: **FILIPINAS DRAVO CORPORATION**  
 Architectural & Engineering Consultants  
 ALFREDO R. DELA CRUZ, PROJECT MANAGER

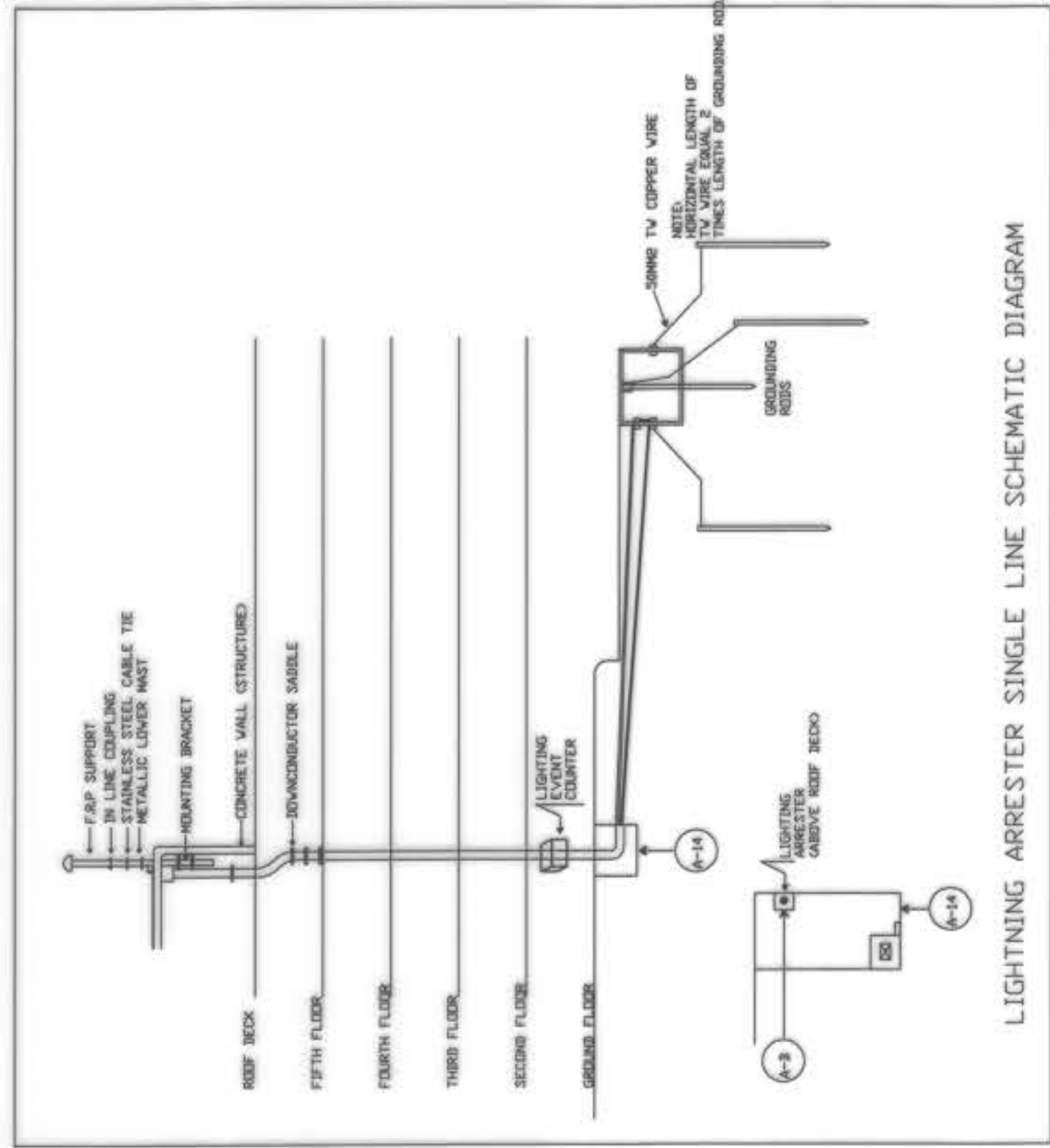
SUBMITTED BY: **BANDAR HEBAT BUILDERS, INC.**  
 ISAAC S. DAVID, PRESIDENT

CERTIFIED BY: **TCGI ENGINEERS**  
 VIRGILO A. MADRAZO, PRESIDENT/CEO

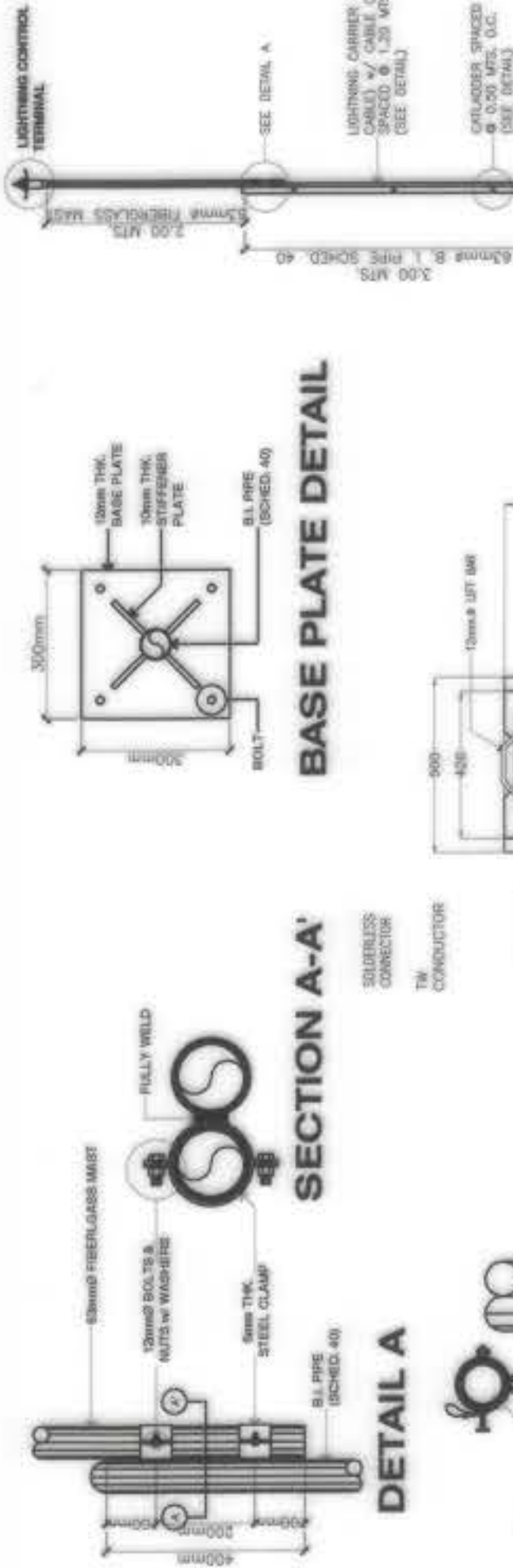
PROJECT TITLE: **AS-BUILT DRAWING**  
 NGAC PHASE 1A ATHLETES VILLAGE - (ELECTRICAL)  
 New Clark City, Capas, Tarlac

