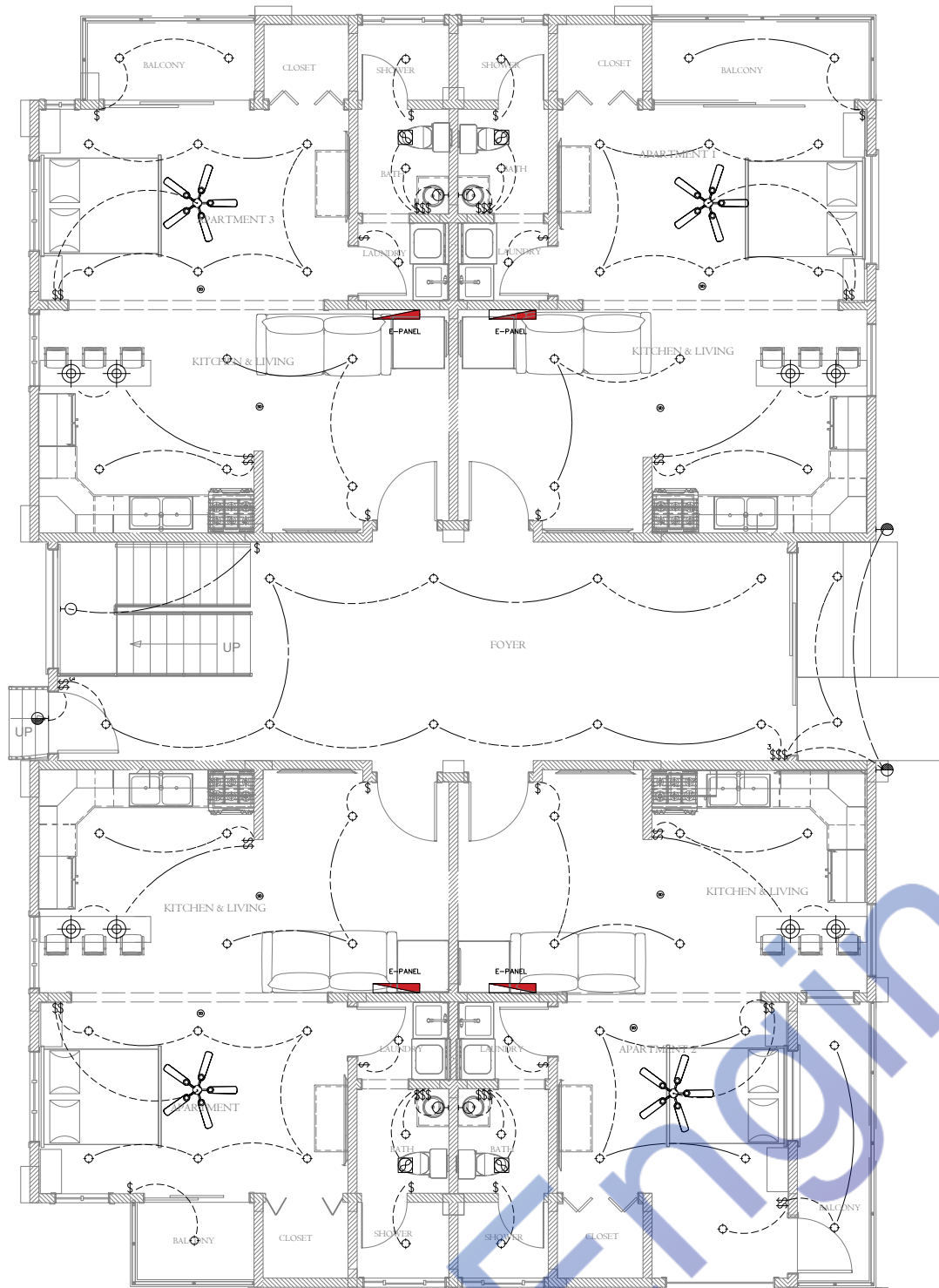
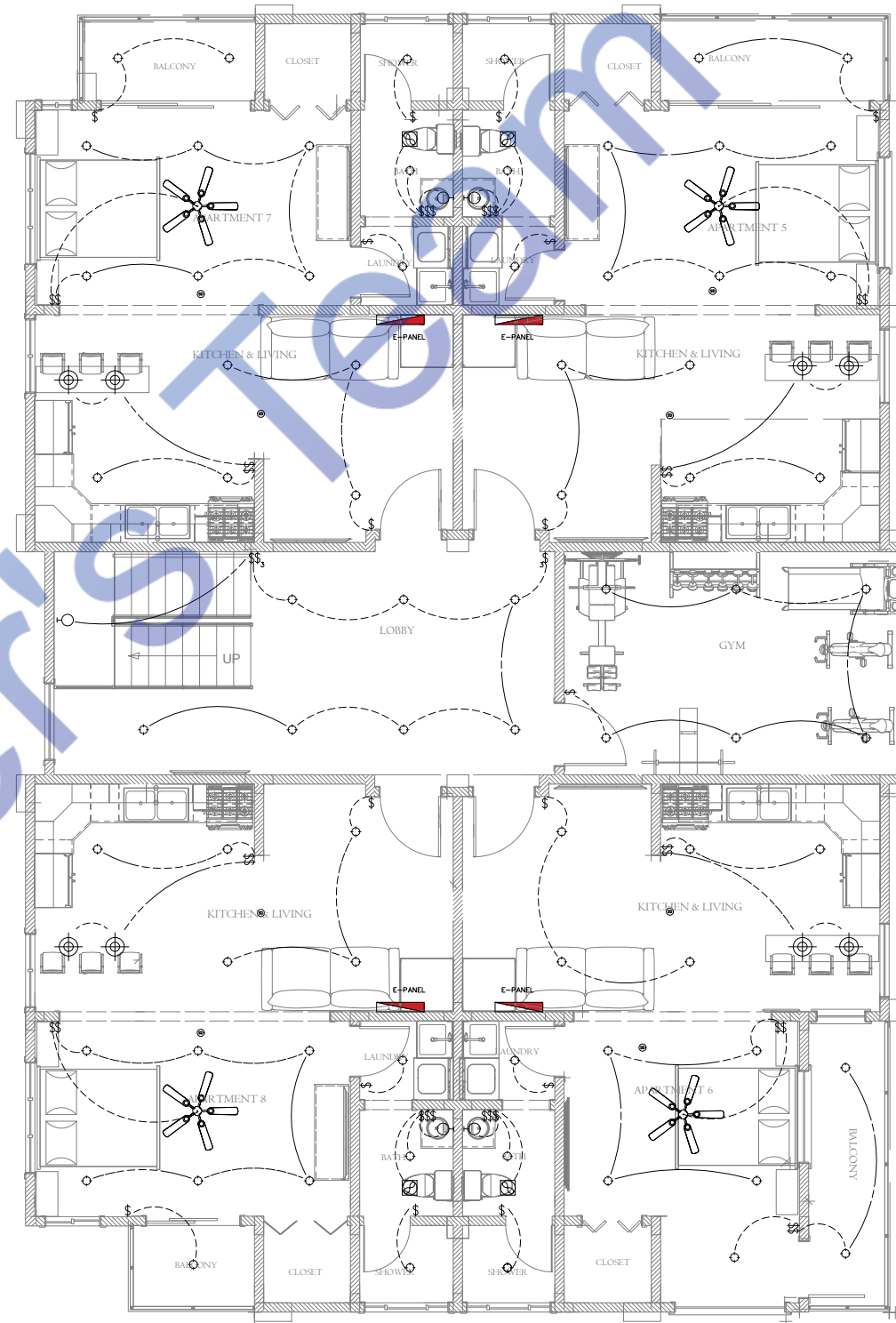




GROUND FLOOR-LIGHTING PLAN
SCALE: 1/4"=1'0"



FIRST FLOOR-LIGHTING PLAN
SCALE: 1/4"=1'0"

