

PANEL: F		VOLTS: 120/240V			PH: 1Ø		3W		LOCATION: BOH			MOUNTING: FLUSH			
BUS: 400A		MAIN: 400A MCB			IG:		10,000			RMS SYM AMPS			FEEDER: SEE RISER DIAGRAM		
CKT	DESCRIPTION	AMPS	POLE	WIRE	ØA	ØB	ØA	ØB	WIRE	POLE	AMPS	DESCRIPTION	CKT NO		
1	SPARE	20	1				443		12	1	20	BACK OF HOUSE LIGHTS	2		
3	SPARE	20	1						447	12	1	20	FRONT OF HOUSE LIGHTS	4	
5	RAPID COOK OVEN	30	2	10	3,120		1,200		12	1	20	SODAVICE MACHINE	6		
7					3,120		1,200		12	1	20	SODAVICE MACHINE	8		
9	MICROWAVE	20	1	12	1,500					1	20	SPARE	10		
11	EXHAUST HOOD FAN	20	1	12		480		1,290	12	1	20	DISPLAY REF	12		
13	REF BACK COUNTER	20	1	12	900		620		12	1	20	DINING LIGHTS	14		
15	RAPID COOK OVEN	30	2	10		3,120		1,200	12	1	20	SERVICE LINE	16		
17					3,120		1,200		12	1	20	SERVICE LINE	18		
19	MICROWAVE	20	1	12		1,500		540	12	1	20	CASH REGISTER (GFI)	20		
21	BREAD OVEN	50	2	6	3,690		360		12	1	20	BACK COUNTER RECPS	22		
23						3,690					1	20	SPARE	24	
25	SPARE	20	1				1,500		12	1	20	CARBONATOR	26		
27	CASH REGISTER (GFI)	20	1	12		540		600	12	1	20	MEDIA CABINET	28		
29	OUTLETS	20	1	12	360		360		12	1	20	CONV RECEPTS	30		
31	DRIVE THRU OUTLET	20	1	12		180		1,800	12	2	20	WALK IN FREEZER	32		
33	WALK IN COOLER	20	2	12	1,400		1,800						34		
35						1,400		100	12	1	20	WALKING COOLER LTS	36		
37	CEILING FANS	20	1	12	300		1,200		12	1	20	DRIVE THRU WARMER	38		
39	PENDENTS/WINDOW RECPS	20	1	12		1,275		1,000	12	1	20	ICE TEA BREWER	40		
41	DRIVE THRU MENU	20	1	12	800		360		12	1	20	STEREO	42		

SECTION 2														
43	CONDENSING UNIT CU-1	60	2	6	4,152		4,152		6	2	60	CONDENSING UNIT CU-2	44	
45					4,152			4,152					46	
47	DIRECTIONAL SIGNAGE	20	1	12	1,200		1,500		12	1	20	FURNACE F-1	48	
49	POLE LIGHTS	20	1	12		1,052		1,500	12	1	20	FURNACE F-2	50	
51	FLYON SIGN	20	1	12	1,200		180		12	1	20	WP/GFI RECEPT	52	
53	SIGNAGE	20	1	12		1,200		400	12	1	20	SECURITY SYSTEM MONITOR	54	
55	SIGNAGE	20	1	12	1,200		400		12	1	20	DRIVE THRU INTERCOM	56	
57	SPARE	20	1								1	20	SPARE	58
59	SPARE	20	1								1	20	SPARE	60
61	SPARE	20	1								1	20	SPARE	62
63	BUSSED SPACE											BUSSED SPACE	64	
65	BUSSED SPACE											BUSSED SPACE	66	
67	BUSSED SPACE											BUSSED SPACE	68	
69	BUSSED SPACE											BUSSED SPACE	70	
71	BUSSED SPACE											BUSSED SPACE	72	
73	BUSSED SPACE											BUSSED SPACE	74	
75	BUSSED SPACE											BUSSED SPACE	76	
77	BUSSED SPACE											BUSSED SPACE	78	
79	BUSSED SPACE											BUSSED SPACE	80	
81	BUSSED SPACE											BUSSED SPACE	82	
83	BUSSED SPACE											BUSSED SPACE	84	

NOTES:	22,942	21,709	15,275	14,224
(GFI)-GFI BRKR	38,217		35,938	
TOTAL CONNECTED LOAD:				74,155 VA
NEG DEMAND LOAD:				62,664 VA
DEMAND AMPS @ 240 VOLT / 1Ø:				261.18 A

LIGHT FIXTURE SCHEDULE

MARK NO.	MANUFACTURER & CATALOG NUMBER	VOLTS WATTS	LAMPS	DESCRIPTION	EQUIVALENT MANUFACTURERS
A*	LIGHTOLIER 2X2 LED	120 36	INCL	2'X2 RECESSED GRID TROFFER WITH ACRYLIC PRISMATIC LENS, LED FIXTURE	FURN BY OWNER, INSTALL BY ELEG CONT.