SHEET CONTENTS:  
 TYPICAL SCHEMATIC LINE DIAGRAM, BLOW UP PLANS FOR STUDIO/HANDICAPPED PANEL BOARD AND SINGLE LINE SCHEMATIC DIAGRAM FOR ELECTRICAL, TELCO AND CATV

SHEET NO. **E-54**



LIGHTNING ARRESTER SINGLE LINE SCHEMATIC DIAGRAM



LIGHTNING CONTROL TERMINAL



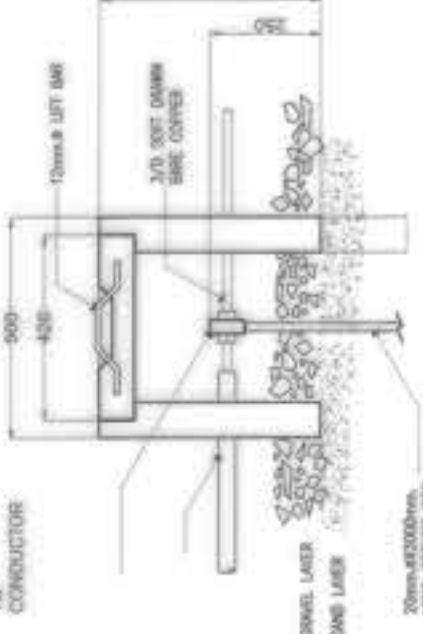
BASE PLATE DETAIL



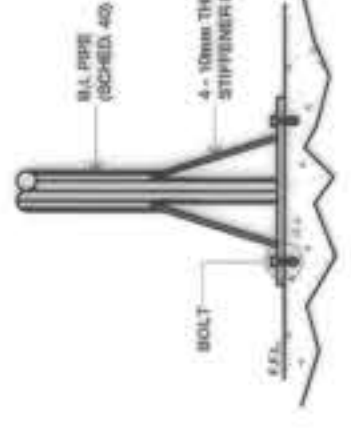
SECTION A-A



CLAMP DETAIL



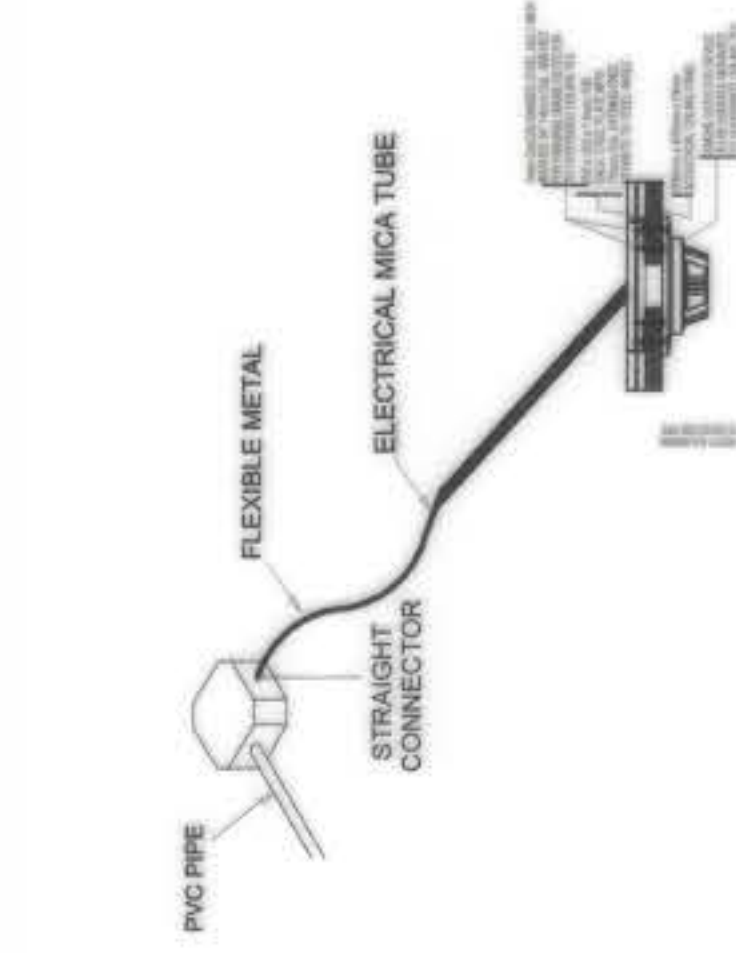
GROUND PIT DETAIL



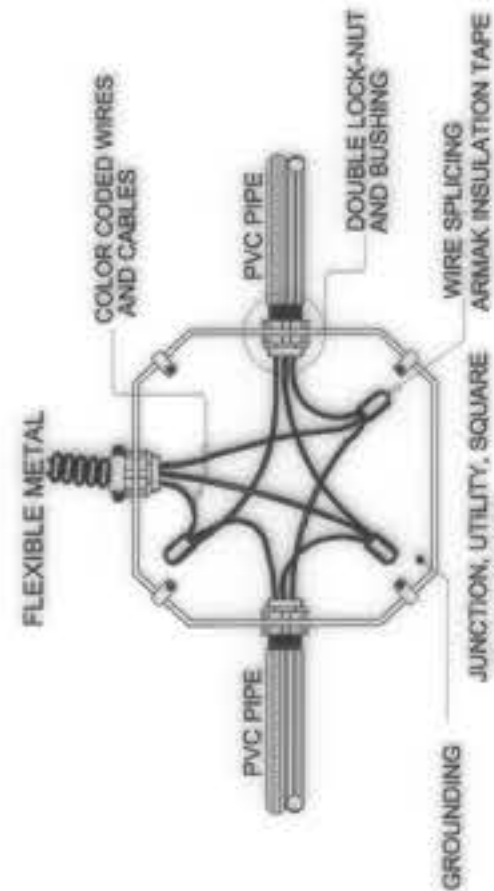
CAT LADDER DETAIL



DOWN CONDUCTOR SUPPORT DETAILS

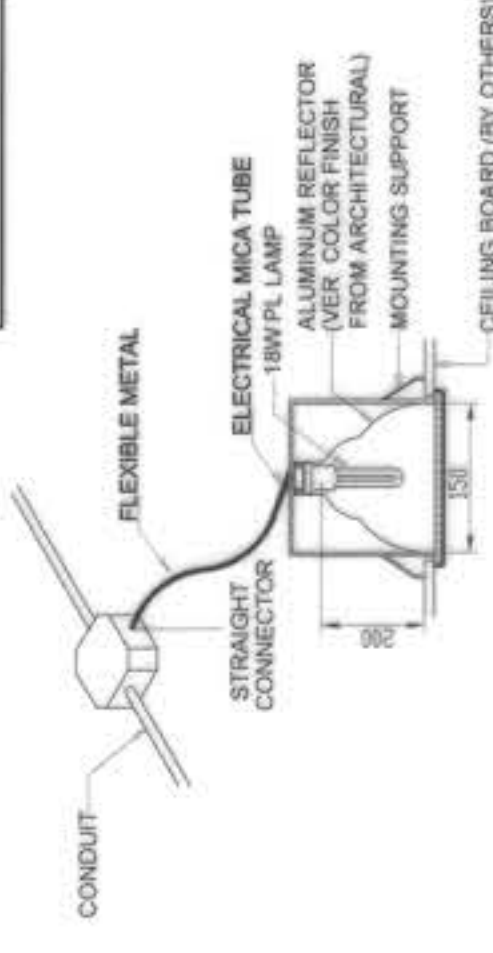


SMOKE DETECTOR MOUNTING DETAIL (TYPICAL TO SPEAKER AND CCTV)

