

JOB NUMBER: 22-168
JOB TITLE: ELECTRICAL SYMBOLS & RISER DIAGRAM
REVISION DATES: 03.06.23

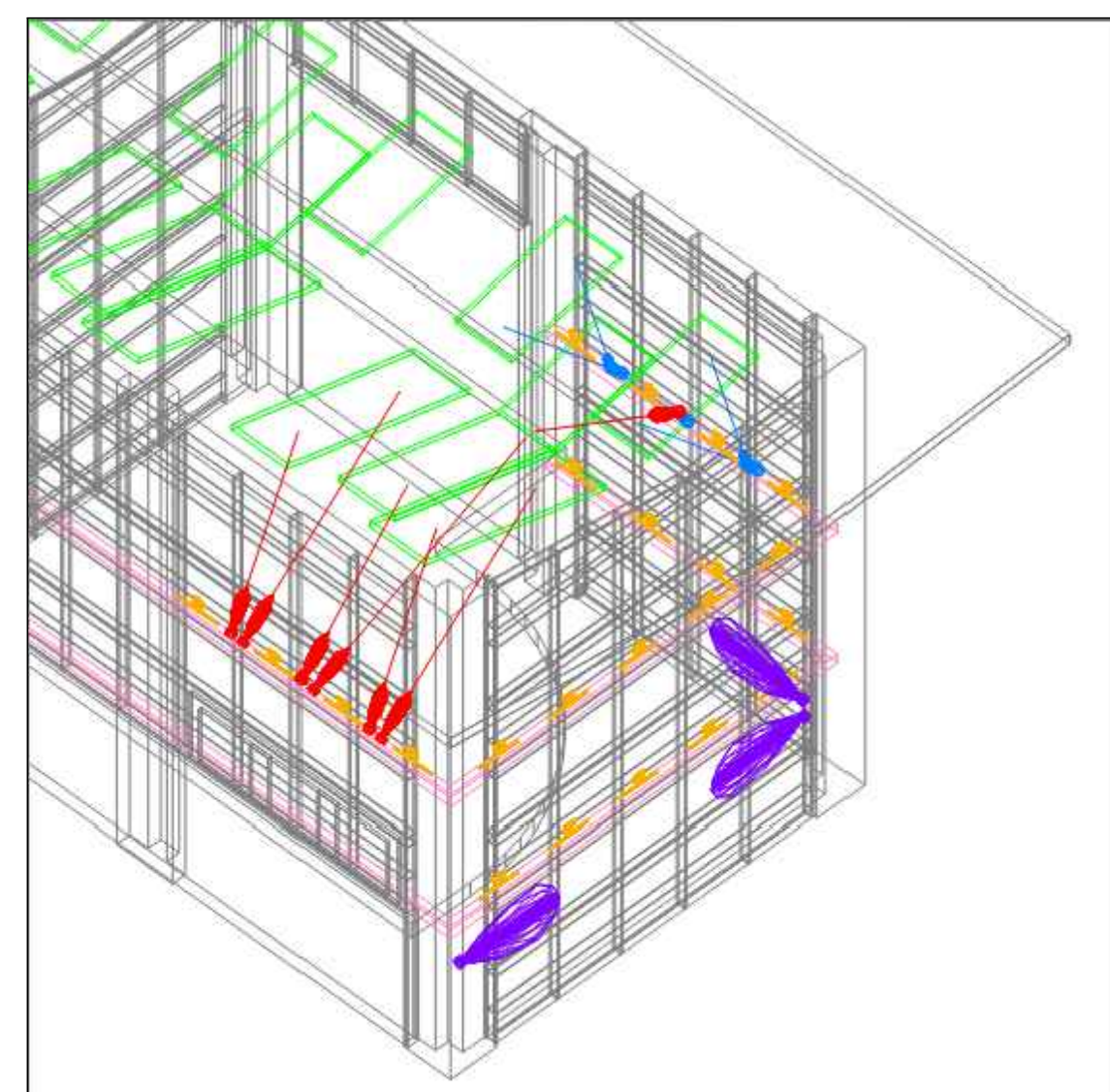
DEVELOPER: MCKNIGHT SMITH WARD GRIFFIN ENGINEERS, INCORPORATED
DESIGNED BY: [Signature]
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DATE: 03.06.23