REVISION TABLE	
NUMBER	DATE REVISED BY DESCRIPTION

12 STUDIO UNITS @
LOT 6 BELLE AIR
RUNAWAY BAY
ST. ANN

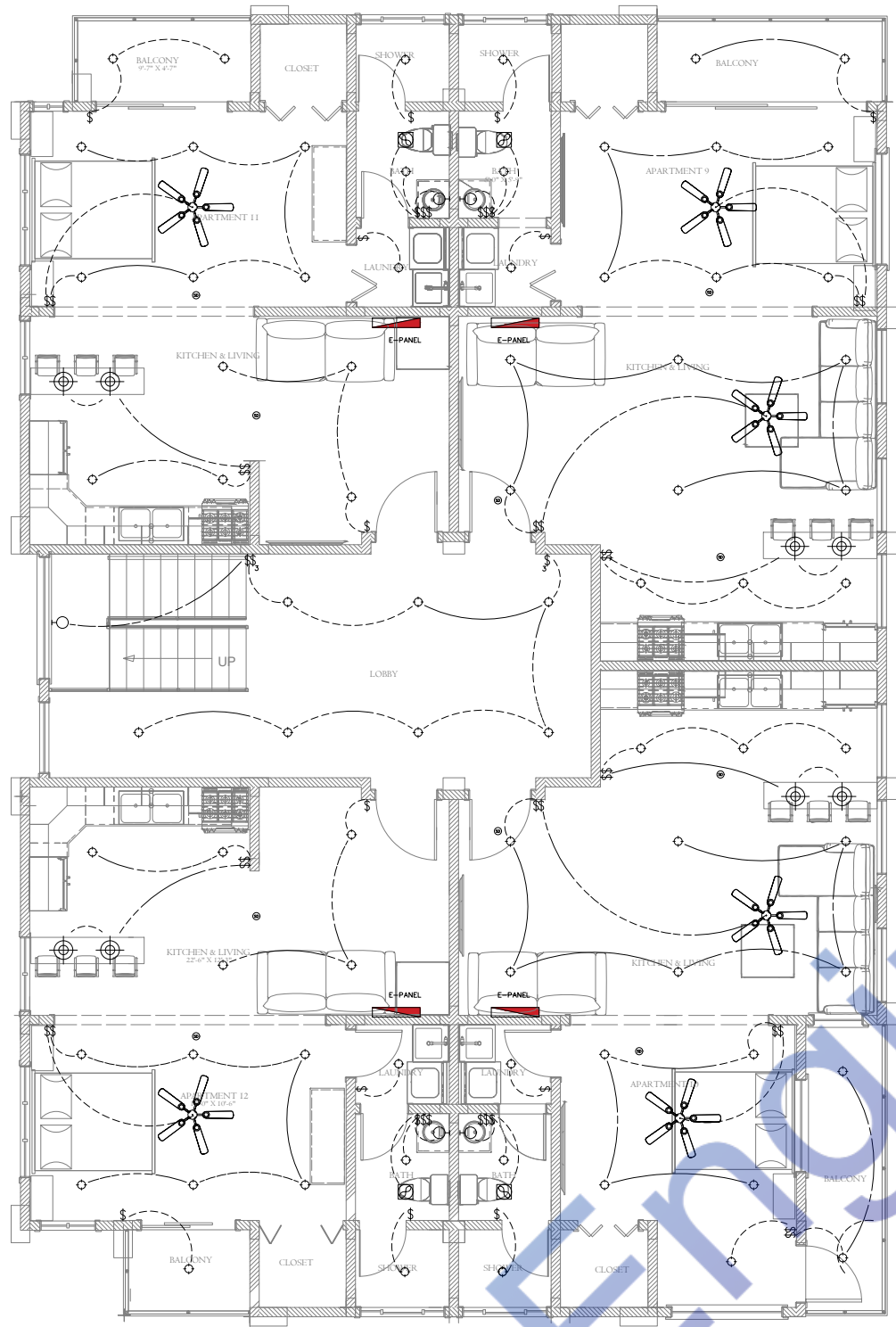
ELECTRICAL LIGHTING PLAN

DRAWINGS PROVIDED BY:
KARVE DESIGN
STUDIO

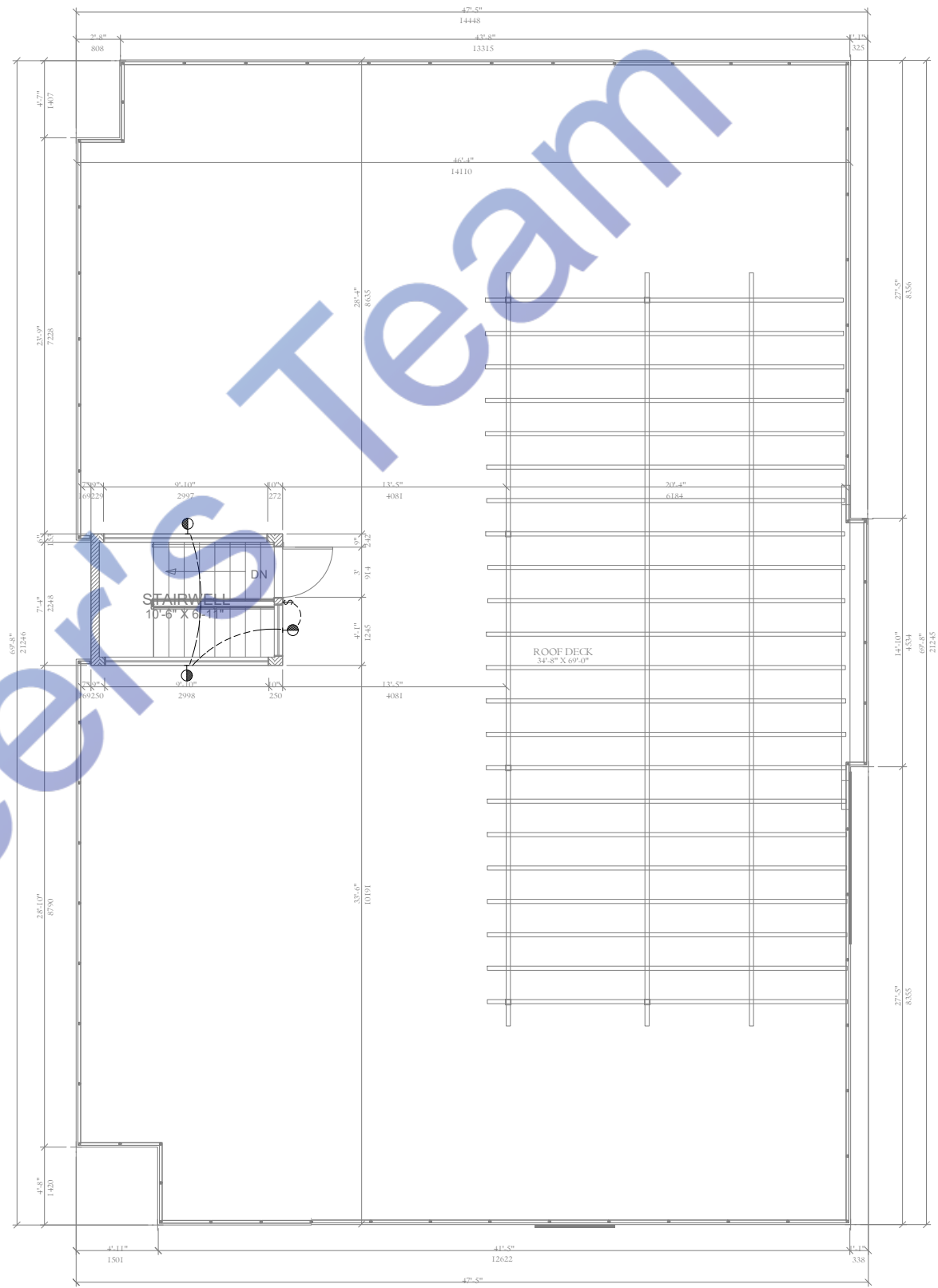
DATE:
8/3/2024

SCALE:
AS NOTED

SHEET:
E-1



SECOND FLOOR-LIGHTING PLAN
SCALE: 1/4"=1'0"



ROOF-LIGHTING PLAN
SCALE: 1/4"=1'0"