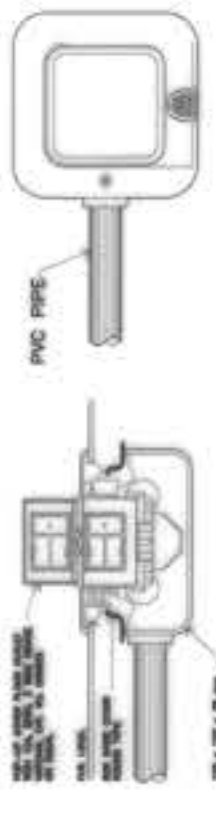


BOX CONNECTION DETAIL

NOTE: PROVIDE BLANK COVER ON ALL JUNCTION BOXES. PROVIDE GROUND WIRE FOR METALLIC PARTS.



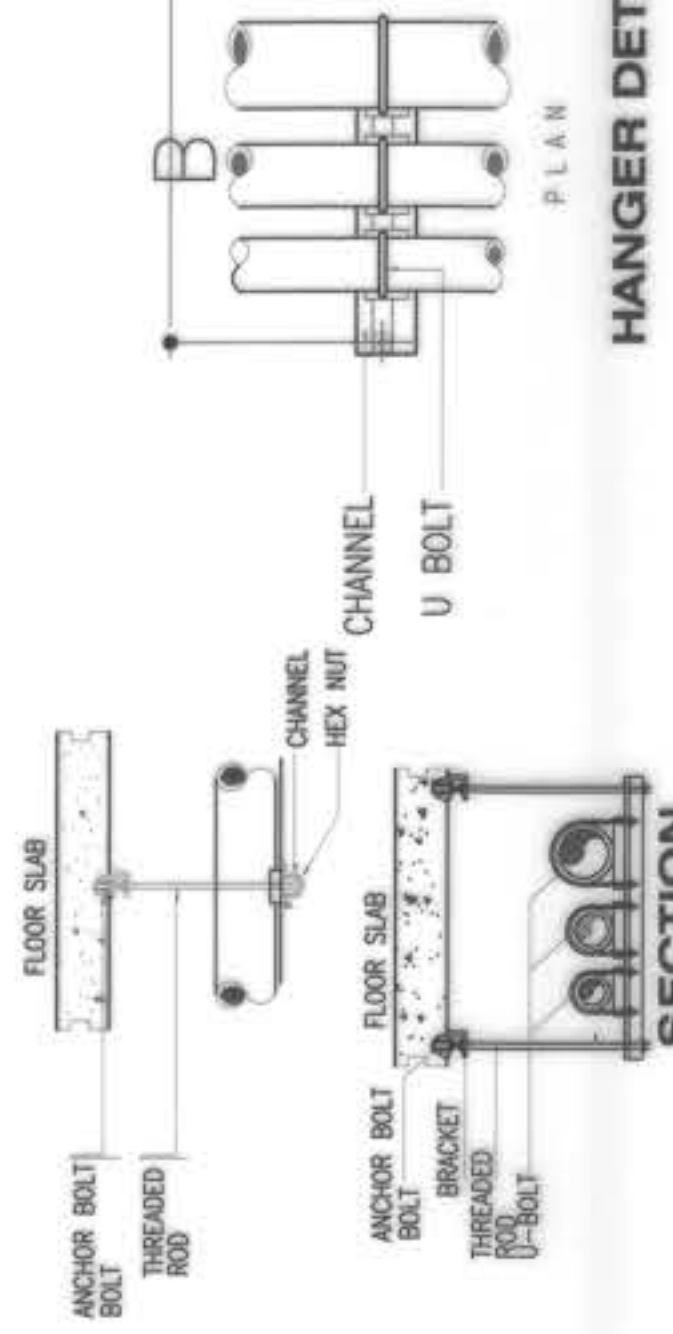
CONDUIT RUN FOR LIGHTING DISTRIBUTION (FOR EXPOSED OR INSIDE DROP-CEILING INSTALLATION)