B*	LIGHTOLIER 2X2 LED	120 36	INCL	2'X2 RECESSED GRID TROFFER WITH ACRYLIC PRISMATIC LENS, LED FIXTURE, FLANGE KIT	FURN BY OWNER, INSTALL BY ELEG CONT.
C	CREE KR6-19L-40K-120V & KR6T-55GC-FF	120 18	18W LED INCL 4000°K 1100 LUM	6" LED DOWNLIGHT WITH 1100 LUMENS, 4000°K COLOR TEMP, AND FLANGE TO MATCH REFLECTOR, RATED FOR DAMP LOCATIONS.	OR EQUAL AS APPROVED BY ENGINEER
D*	LIGHTOLIER LED CAN	120 17	INCL	6"Ø RECESSED CAN, PAR30 LED LAMP	FURN BY OWNER, INSTALL BY ELEG CONT.
F*	TUTU LED PENDANT	120 9	INCL	LARGE LED FIXTURE, PENDENT SUSPEND PENDENT AT 6'-6" FROM FLOOR TO BOTTOM OF FIXTURE. CENTER OVER TABLE	FURN BY OWNER, INSTALL BY ELEG CONT.
G*	VILLA LIGHTING HQ2-49-520K REGENCY MX-EXCEL	120 100	N/A	PENDANT MOUNTED 5 BLADE CEILING FAN WITH CHERRY FINISH BLADES. VERIFY REQTS. BY OWNER. PROVIDE SPEED CONTROLLERS TO CONTROL MULTIPLE FANS INDICATED.	FURN BY OWNER, INSTALL BY ELEG CONT.
H	LITHONIA HQSLD-2-10A100/40K-SR3-120-P E-DEBND	120 47	1-47W LED	SURFACE MOUNTED QUARTER SPHERE FOR LED LAMP, BRONZE FINISH, WITH PUSH BUTTON PHOTOCELL, MOUNT 10'-0" ABOVE GRADE AT BACK DOWN ON EAST SIDE. REFER TO ARCH ELEVATIONS FOR MOUNTING HEIGHT ON NORTH AND WEST SIDE.	HUBBELL LUMARK OR EQUAL
L*	LIGHTOLIER TRACK WITH LED FIXTURES	120 18	INCL	4" SURFACE MOUNT TRACK WITH TWO 9 WATT PAR30 LED FIXTURES, WHITE FINISH	FURN BY OWNER, INSTALL BY ELEG CONT.