SYMBOL SCHEDULE

GENERAL SYMBOLS		WIRING DEVICES	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	CONDUIT RUN CONCEALED ABOVE CEILINGS OR IN WALLS.	S	LIGHT SWITCH, SINGLE-POLE.
----	CONDUIT RUN CONCEALED IN OR BELOW FLOORS OR UNDERGROUND.	S2	LIGHT SWITCH, 2-POLE.
---	CONDUIT RUN EXPOSED.	S3	LIGHT SWITCH, 3-WAY.
---	CONDUIT TURNING UP	S4	LIGHT SWITCH, 4-WAY.
---	CONDUIT TURNING DOWN	SS	WHERE TWO SWITCHES ARE SHOWN CONTROLLING A SINGLE OR COMMON GROUP OF FLUORESCENT LIGHTING FIXTURES, EACH WITH 3 OR MORE LAMPS, THE SWITCH CLOSEST TO THE DOOR SHALL CONTROL THE INNER LAMP(S) IN EACH FIXTURE, AND THE OTHER SWITCH SHALL CONTROL THE OUTER LAMP(S) IN EACH FIXTURE. WHERE INDICATED, MASTER-SLAVE BALLAST WIRING SHALL BE UTILIZED TO ACHIEVE THIS CONTROL.
---	SQUARE ON CONDUIT SYMBOL INDICATES THAT CIRCUIT CONTINUES BUT NOT SWITCHED.	SS	WHERE TWO SWITCHES ARE SHOWN CONTROLLING A SINGLE OR COMMON GROUP OF LED LIGHTING FIXTURES, FIXTURES ARE TO BE PROVIDED WITH STEP-LEVEL DIMMING OPTION FOR 50% ON-100% ON AND OFF.
---	HOMERUN TO PANEL AND CIRCUIT(S) DESIGNATED. ARROW(S) INDICATE QUANTITY OF CIRCUITS.	Sp	LIGHT SWITCH WITH NEON TOGGLE (LIT WHEN LOAD IS ON).
---	JUNCTION BOX PER N.E.C.	Swp	LIGHT SWITCH, WEATHERPROOF.
---	SPECIAL NOTE, NUMERALS IDENTIFY, SEE SCHEDULE.	Sr	PROGRAMMABLE LIGHT SWITCH, WALL MOUNTED.
---	SPECIAL CONNECTION TO A SPECIFIC ITEM OF EQUIPMENT, SEE CONNECTION SCHEDULE.	Sd	DIMMER LIGHT SWITCH.
LIGHTING		MOUNTING HEIGHTS	
SYMBOL	DESCRIPTION	(DISTANCE FROM FINISHED FLOOR TO CENTER OF DEVICE UNLESS OTHERWISE NOTED)	
○	LED LIGHTING FIXTURE, DRAWN TO SCALE.	RECEPTACLE GENERAL	18" AFF. (UNLESS OTHERWISE NOTED)
▨	LED LIGHTING FIXTURE, UTILIZED AS A NIGHT-LIGHT. CONNECT TO THE UNSWITCHED LEG OF THE CIRCUIT.	ABOVE COUNTER TOP	46" AFF. (UNLESS OTHERWISE NOTED)
▨	LED LIGHTING FIXTURE, CONNECTED TO EMERGENCY CIRCUIT. UTILIZED AS A NIGHT-LIGHT. CONNECT TO THE UNSWITCHED LEG OF THE CIRCUIT.	LIGHT SWITCH	46" AFF. (UNLESS OTHERWISE NOTED)
---	BARE LED STRIP FIXTURE.	TELECOMMUNICATIONS GENERAL	18" AFF. (UNLESS OTHERWISE NOTED)
---	BARE LED STRIP FIXTURE CONNECTED TO AN EMERGENCY CIRCUIT. CONNECT TO THE UNSWITCHED LEG OF THE CIRCUIT.	ABOVE COUNTER TOP	46" AFF. (UNLESS OTHERWISE NOTED)
○	LED LIGHTING FIXTURE, CEILING MOUNTED.	WALL	46" AFF.
●	LED LIGHTING FIXTURE, CONNECTED TO AN EMERGENCY CIRCUIT OR EMERGENCY BALLAST.	TELEVISION	18" AFF. (UNLESS OTHERWISE NOTED)
⊠	LED LIGHTING FIXTURE, UTILIZED AS A NIGHT-LIGHT. CONNECT TO THE UNSWITCHED LEG OF THE CIRCUIT.	FIRE ALARM PULL STATION	46" AFF.
⊠	LED LIGHTING FIXTURE, CONNECTED TO AN EMERGENCY CIRCUIT OR EMERGENCY BALLAST. CONNECT TO THE UNSWITCHED LEG OF THE CIRCUIT.	AUDIBLE/STROBE COMBINATION OR STROBE DEVICE ONLY	80" ABOVE THE FINISHED FLOOR.
DISTRIBUTION			
SYMBOL	DESCRIPTION		
---	ELECTRICAL PANELBOARD, FLUSH MOUNTED.		
---	ELECTRICAL PANELBOARD, SURFACE MOUNTED.		
---	GROUND CONNECTION.		
---	DRY-TYPE TRANSFORMER, 480-120/208V 3-PHASE OR 208-120/208V 3-PHASE.		