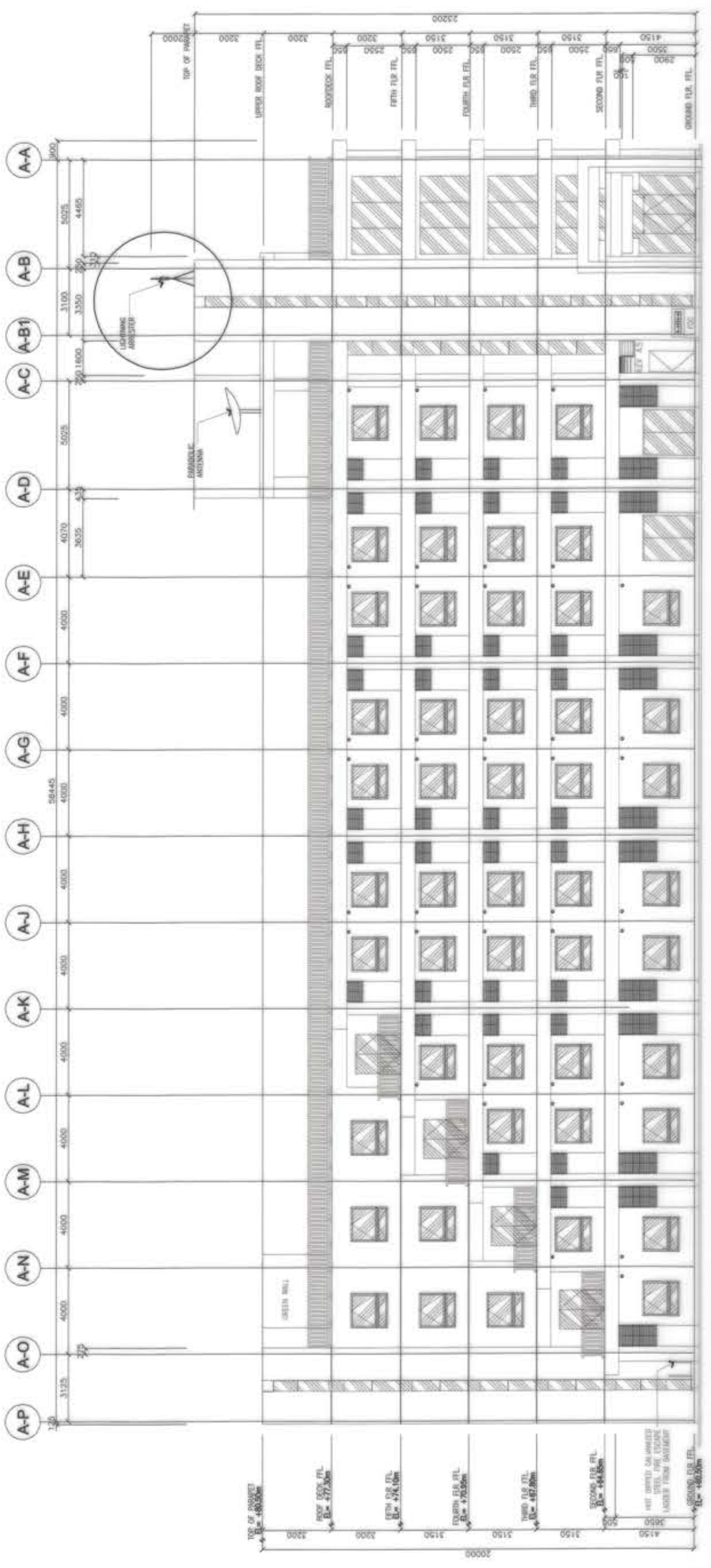
FLOOR POWER OUTLET DETAIL



CONDUIT ON BOX INSTALLATION DETAIL



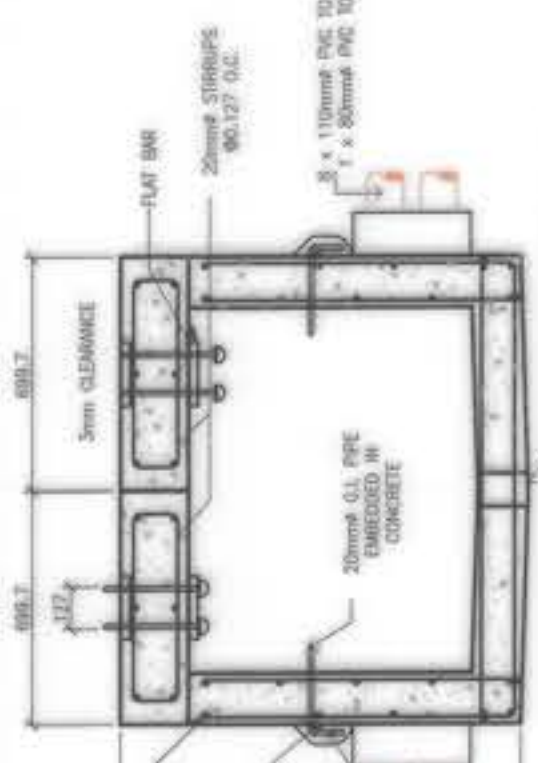
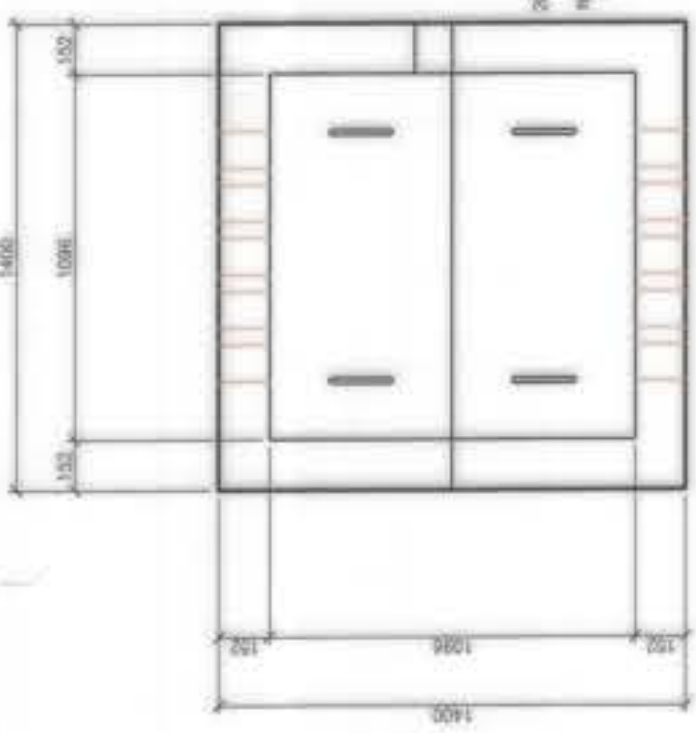
HANGER DETAIL