REVISION TABLE
NUMBER DATE REVISED BY DESCRIPTION

12 STUDIO UNITS @
LOT 6 BELLE AIR
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ST. ANN

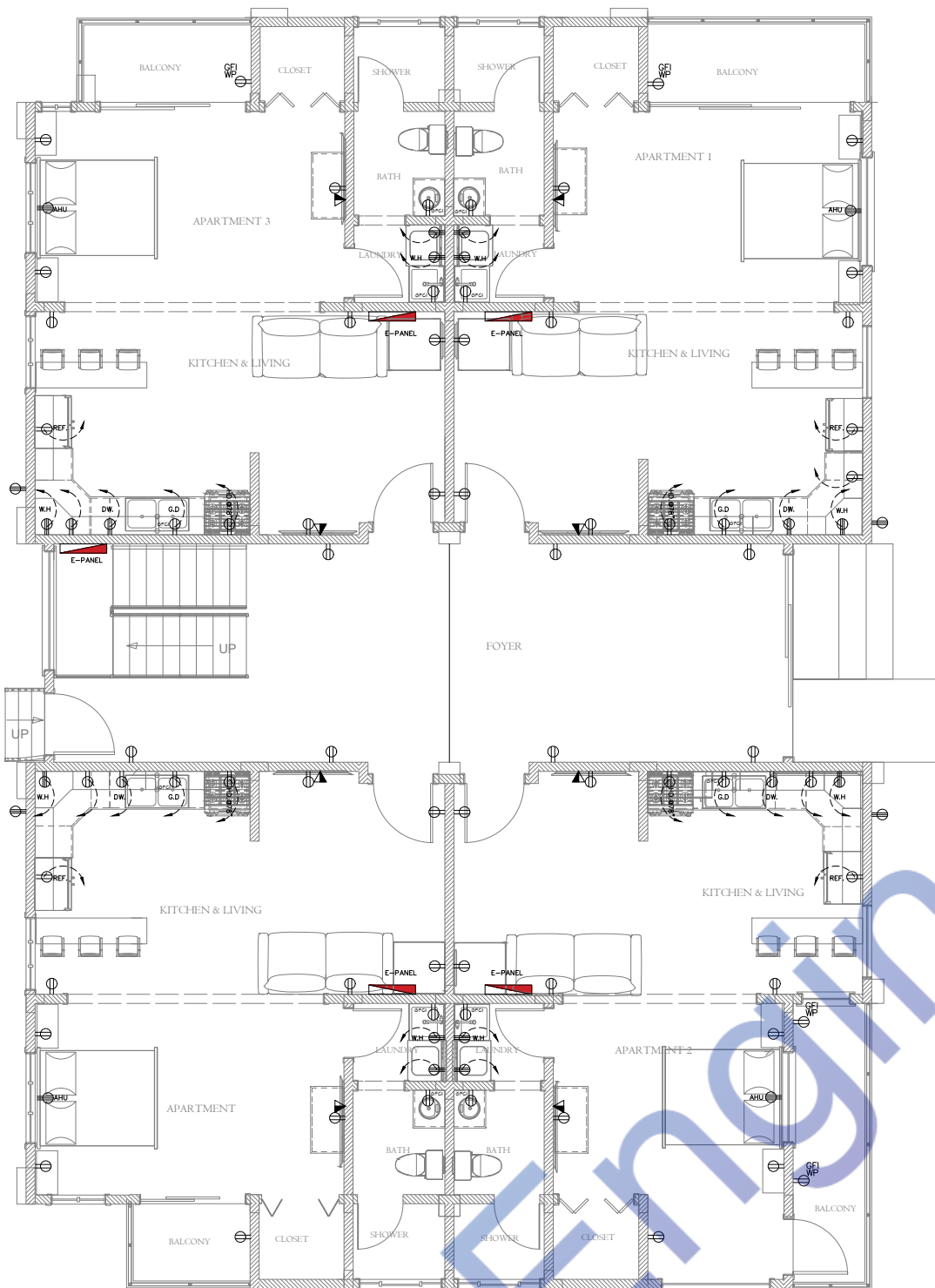
ELECTRICAL LIGHTING PLAN

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STUDIO

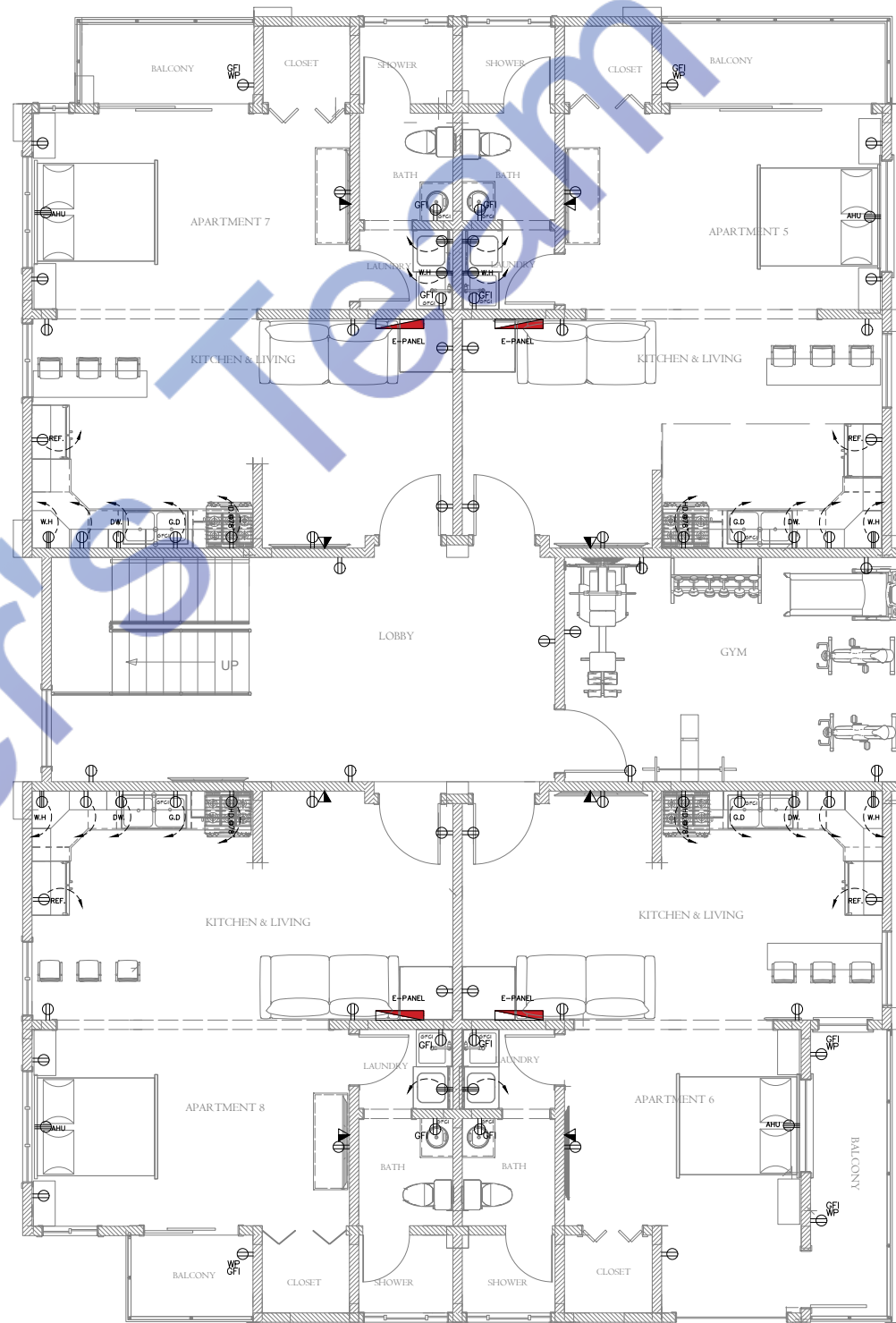
DATE:
8/3/2024

SCALE:
AS NOTED

SHEET:
E-2



GROUND FLOOR-ELECTRICAL POWER PLAN
SCALE: 1/4"=1'0"



FIRST FLOOR-ELECTRICAL POWER PLAN
SCALE: 1/4"=1'0"

REVISION TABLE	
NUMBER	DATE REVISED BY DESCRIPTION

12 STUDIO UNITS @
LOT 6 BELLE AIR
RUNAWAY BAY
ST. ANN

ELECTRICAL POWER PLAN

DRAWINGS PROVIDED BY:
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STUDIO

DATE:

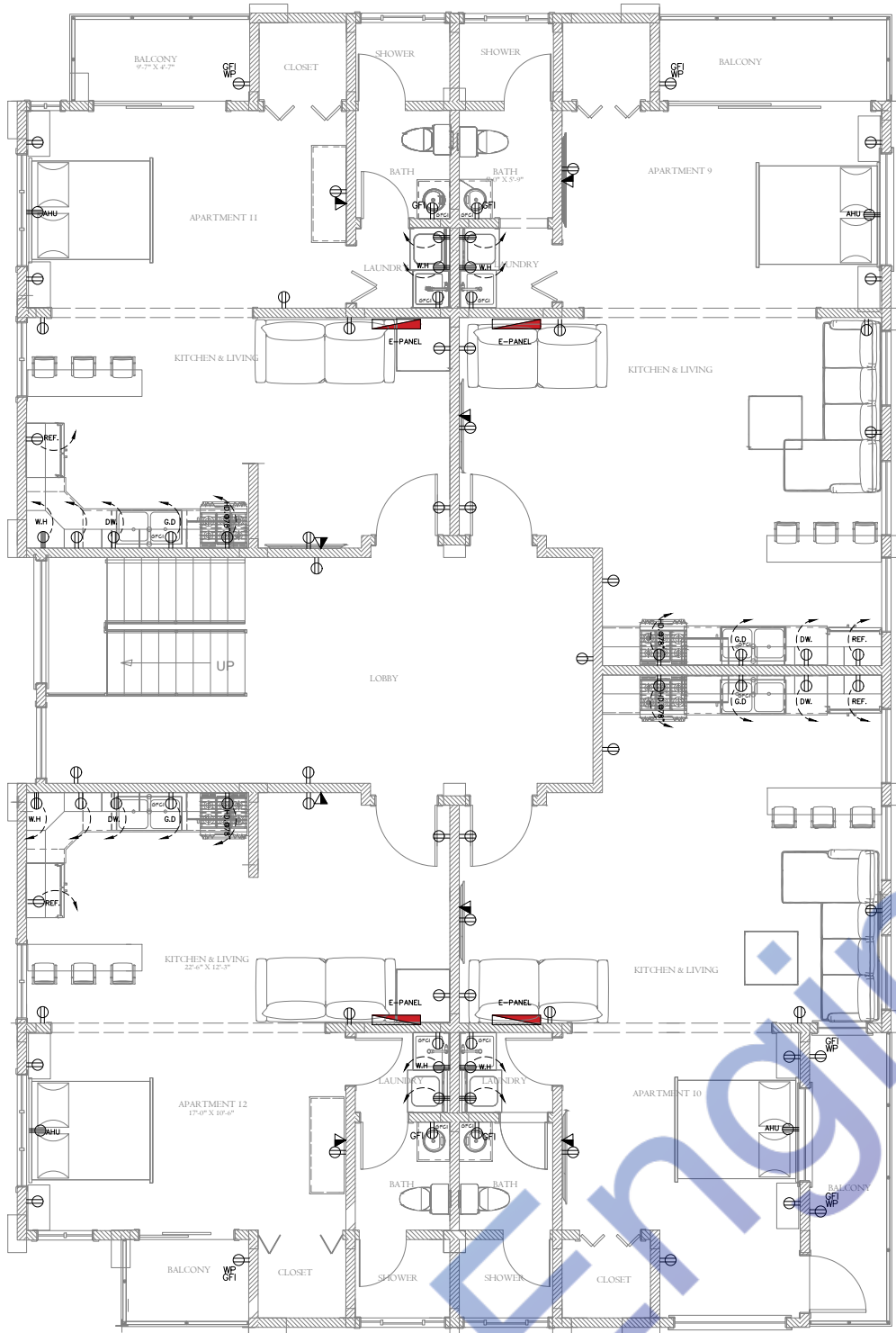
8/3/2024

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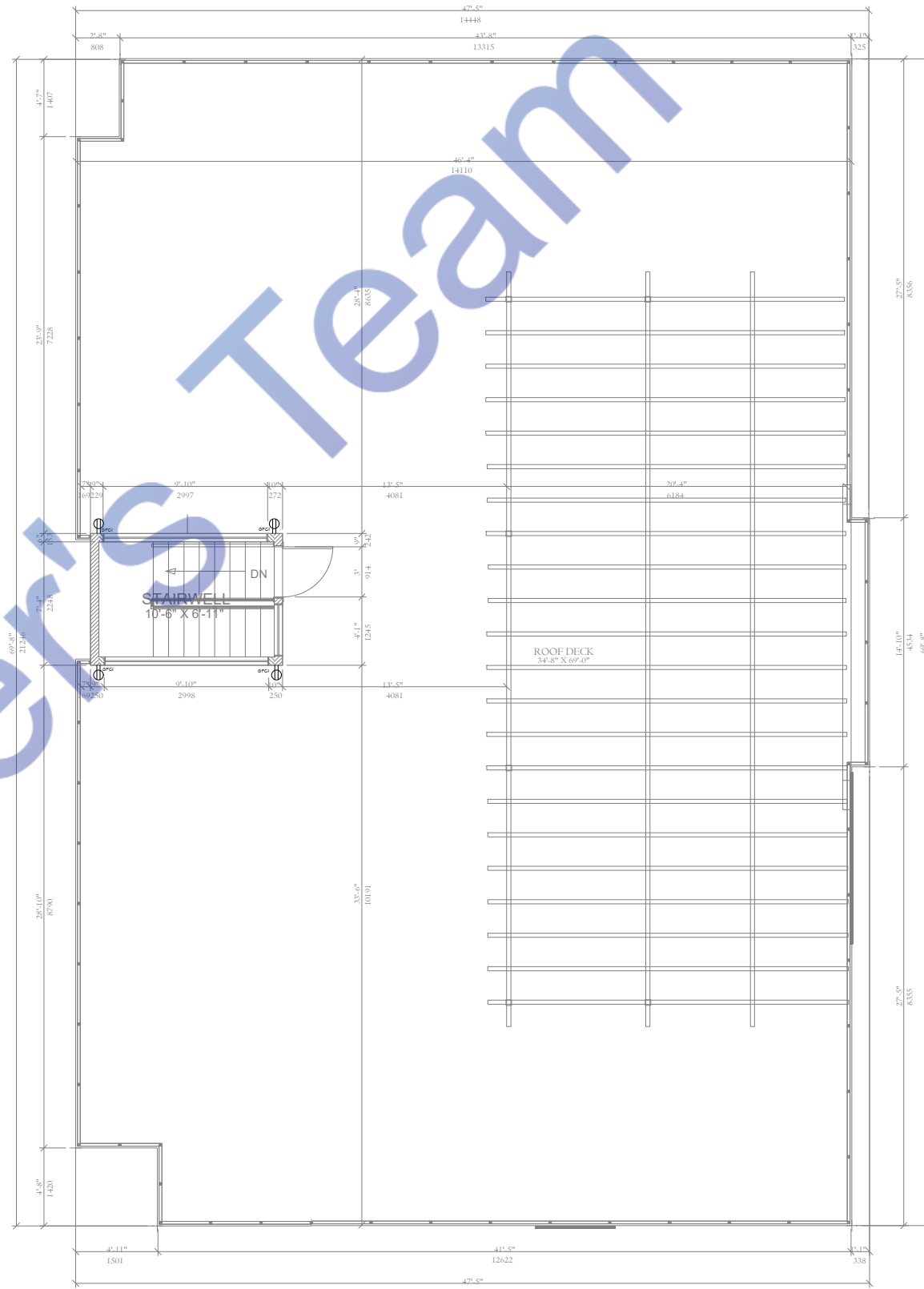
AS NOTED

SHEET:

E-3



SECOND FLOOR-ELECTRICAL POWER PLAN
SCALE: 1/4"=1'0"



ROOF-ELECTRICAL POWER PLAN
SCALE: 1/4"=1'0"

REVISION TABLE	
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12 STUDIO UNITS @
LOT 6 BELLE AIR
RUNAWAY BAY
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ELECTRICAL POWER PLAN

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DATE:

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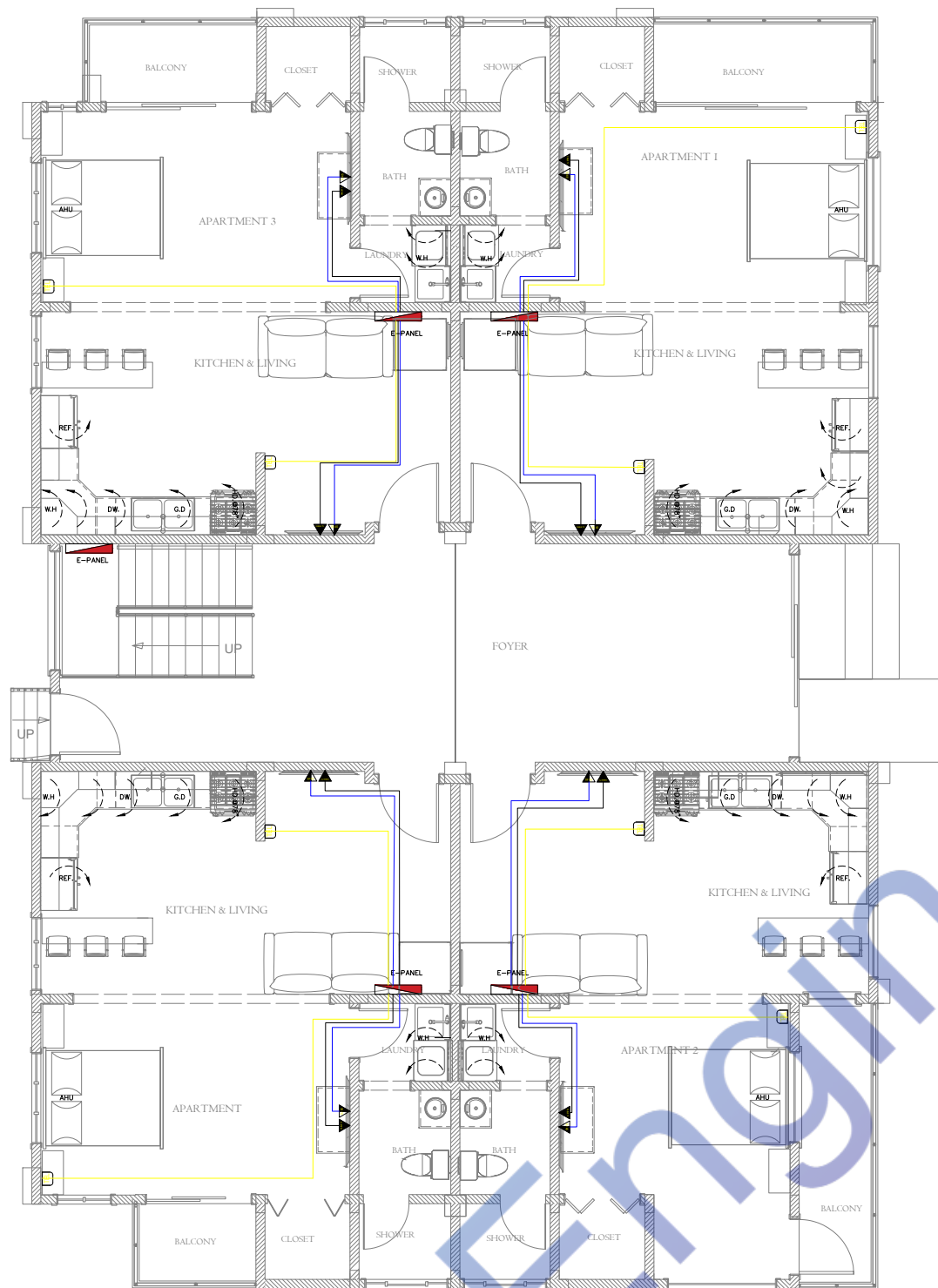
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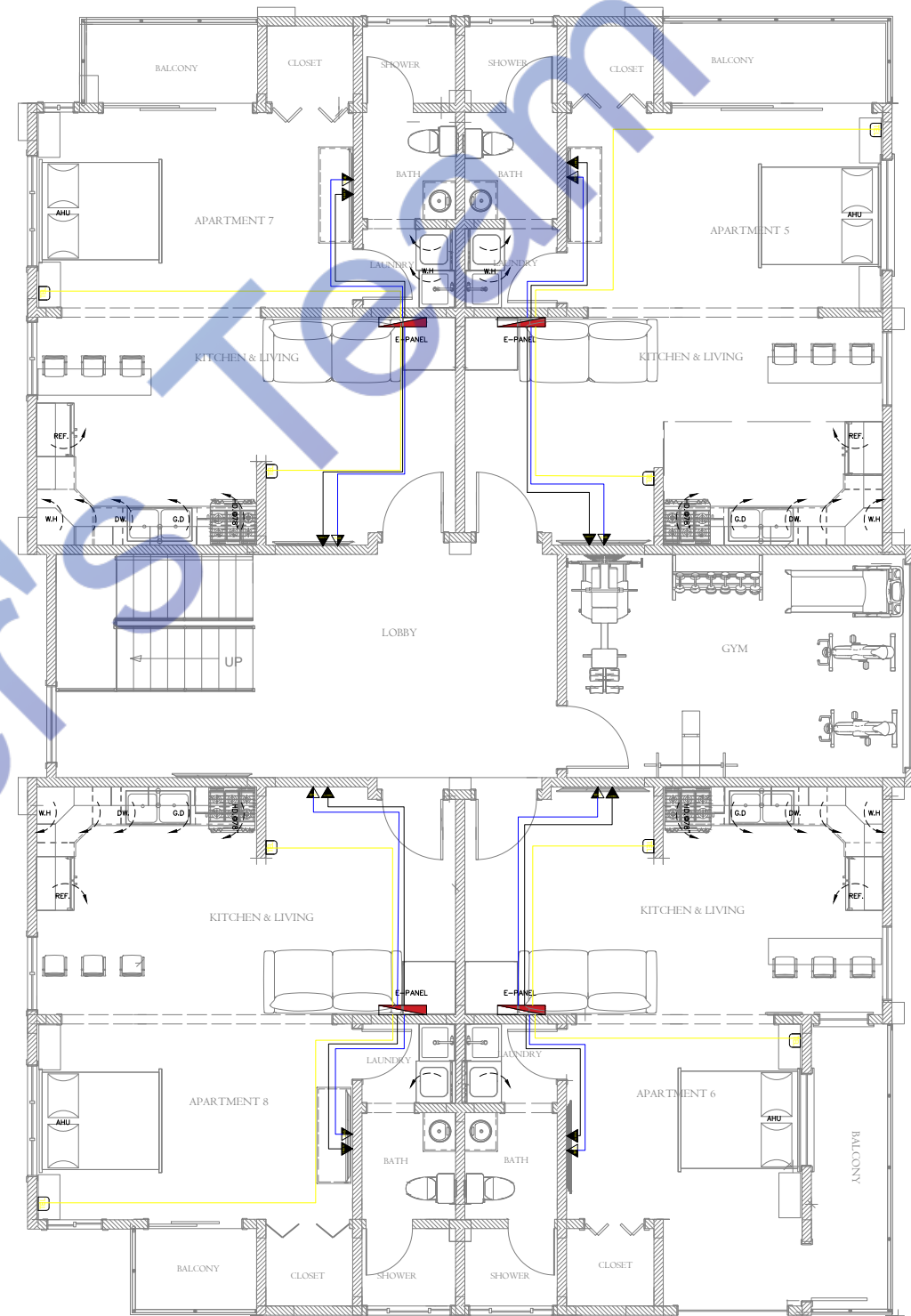
SHEET:

E-4





GROUND FLOOR-ELECTRICAL COMMUNICATION PLAN
SCALE: 1/4"=1'0"



FIRST FLOOR-ELECTRICAL COMMUNICATION PLAN
SCALE: 1/4"=1'0"

REVISION TABLE	
NUMBER	DATE REVISED BY DESCRIPTION

12 STUDIO UNITS @
LOT 6 BELLE AIR
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ST. ANN

ELECTRICAL LOW VOLTAGE PLAN

DRAWINGS PROVIDED BY:
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DATE:

8/3/2024

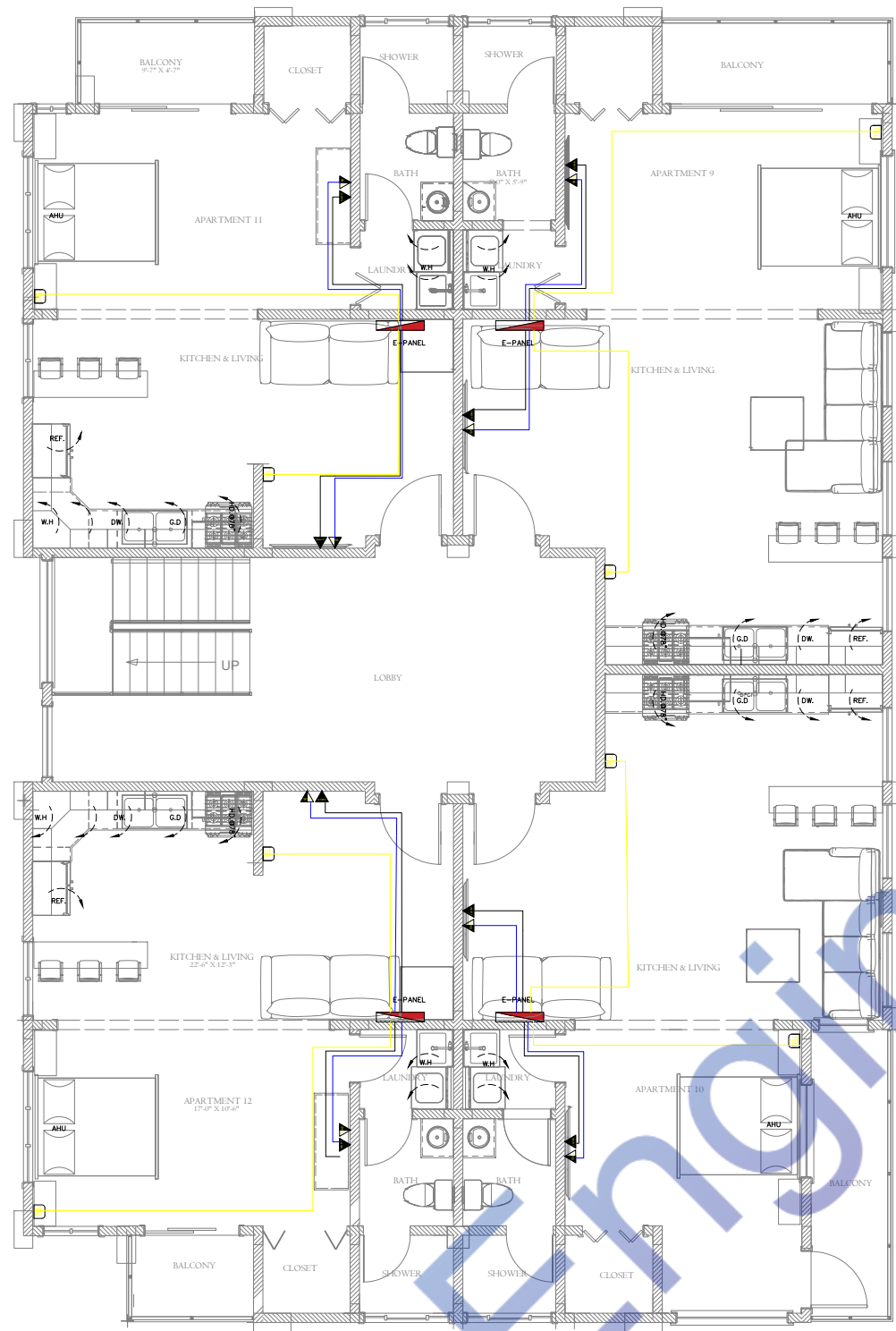
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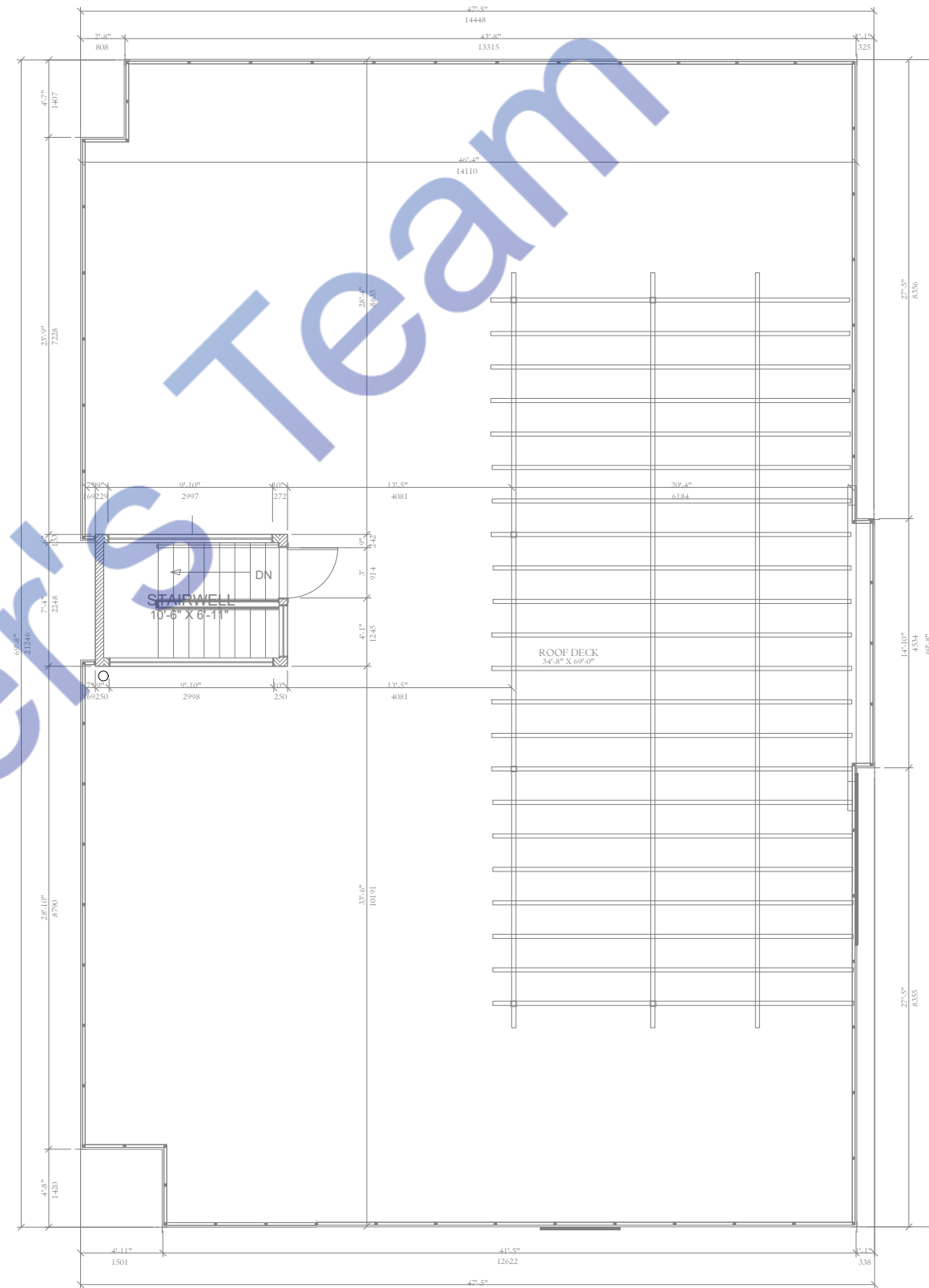
SHEET:

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SECOND FLOOR-ELECTRICAL COMMUNICATION PLAN
SCALE: 1/4"=1'0"



ROOF-ELECTRICAL COMMUNICATION PLAN
SCALE: 1/4"=1'0"

REVISION TABLE	
NUMBER	DATE REVISED BY DESCRIPTION

12 STUDIO UNITS @
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ELECTRICAL LOW VOLTAGE PLAN

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DATE:

8/3/2024

SCALE:

AS NOTED

SHEET:

E-6



ELECTRICAL PANEL -A					
LOAD SERVED	CKT #	TYPE	BKR TRIP	WIRE SIZE	PHASE A
G FLOOR APT-1 LIGHTS & FAN	1		20	#14	470
G FLOOR APT-1 K & L POWER	2		20	#12	1500
G FLOOR APT-1 BED & BATH POWER	3		20	#14	200
G FLOOR APT-1 WH 3.5KW X 2 = 7KW	4		40	#10	7000
G FLOOR APT-1 AHU 9K BTU = 2.6KW	5		25	#14	2600
TOTAL VA PHASE A			11770		
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)			110	AMPS	107
TOTAL CONNECTED LOAD (AMPS)			107		
TOTAL CONNECTED LOAD (AMPS) @ 125%			134		
MAIN TYPE AND AMPERE RATING			140- 150 AMP MCB		
PANEL FEEDER SIZE - SEE RISER DIAGRAM					

ELECTRICAL PANEL -B					
LOAD SERVED	CKT #	TYPE	BKR TRIP	WIRE SIZE	PHASE A
G FLOOR APT-3 LIGHTS & FAN	11		20	#14	470
G FLOOR APT-3 K & L POWER	12		20	#12	1500
G FLOOR APT-3 BED & BATH POWER	13		20	#14	200
G FLOOR APT-3 WH 3.5KW X 2 = 7KW	14		40	#10	7000
G FLOOR APT-3 AHU 9K BTU = 2.6KW	15		25	#12	2600
FOYER LOAD + POWER	16		20	#14	200
TOTAL VA PHASE A			11970		
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)			110	AMPS	109
TOTAL CONNECTED LOAD (AMPS)					109
TOTAL CONNECTED LOAD (AMPS) @ 125%			136		
MAIN TYPE AND AMPERE RATING			140- 150 AMP MCB		
PANEL FEEDER SIZE - SEE RISER DIAGRAM					

ELECTRICAL PANEL -C							
PHASE A	BKR TRIP	WIRE SIZE	TYPE	CKT #	LOAD SERVED		
450	20	#14		6	G FLOOR APT-2 LIGHTS & FAN		
1500	20	#12		7	G FLOOR APT-2 K & L POWER		
200	20	#14		8	G FLOOR APT-2 BED & BATH POWER		
7000	40	#10		9	G FLOOR APT-2 WH 3.5KW X 2 = 7KW		
2600	25	#12		10	G FLOOR APT-2 AHU 9K BTU = 2.6KW		
TOTAL VA PHASE A					11750		
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)					110	AMPS	107
TOTAL CONNECTED LOAD (AMPS)					107		
TOTAL CONNECTED LOAD (AMPS) @ 125%					134		
MAIN TYPE AND AMPERE RATING					140- 150 AMP MCB		
PANEL FEEDER SIZE - SEE RISER DIAGRAM							