ABBREVIATIONS

A	AMPERES	KW	KILOWATTS
ACC	ARMORED CLAD CABLE	LFNC	LIQUIDTIGHT FLEXIBLE NON-METALLIC CONDUIT
AF	ABOVE FINISHED FLOOR	LFMC	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT
AFG	ABOVE FINISHED GRADE	LVC	LOW VOLTAGE CONTROL CABINET
ANN	FIRE ALARM ANNUNCIATOR CABINET	MCB	MAIN CIRCUIT BREAKER
C	CONDUIT	MCC	METAL CLAD CABLE
CB	CIRCUIT BREAKER	MLO	MAIN LUIS ONLY MOUNTED
CKT	CIRCUIT	MTD	MOUNTED
CLG	CEILING	NMC	NON-METALLIC CLAD CABLE
DN	DOWN	PB	PULLBOX
DW	DISHWASHER	PBL	PANELBOARD
EC	EMPTY CONDUIT	PRS	PROGRAM RAPID START
EMT	ELECTRICAL METALLIC TUBING	PS	PROGRAM START
ENT	ELECTRICAL NON-METALLIC TUBING	PWR	POWER
EWC	ELECTRIC WATER COOLER	REC	RECEPTACLE
FACP	FIRE ALARM CONTROL PANEL	RMC	RIGID METAL CONDUIT
FMC	FLEXIBLE METAL CONDUIT	RS	RAPID START
G	GROUND	RS	FIRE ALARM PULL STATION
GF	GROUND FAULT INTERRUPTER	SC	SWITCH
HGA	HAND OFF AUTOMATIC	SWB	SWITCHBOARD
HP	HORSEPOWER	TIB	TELEPHONE TERMINAL BOARD
HPF	HIGH POWER FACTOR	TEL	TELEVISION
HX	HIGH REACTANCE	TV	TYPICAL
IG	ISOLATED GROUND	TYP	TYPICAL
IMC	INTERMEDIATE METAL CONDUIT	V	VOLTS
IS	INSTANT START	VP	VAPOR PROOF
JB	JUNCTION BOX	W	WALL MOUNTED
KVA	KILOVOLT-AMPERES	WG	WIRE GUARD
FPN	FUSE PER NAMEPLATE	WP	WEATHER PROOF TRANSFORMER