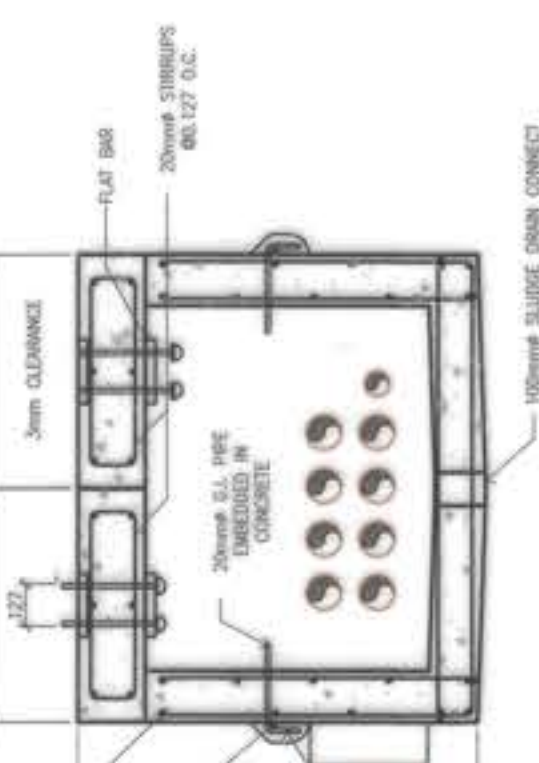
LIGHTNING ARRESTER DETAILS

MISCELLANEOUS DETAILS

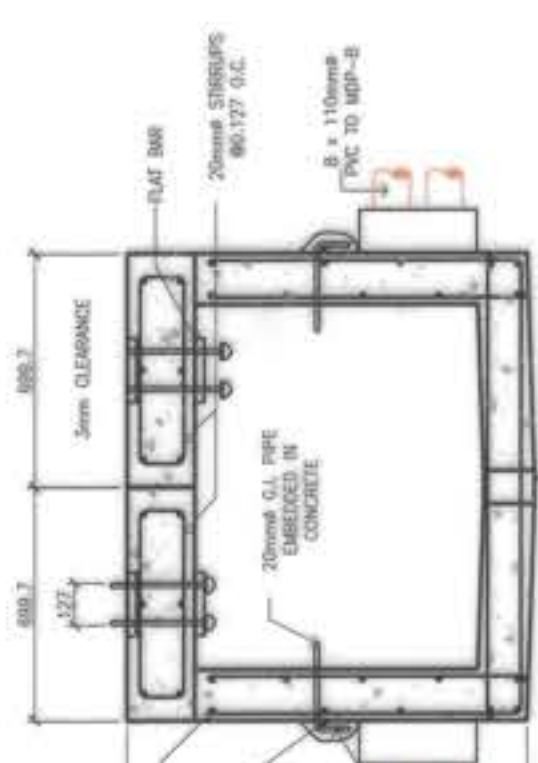
OWNER :	NGAC PHASE I JV COMPANY	PREPARED BY :	PREY-FIL CORPORATION MANILA - DIVISIA - CEBU - ALABID 100 West Avenue, P.O. Box 1000, Alabid, Cebu City, Philippines www.prey-fil.com	REVIEWED AND VALIDATED BY :	FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants 11th Floor, 1101, 11th Avenue, Alabid, Cebu City, Philippines www.filcorp.com	SUBMITTED BY :	BANDAR HEBAT BUILDERS, INC. 16AAC S. DAVID PRESIDENT	CERTIFIED BY :	INDEPENDENT CONSULTANT TCGI ENGINEERS 11th Floor, 1101, 11th Avenue, Alabid, Cebu City, Philippines www.tcgi.com	PROJECT TITLE :	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - (ELECTRICAL) New Clark City, Capas, Tarlac	SHEET CONTENTS :	LIGHTNING ARRESTER AND MISCELLANEOUS DETAILS	SHEET NO. :	E-55
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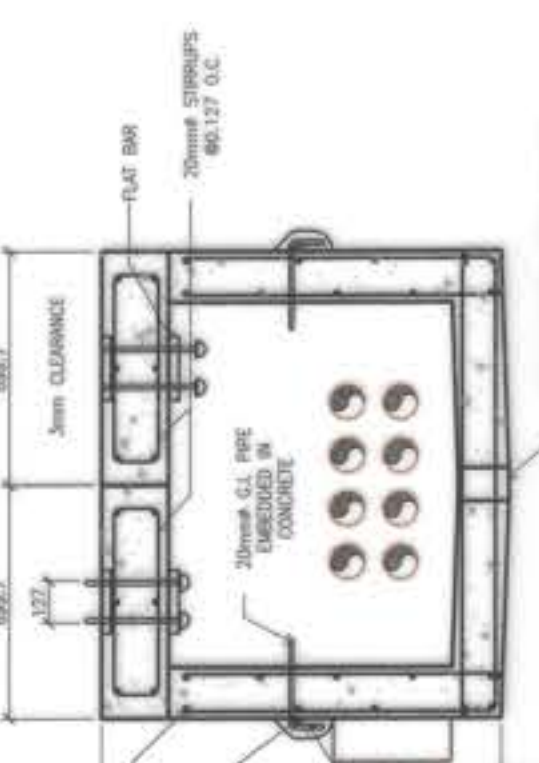
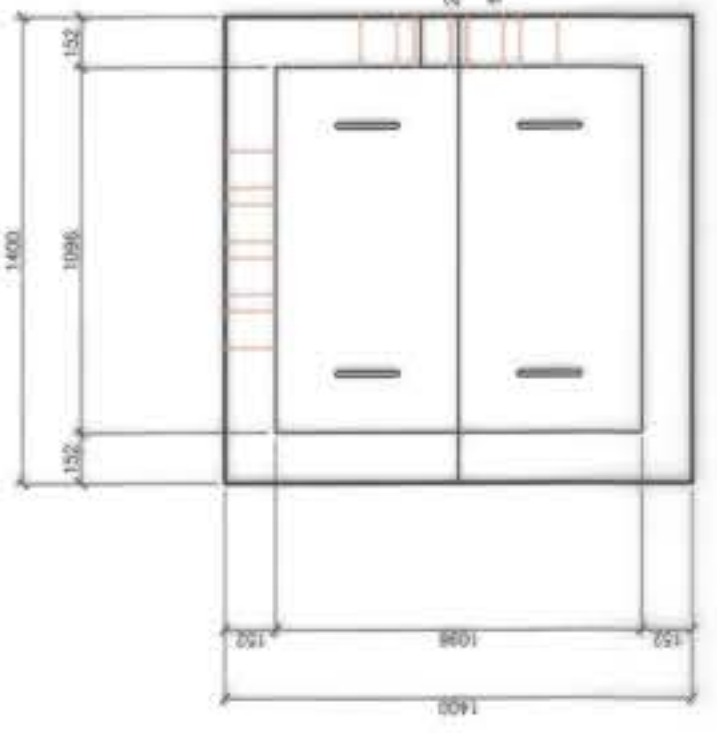
**E.M.H. A - 1**