ELECTRICAL PANEL -D					
450	20	#14		17	G FLOOR APT-4 LIGHTS & FAN
1500	20	#12		18	G FLOOR APT-4 K & L POWER
200	20	#14		19	G FLOOR APT-4 BED & BATH POWER
7000	40	#10		20	G FLOOR APT-4 WH 3.5KW X 2 = 7KW
2600	25	#12		21	G FLOOR APT-4 AHU 9K BTU = 2.6KW
				22	
TOTAL VA PHASE A					11750
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)					
				110	AMPS
TOTAL CONNECTED LOAD (AMPS)					107
TOTAL CONNECTED LOAD (AMPS) @ 125%				134	
MAIN TYPE AND AMPERE RATING				140- 150 AMP MCB	
PANEL FEEDER SIZE - SEE RISER DIAGRAM					

ELECTRICAL PANEL -E					
LOAD SERVED	CKT #	TYPE	BKR TRIP	WIRE SIZE	PHASE B
F FLOOR APT-5 LIGHTS & FAN	1		20	#14	470
F FLOOR APT-5 K & L POWER	2		20	#12	1500
F FLOOR APT-5 BED & BATH POWER	3		20	#14	200
F FLOOR APT-5 WH 3.5KW X 2 = 7KW	4		40	#10	7000
F FLOOR APT-5 AHU 9K BTU = 2.6KW	5		25	#12	2600
TOTAL VA PHASE B				11770	
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)			110	AMPS	107
TOTAL CONNECTED LOAD (AMPS)					107
TOTAL CONNECTED LOAD (AMPS) @ 125%				134	
MAIN TYPE AND AMPERE RATING			140- 150 AMP MCB		
PANEL FEEDER SIZE -- SEE RISER DIAGRAM					

ELECTRICAL PANEL -F					
LOAD SERVED	CKT #	TYPE	BKR TRIP	WIRE SIZE	PHASE B
F FLOOR APT-7 LIGHTS & FAN	11		20	#14	470
F FLOOR APT-7 K & L POWER	12		20	#12	1500
F FLOOR APT-7 BED & BATH POWER	13		20	#14	200
F FLOOR APT-7 WH 3.5KW X 2 = 7KW	14		40	#10	7000
F FLOOR APT-7 AHU 9K BTU = 2.6KW	15		25	#12	2600
LOBBY & GYM - LOAD + POWER	16		20	#14	200
TOTAL VA PHASE B				11970	
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)			110	AMPS	109
TOTAL CONNECTED LOAD (AMPS)					109
TOTAL CONNECTED LOAD (AMPS) @ 125%				136	
MAIN TYPE AND AMPERE RATING			140- 150 AMP MCB		
PANEL FEEDER SIZE - SEE RISER DIAGRAM					

ELECTRICAL PANEL -G					
PHASE B	BKR TRIP	WIRE SIZE	TYPE	CKT #	LOAD SERVED
450	20	#14		6	F FLOOR APT-6 LIGHTS & FAN
1500	20	#12		7	F FLOOR APT-6 K & L POWER
200	20	#14		8	F FLOOR APT-6 BED & BATH POWER
7000	40	#10		9	F FLOOR APT-6 WH 3.5KW X 2= 7KW
2600	25	#12		10	F FLOOR APT-6 AHU 9K BTU =2.6KW
TOTAL VA PHASE B				11750	
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)					
				110	AMPS
TOTAL CONNECTED LOAD (AMPS)					107
TOTAL CONNECTED LOAD (AMPS) @ 125%				134	
MAIN TYPE AND AMPERE RATING				140- 150 AMP MCB	
PANEL FEEDER SIZE ~ SEE RISER DIAGRAM					

ELECTRICAL PANEL -H						
450	20	#14		17	F FLOOR APT-8 LIGHTS & FAN	
1500	20	#12		18	F FLOOR APT-8 K & L POWER	
200	20	#14		19	F FLOOR APT-8 BED & BATH POWER	
7000	40	#10		20	F FLOOR APT-8 WH 3.5KW X 2 = 7KW	
2600	25	#12		21	F FLOOR APT-8 AHU 9K BTU = 2.6KW	
				22		
TOTAL VA PHASE B					11750	
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)				110	AMPS	107
TOTAL CONNECTED LOAD (AMPS)						107
TOTAL CONNECTED LOAD (AMPS) @ 125%					134	
MAIN TYPE AND AMPERE RATING				140- 150 AMP MCB		
PANEL FEEDER SIZE -- SEE RISER DIAGRAM						

ELECTRICAL PANEL -I

LOAD SERVED	CKT #	TYPE	BKR TRIP	WIRE SIZE	PHASE C
S FLOOR APT-9 LIGHTS & FAN	1		20	#14	610
S FLOOR APT-9 K & L POWER	2		20	#12	1500
S FLOOR APT-9 BED & BATH POWER	3		20	#14	200
S FLOOR APT-9 WH 3.5KW	4		40	#10	3500
S FLOOR APT-9 AHU BK 6TU = 2.6KW	5		25	#12	2600
TOTAL VA PHASE C				8410	
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)					
			110	AMPS	76
TOTAL CONNECTED LOAD (AMPS)					76
TOTAL CONNECTED LOAD (AMPS) @ 125%					95
MAIN TYPE AND AMPERE RATING			100 AMP MCB		
PANEL FEEDER SIZE -- SEE RISER DIAGRAM					

ELECTRICAL PANEL - J					
LOAD SERVED	CKT #	TYPE	BKR TRIP	WIRE SIZE	PHASE C
S FLOOR APT-11 LIGHTS & FAN	11		20	#14	470
S FLOOR APT-11 K & L POWER	12		20	#12	1500
S FLOOR APT-11 BED & BATH POWER	13		20	#14	200
S FLOOR APT-11 WH 3.5KW X 2 = 7KW	14		40	#10	7000
S FLOOR APT-11 AHU 9K BTU = 2.6KW	15		25	#12	2600
ROOF - LOAD + POWER	16		20	#14	440
TOTAL VA PHASE C				12210	
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)					
			110	AMPS	111
TOTAL CONNECTED LOAD (AMPS)					
					111
TOTAL CONNECTED LOAD (AMPS) @ 125%					
				139	
MAIN TYPE AND AMPERE RATING			140 - 150 AMP MCB		
PANEL FEEDER SIZE - SEE RISER DIAGRAM					

ELECTRICAL PANEL -K					
PHASE C	BKR TRIP	WIRE SIZE	TYPE	CKT #	LOAD SERVED
590	20	#14		6	S FLOOR APT-10 LIGHTS & FAN
1500	20	#12		7	S FLOOR APT-10 K & L POWER
200	20	#14		8	S FLOOR APT-10 BED & BATH POWER
3500	40	#10		9	S FLOOR APT-10 WH 3.5KW
2600	25	#12		10	S FLOOR APT-10 AHU 9K BTU = 2.6KW
TOTAL VA PHASE C					8390
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)					
				110	AMPS
TOTAL CONNECTED LOAD (AMPS)					76
TOTAL CONNECTED LOAD (AMPS) @ 125%				95	
MAIN TYPE AND AMPERE RATING				100 AMP MCB	
PANEL FEEDER SIZE -- SEE RISER DIAGRAM					

ELECTRICAL PANEL -L					
450	20	#14		17	S FLOOR APT-12 LIGHTS & FAN
1500	20	#12		18	S FLOOR APT-12 K & L POWER
200	20	#14		19	S FLOOR APT-12 BED & BATH POWER
7000	40	#10		20	S FLOOR APT-12 WH 3.5KW X 2 = 7KW
2600	25	#12		21	S FLOOR APT-12 AHU 9K BTU = 2.6KW
				22	
TOTAL VA PHASE C					11750
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)					
				110	AMPS
TOTAL CONNECTED LOAD (AMPS)					107
TOTAL CONNECTED LOAD (AMPS) @ 125%				134	
MAIN TYPE AND AMPERE RATING				140 ~ 150 AMP MCB	
PANEL FEEDER SIZE - SEE RISER DIAGRAM					

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12 STUDIO UNITS @
LOT 6 BELLE AIR
RUNAWAY BAY
ST. ANN

ELECTRICAL LOAD SCHEDULE

DRAWINGS PROVIDED BY:
KARVE DESIGN
STUDIO

DATE:

8/3/2024

SCALE:

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ELECTRICAL PANEL M															
LOAD SERVED	CKT #	TYPE	BKR TRIP	WIRE SIZE	PHASE A	PHASE B	PHASE C	PHASE A	PHASE B	PHASE C	BKR TRIP	WIRE SIZE	TYPE	CKT #	LOAD SERVED
PANEL A	1		150	#1/0	11770			11970			150	#1/0		2	PANEL B
PANEL E	3		150	#1/0		11770			11970		150	#1/0		4	PANEL F
PANEL I	5		100	#3			8410			12210	150	#1/0		6	PANEL J
PANEL C	7		150	#1/0	11750			11750			150	#1/0		8	PANEL D
PANEL G	9		150	#1/0		11750			11750		150	#1/0		10	PANEL H
PANEL K	11		100	#3			8390			11750	150	#1/0		12	PANEL L
PANEL M	11		50	#6		2500									
TOTAL VA PHASE A					23520			23720							47240
TOTAL VA PHASE B						26020			23720						49740
TOTAL VA PHASE C							16800			23960					40760
TOTAL VOLT-AMPS															137740
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE TO PHASE)								190			AMPS				725
DIVIDE AMPS BY 3 PHASE MULTIPLIER								1.732			3 PHASE AMPS				419
TOTAL CONNECTED LOAD (AMPS)															419
TOTAL CONNECTED LOAD (AMPS) @ 125%											524				
MAIN TYPE AND AMPERE RATING											530- 550 AMP MCB				
PANEL FEEDER SIZE - SEE RISER DIAGRAM															

ELECTRICAL PANEL -M (Common)					
LOAD SERVED	CKT #	TYPE	BKR TRIP	WIRE SIZE	PHASE B
COMMON AREA & SECURITY LIGHTS & FAN	1		20	#14	500
COMMON AREA & SECURITY POWER	2		20	#12	2000
TOTAL VA PHASE B					2500
DIVIDE TOTAL VOLT-AMPS BY SYSTEM VOLTAGE (PHASE)					110
					AMPS
TOTAL CONNECTED LOAD (AMPS)					23
TOTAL CONNECTED LOAD (AMPS) @ 125%					29
MAIN TYPE AND AMPERE RATING					50 AMP MCB
PANEL FEEDER SIZE - SEE RISER DIAGRAM					

ELECTRICAL LEGEND	
	20W CEILING MOUNT LED LIGHT
	10W CEILING MOUNT LED LIGHT
	10W LED TUBE LIGHT 4 FEET
	ONE WAY SWITCH 110V
	TWO WAY SWITCH 110V
	GFI WATER PROOF OUTLET 110V/220V
	GFCI OUTLET 110V/220V
	20W WALL MOUNTED LED LIGHT
	60W CEILING FAN 220V
	E - DISTRIBUTION PANEL
	50W BATHROOM EXHAUST FAN
	SMOCK DETECTOR
	RJ45 ETHERNET LAN NETWORK PORT
	COAXIAL CABLE TV PORT
	TELECOMMUNICATION CABLE PORT

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12 STUDIO UNITS @
LOT 6 BELLE AIR
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ST. ANN

ELECTRICAL LOAD SCHEDULE

DRAWINGS PROVIDED BY:
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STUDIO

DATE:
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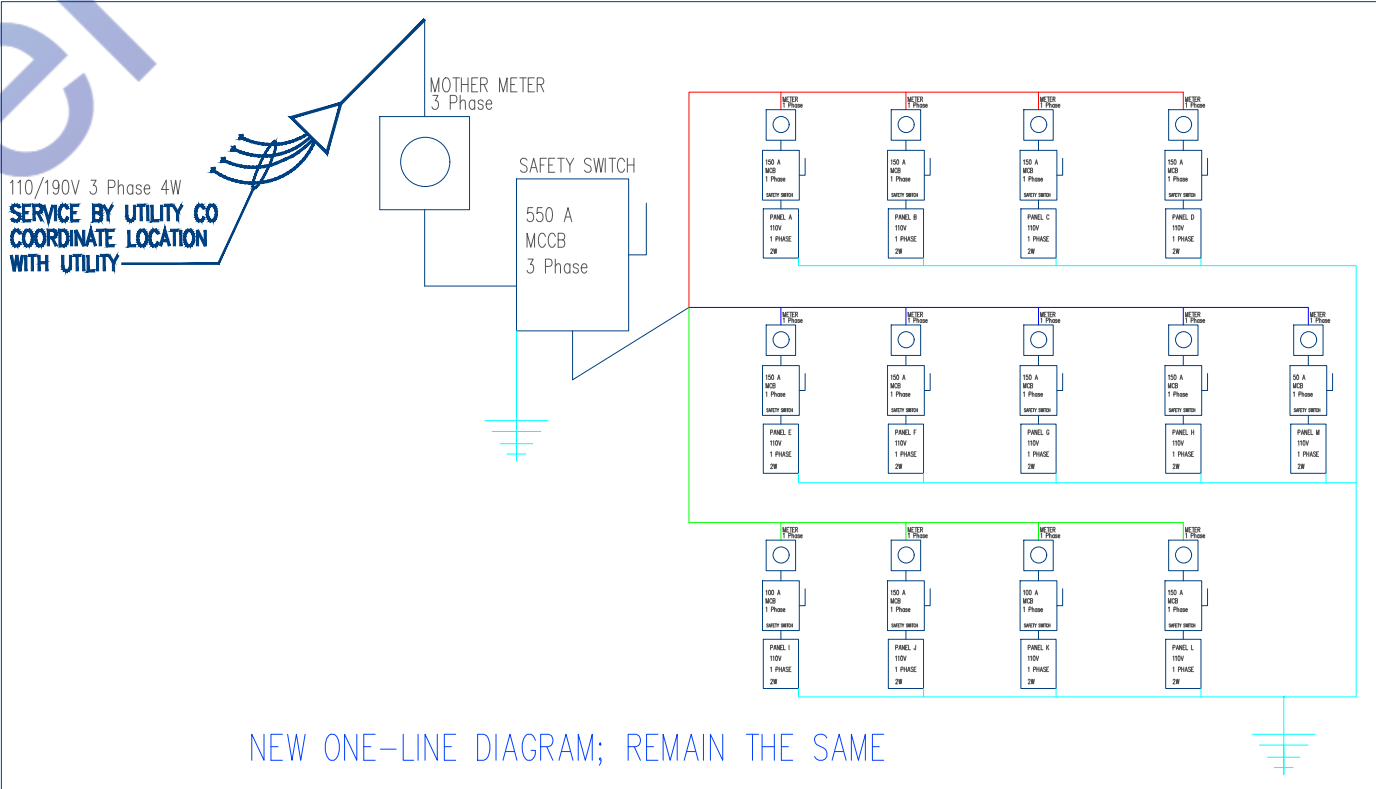
Material	
Name	Watt
110V ELECTRICAL DUPLEX RECEPTACLE WATERPROOF/110V DUPLEX RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER	20W
2X2 FT LED LIGHT FLAT PANEL	40W
CEILING FAN WITH LIGHT AND REMOTE	55W
CEILING VENTILATION BATHROOM EXHAUST FAN WITH LED LIGHT	50W
VANITY LIGHT FIXTURES ADJUSTABLE BATHROOM LED LIGHT	22W
4 INCH ULTRA THIN LED RECESSED CEILING LED LIGHT	10W

HOUSE AT BELLE AIR RUNAWAY BAY ST. ANN				
NEC ART 110 LOAD ANALYSIS - 150 AMPs 110/190 VOLT 3 PHASE 4 WIRE ELECTRICAL SERVICE				
ITEM	CONN. LOAD (VA)	DEMAND F.	DEMAND LOAD (WATTS)	TOTAL (AMPS)
LIGHTING	5800	125%	7250	
WATER HEATERS	77000	100%	77000	
KITCHEN EQUIPMENT	12000	65%	7800	
DINNING EQUIPMENT	6000	65%	3900	
HVAC LOADS	31200	100%	31200	
SUB-TOTAL			127150	
LARGEST MOTOR	0	125%	0	
TOTAL @ 220/240V/3PH	132000		127150	385 ~ 400

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PANEL SCHEDULE & SERVICE CALCULATION

E200



1

SINGLE LINE DIAGRAM

E200

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ELECTRICAL LOAD SCHEDULE

DRAWINGS PROVIDED BY:
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STUDIO

DATE:

8/3/2024

SCALE:

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SHEET:

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Designed By Engr. Al Amin (MEP Engineer | Director - Engineer's Team LTD)



support@engrteam.com



<https://engrteam.com>

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