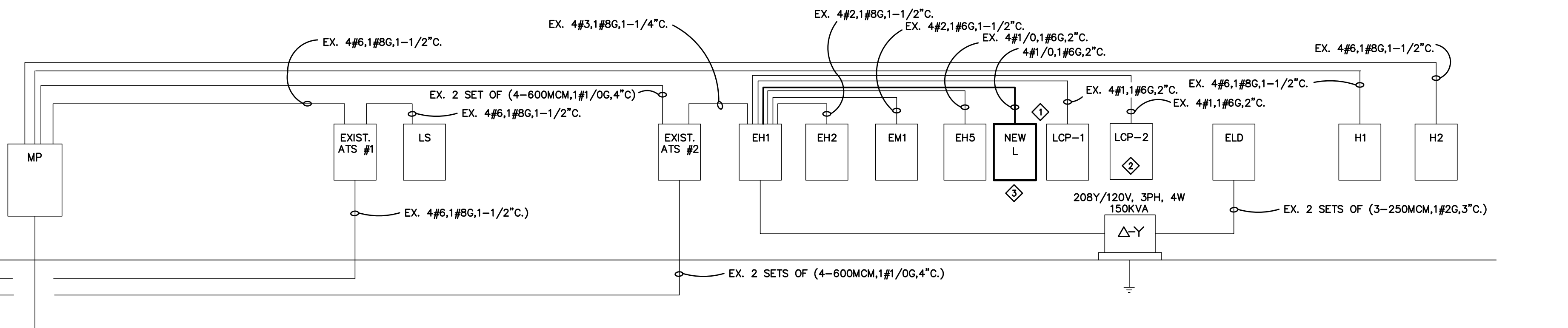
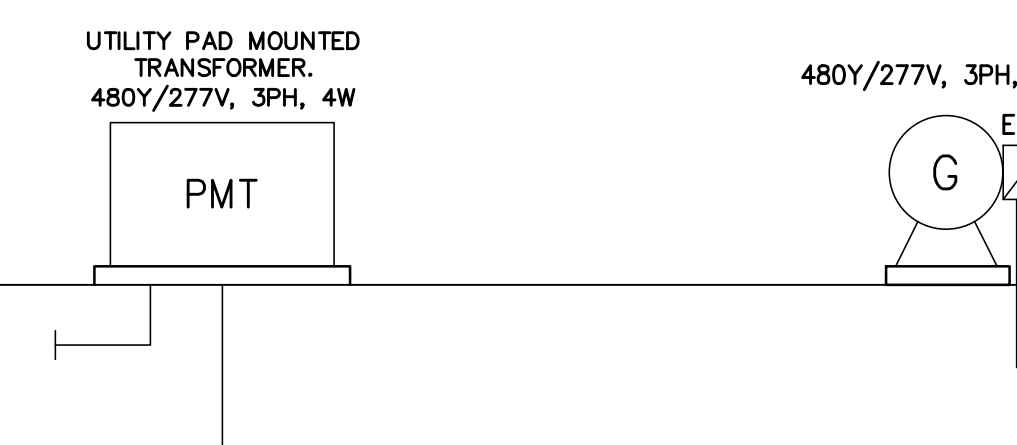
Symbol	Qty	Label	Arrangement	LLF	Description
○	5	R3	Single	0.950	LBL-VOLT-MRGBW40K-WFL-(FINISH)-(CONTROL)-UL-(WHIP)
○	7	R2	Single	0.950	LBL-VOLT-MRGBW40K-FL-(FINISH)-(CONTROL)-UL-(WHIP)
○	22	R4	Single	0.950	LOGN-4W-48V-48-RGBW40K-10x90-CL-(MOUNTING)-(FINISH)-UCLT-UL
○	3	R1	Single	0.950	LBL-VOLT-RGBW40K-NS-NO-LSL(0)-(FINISH)-(CONTROL)-UL-(WHIP)