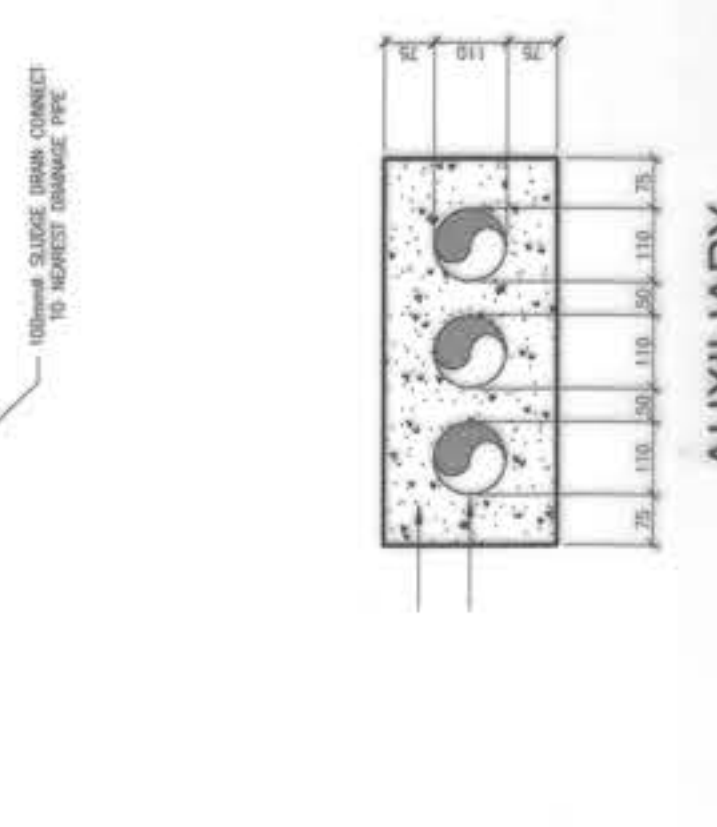
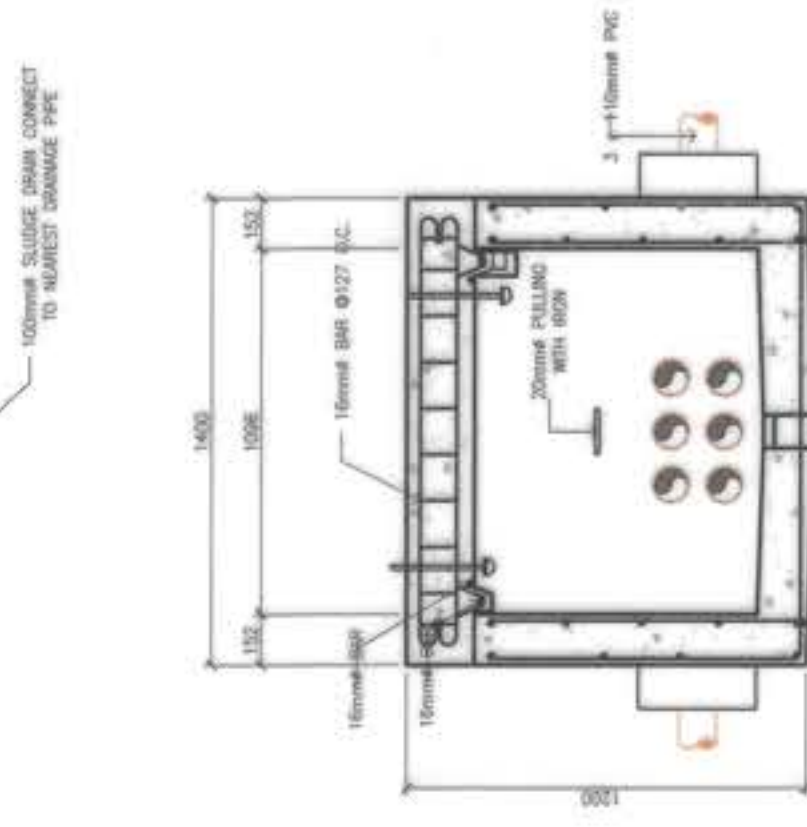
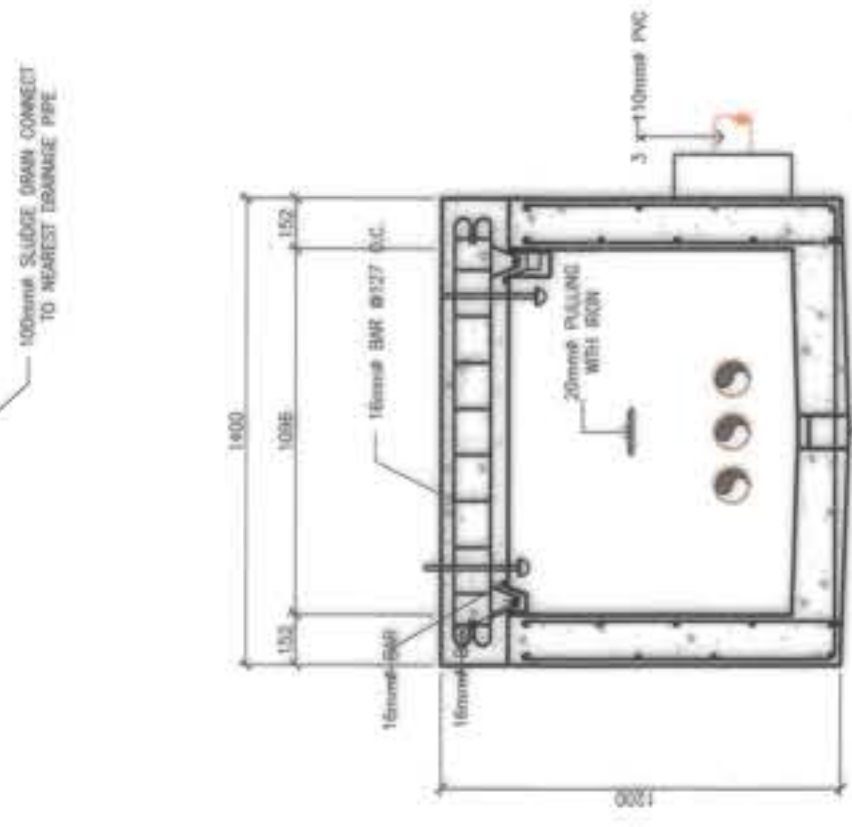
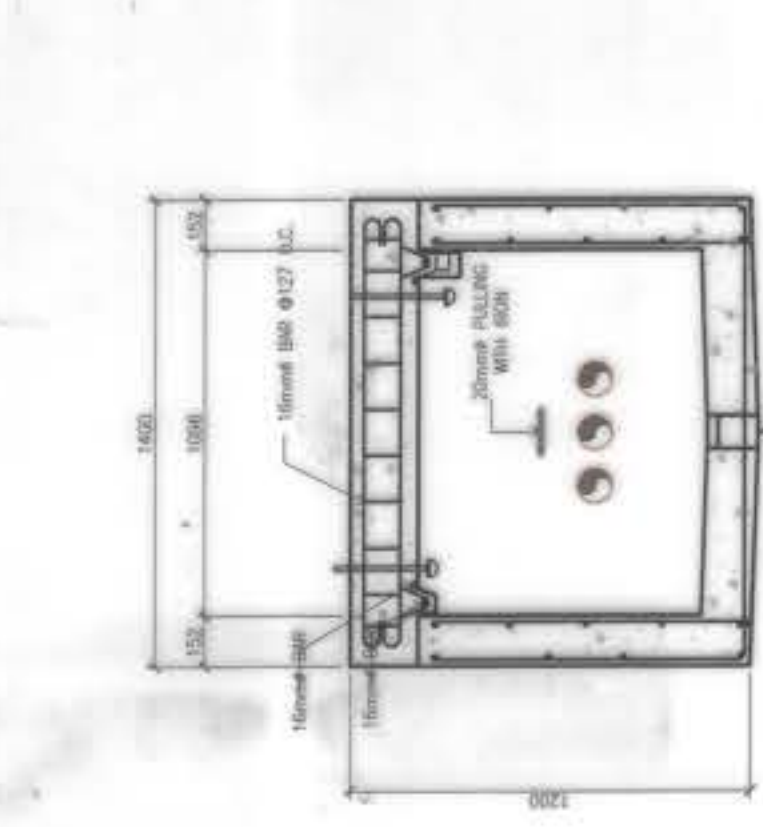
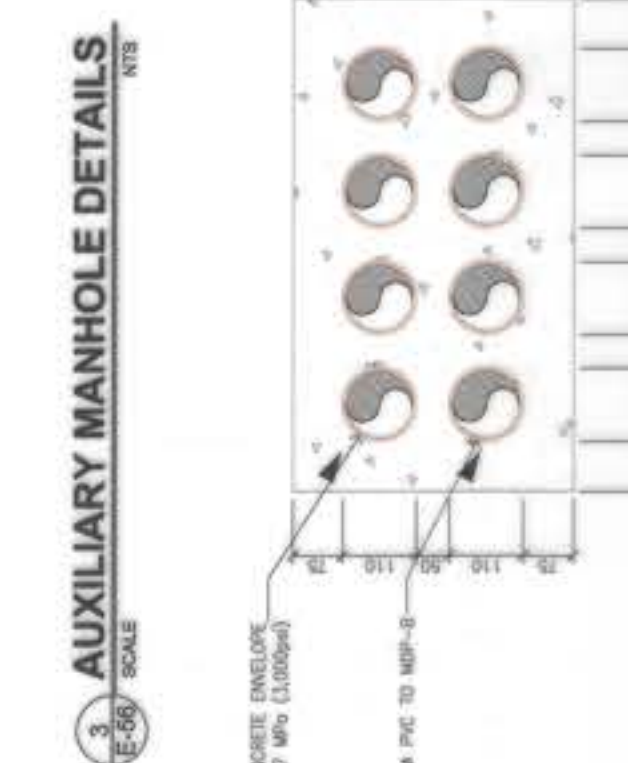
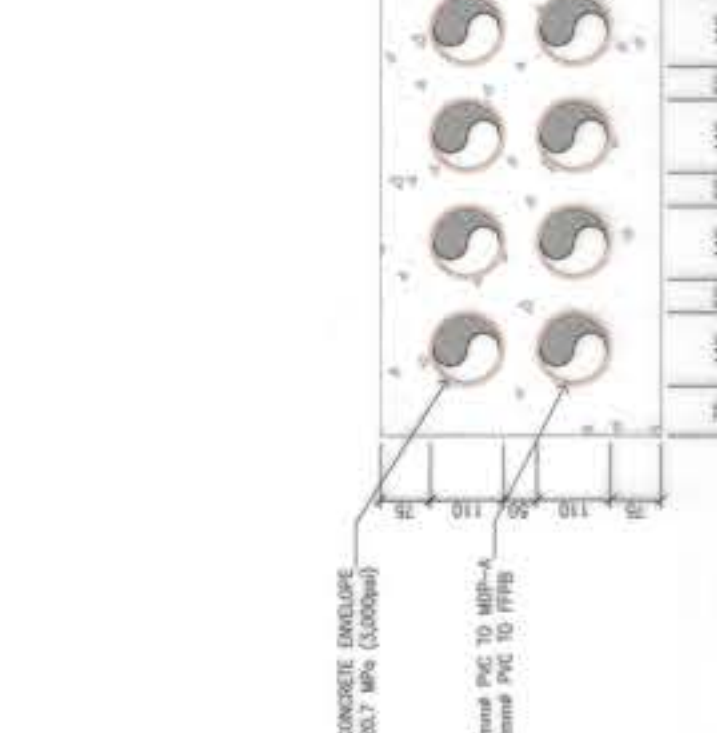
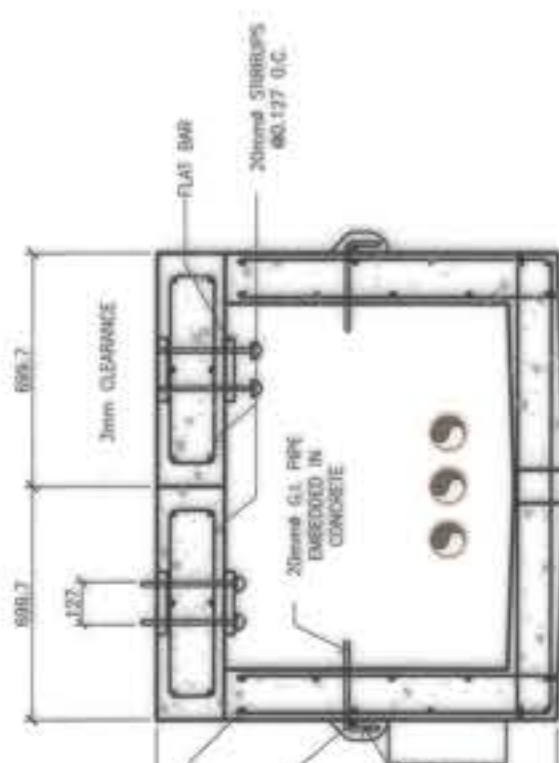
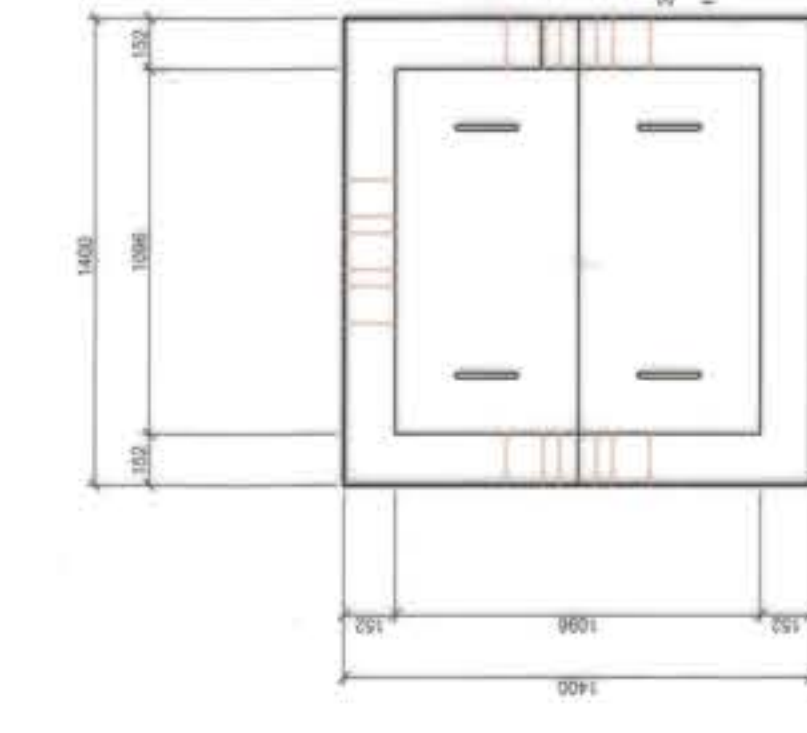
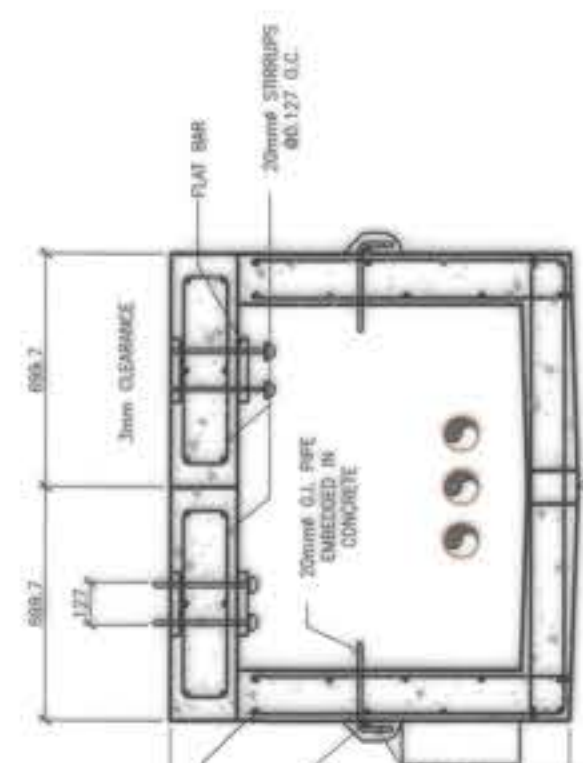
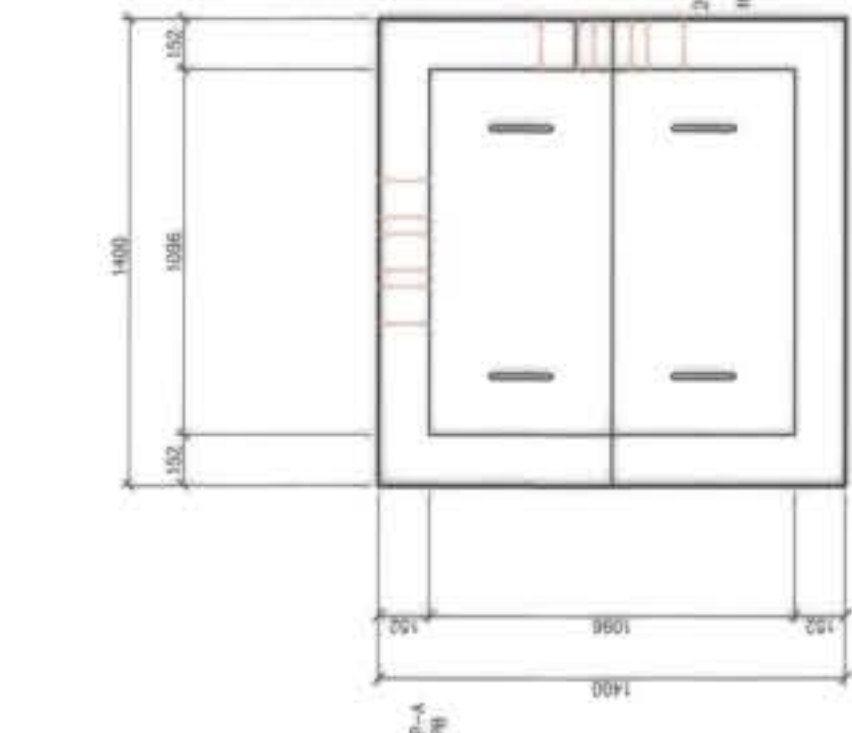
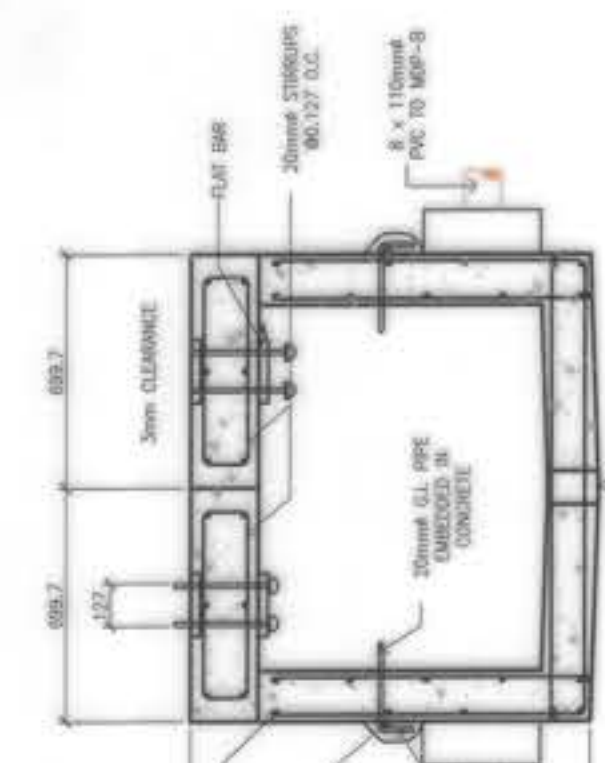
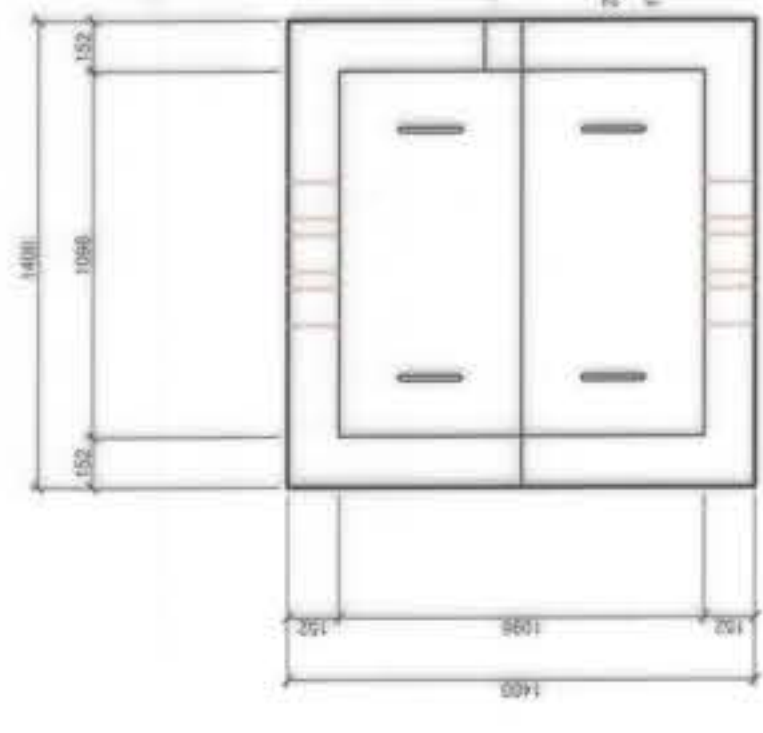
**E.M.H. A - 2**