1 RENDERING OF LOBBY AREA RGBW LIGHTING
NO SCALE

LOAD DESCRIPTION	WIRE	BKR	CONNECTED LOAD (KVA)			BKR	WIRE	LOAD DESCRIPTION	
			A	B	C				
OFFICE LTS	10	20/1	1.4	0.5	1.0	2A	20/1	10	BATHROOM LTS
CORRIDOR LTS	10	20/1	3.8	1.8	1.8	4B	20/1	10	ATRIUM LTS
ATRIUM LTS	10	20/1	5C	0.5	0.5	6C	20/1	10	ATRIUM LTS
CORRIDOR LTS	10	20/1	7A	0.8	0.8	8A	20/1	10	CORRIDOR LTS
BATHROOM LTS	10	20/1	9B	1.3	1.3	10B	20/1	10	CORRIDOR LTS
EXHIBIT HALL LTS	10	20/1	11C	0.8	0.8	12C	20/1	10	EXHIBIT HALL LTS
LRG CONFERENCE LTS	10	20/1	13A	0.5	0.5	14A	20/1	10	LRG CONFERENCE LTS
CORRIDOR LTS	10	20/1	15B	0.8	0.8	16B	20/1	10	LOBBY LTS
LOBBY LTS	10	20/1	17C	0.5	0.5	18C	20/1	10	SUB CONF LTS
SUB CONF LTS	10	20/1	19A	0.5	0.2	20A	20/1	10	SUB CONF LTS
LRG CONFERENCE LTS	10	20/1	21B	0.5	0.2	22B	20/1	10	LRG CONFERENCE LTS
LRG CONFERENCE LTS	10	20/1	23C	0.1	0.1	24C	20/1	10	SUB CONF LTS
SUB CONF LTS	10	20/1	25A	0.2	0.2	26A	20/1	10	SUB CONF LTS
LRG CONFERENCE LTS	10	20/1	27B	0.5	0.2	28B	20/1	10	LRG CONFERENCE LTS
LRG CONFERENCE LTS	10	20/1	29C	0.5	0.2	30C	20/1	10	SUB CONF LTS
SUB CONF LTS	10	20/1	31A	0.2	0.1	32A	20/1	10	SUB CONF LTS
SUB CONF LTS	10	20/1	33B	0.5	0.2	34B	20/1	10	SUB CONF LTS
SUB CONF LTS	10	20/1	35C	0.1	0.1	36C	20/1	10	SUB CONF LTS
SUB CONF LTS	10	20/1	37A	0.5	0.2	38A	20/1	10	SUB CONF LTS
SUB CONF LTS	10	20/1	39B	0.5	0.2	40B	20/1	10	SUB CONF LTS
SUB CONF LTS	10	20/1	41C	0.1	0.1	42C	20/1	10	1ST FLR CORRIDOR LTS
1ST FLR CORRIDOR LTS	10	20/1	43A	1.4	1.4	44A	20/1	10	RGB LTS
SPARE	20/1	45B	1.8	1.8	0.0	46B	20/1	10	SPARE
SPARE	20/1	47C	0.0	0.0	0.0	48C	20/1	10	SPARE
SPACE ONLY	/	49A	0.0	0.0	0.0	50A	/	3	SPACE ONLY
	/	51B	0.0	0.0	0.0	52B	/		
	/	53C	0.0	0.0	0.0	54C	/		
			24.3	8.4	8.4				

NOTES:
** FOR THE NEW BRANCH CONDUCTOR EXTENSION FORM PANEL L TO ADJACENT LIGHTING JUNCTION BOX AND BEYOND TO THE MODULAR RELAYS MATCH WIRE SIZE OF EXISTING CONDUCTORS RUN FROM JUNCTION BOX TO LIGHT FIXTURES.

LIGHTS 24.3 KVA
RECEPTS 8.4 KVA
MOTORS 0.0 KVA
HEAT 0.0 KVA
KITCHEN 0.0 KVA
CMTR 0.0 KVA
OTHER 0.0 KVA
TOTAL 24.3 KVA



2 POWER RISER DIAGRAM
NO SCALE

- NOTES:
- ◇ PROVIDE NEW FEEDER TO PANEL L AS INDICATED. UTILIZE EXISTING CRESTRON PANEL LCP1 FEEDER CONDUIT TO EXTENT POSSIBLE.
 - ◇ REMOVE INTERIOR OF PANEL LCP2 INCLUDING CIRCUIT BREAKER SECTION AND RELAY SECTION. UTILIZE THIS ENCLOSURE AS A JUNCTION BOX TO EXTEND LIGHTING CIRCUIT BRANCH WIRING TO NEW 4120 MODULAR LIGHT RELAY CABINETS. REFER TO WALL ELEVATION DETAIL FOR MORE INFORMATION.
 - ◇ EXTEND EXISTING BRANCH LIGHTING CIRCUITS FROM LIGHTING JUNCTION BOX (SEE NOTE 2) TO NEW PANEL L AND CONNECT TO BRANCH BREAKERS AS INDICATED BY THE PANEL SCHEDULE.

THIS DIAGRAM DOES NOT SHOW THE ENTIRE BUILDING DISTRIBUTION SYSTEM. IT SHOWS ONLY DISTRIBUTION AFFECTED BY THIS PROJECT. ALL DISTRIBUTION EQUIPMENT AND FEEDERS ARE EXISTING TO REMAIN UNLESS OTHERWISE INDICATED.