**E.M.H. B - 1**



**E.M.H. B - 2**



**2 ELECTRICAL MANHOLE DETAILS**  
E-56 SCALE NTS

**1 MANHOLE DETAILS**  
E-56 SCALE NTS

**DUCTBANK A DETAILS**

**DUCTBANK B DETAILS**

**AUXILIARY DUCTBANK DETAILS**

**3 AUXILIARY MANHOLE DETAILS**  
E-56 SCALE NTS

OWNER :	NGAC PHASE I JV COMPANY	PREPARED BY :	<b>FF</b> FREY-FIL CORPORATION MANILA - DAVOS - CEBU - ILOILO 44 Frey Building, P.O. Box 100, Manila, Philippines	REVIEWED AND VALIDATED BY :	<b>F70</b> FILIPINAS DRAVO CORPORATION Architectural & Engineering Consultants Corporate Office: 10th Floor, 1000 Shaw Blvd., Mandaluyong City, Philippines ALFREDO R. REVELLA PROJECT MANAGER	SUBMITTED BY :	<b>BD</b> BANDAR HEBAT BUILDERS, INC. SAAC S. DAVID PRESIDENT	CERTIFIED BY :	<b>TCGI</b> TCGI ENGINEERS VIRGILO A. MADRAZO PRESIDENT/CEO	PROJECT TITLE :	AS-BUILT DRAWING NGAC PHASE 1A ATHLETES VILLAGE - (ELECTRICAL) New Clark City, Capas, Tarlac	SHEET CONTENTS :	MANHOLE DETAILS	SHEET NO. :	E-56
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