M	CREE ARE-ED6-4M-DA-16-D-U L-BZ-525-40K 1V P84825C1BZ POLE	120 263	4000°K 160 LED PKG	LED PARKING LIGHT LIGHT FIXTURE WITH 160 LED, 525 MA DRIVER, TYPE 4 MEDIUM DISTRIBUTION, MT ON 4" SQUARE X 25" POLE ON 24" HIGH BASE (SEE DETAIL). BRONZE FIN.	OR EQUAL AS APPROVED BY ENGINEER
	LITHONIA LEM2	120 4	INCL	EMERGENCY LIGHT WITH TWIN ADJUSTABLE HEADS AND SEALED LEAD CALCIUM BATTERY, MOUNT AT 7'-6", TO CLEAR OBSTACLES.	DUAL-LITE SURE-LITE OR EQUAL
	LITHONIA LHQM-S-V-3-R-120	120 4	INCL	COMBINATION EMERGENCY/EXIT LIGHT WITH LED LAMPS, RED LETTERS ON WHITE BACKGROUND, TWIN 8W EMERGENCY LIGHT HEADS, UNIVERSAL MOUNT, BATTERY BACKUP.	DUAL-LITE SURE-LITE OR EQUAL
	LITHONIA LHQM-S-V-3-R-120-HO 1V ELA-MR24	120 8	INCL	COMBINATION EMERGENCY/EXIT LIGHT WITH LED LAMPS, RED LETTERS ON WHITE BACKGROUND, TWIN 8W EMERGENCY LIGHT HEADS, UNIVERSAL MOUNT, BATTERY BACKUP, AND REMOTE HEAD	DUAL-LITE SURE-LITE OR EQUAL

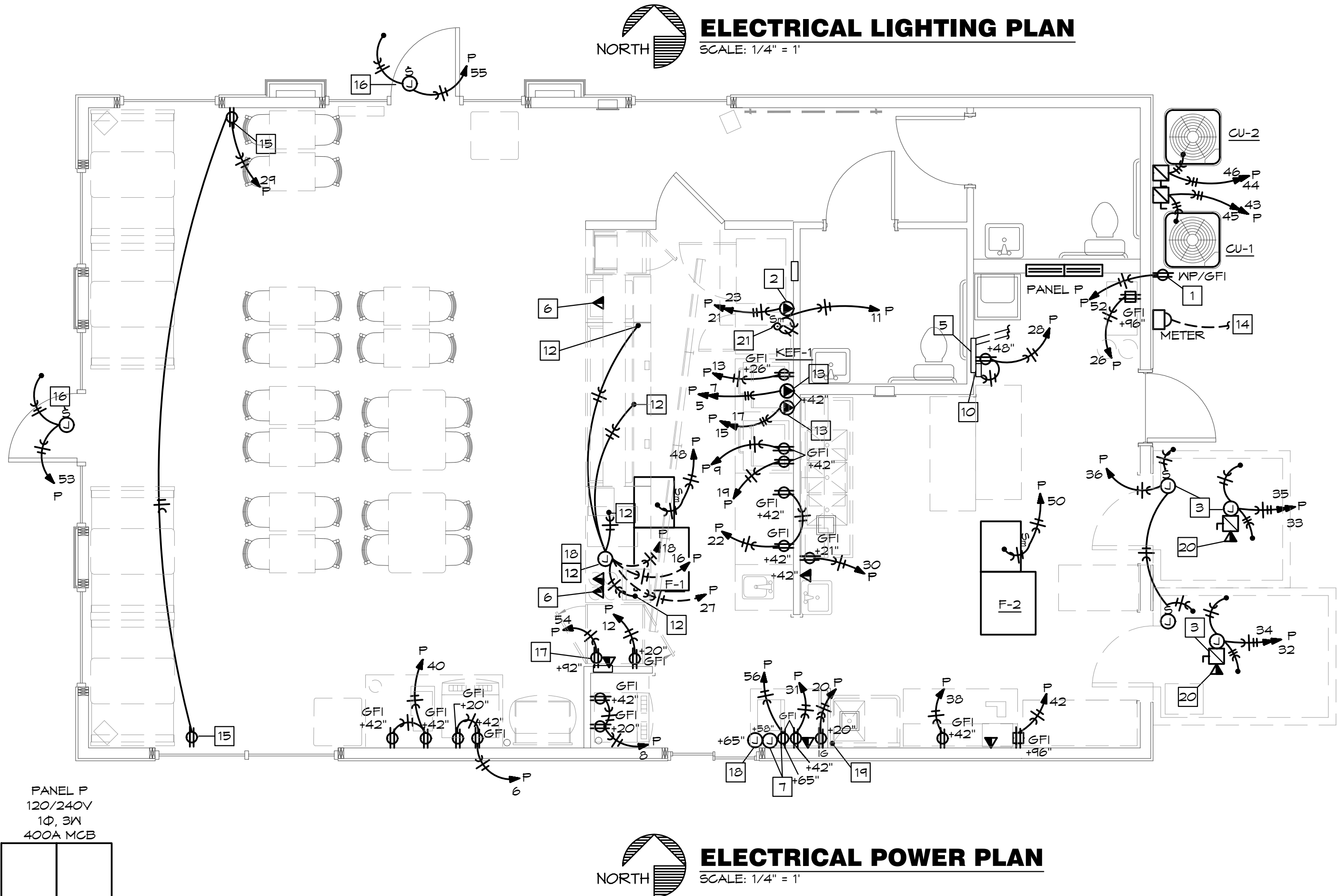
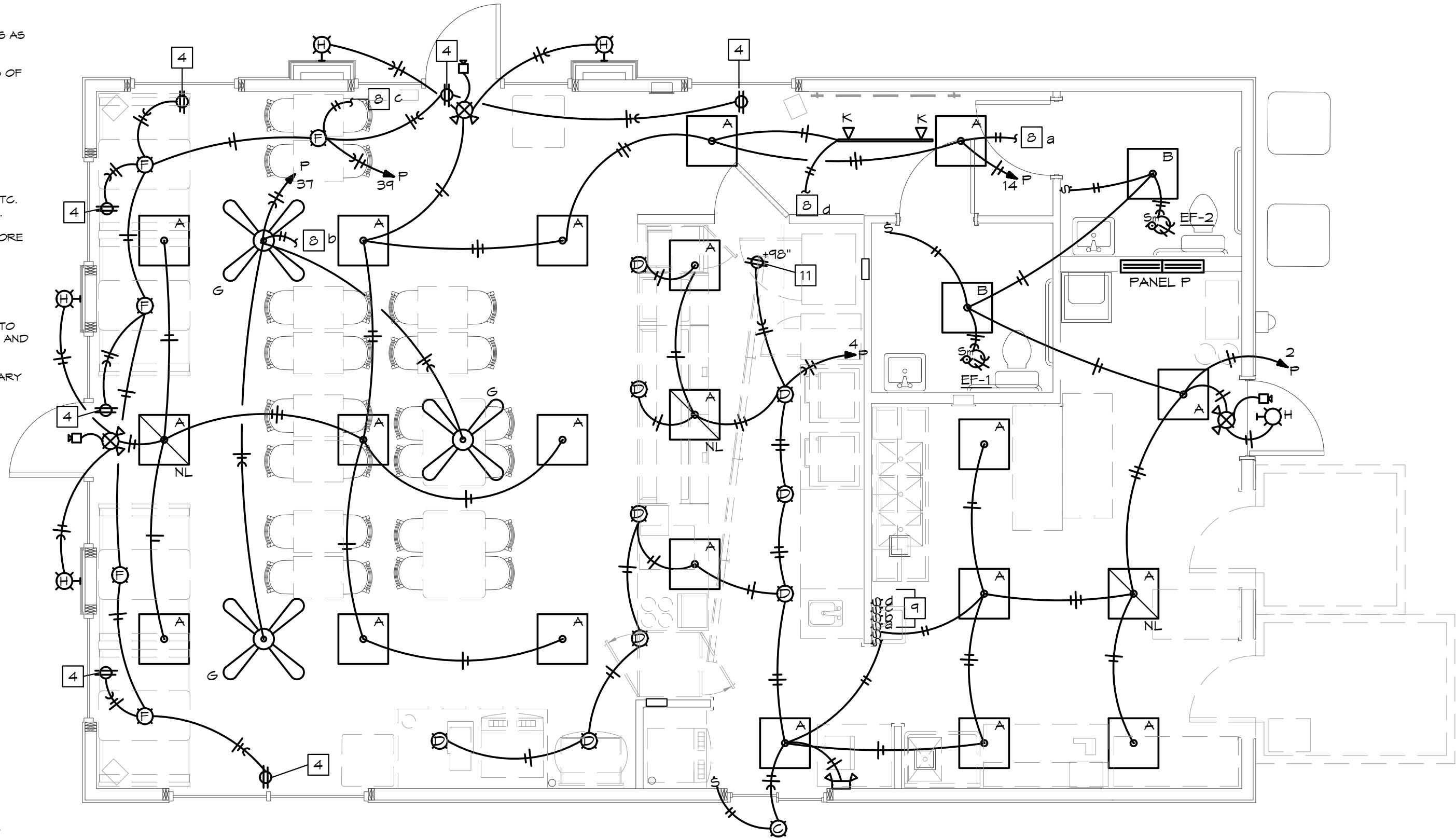
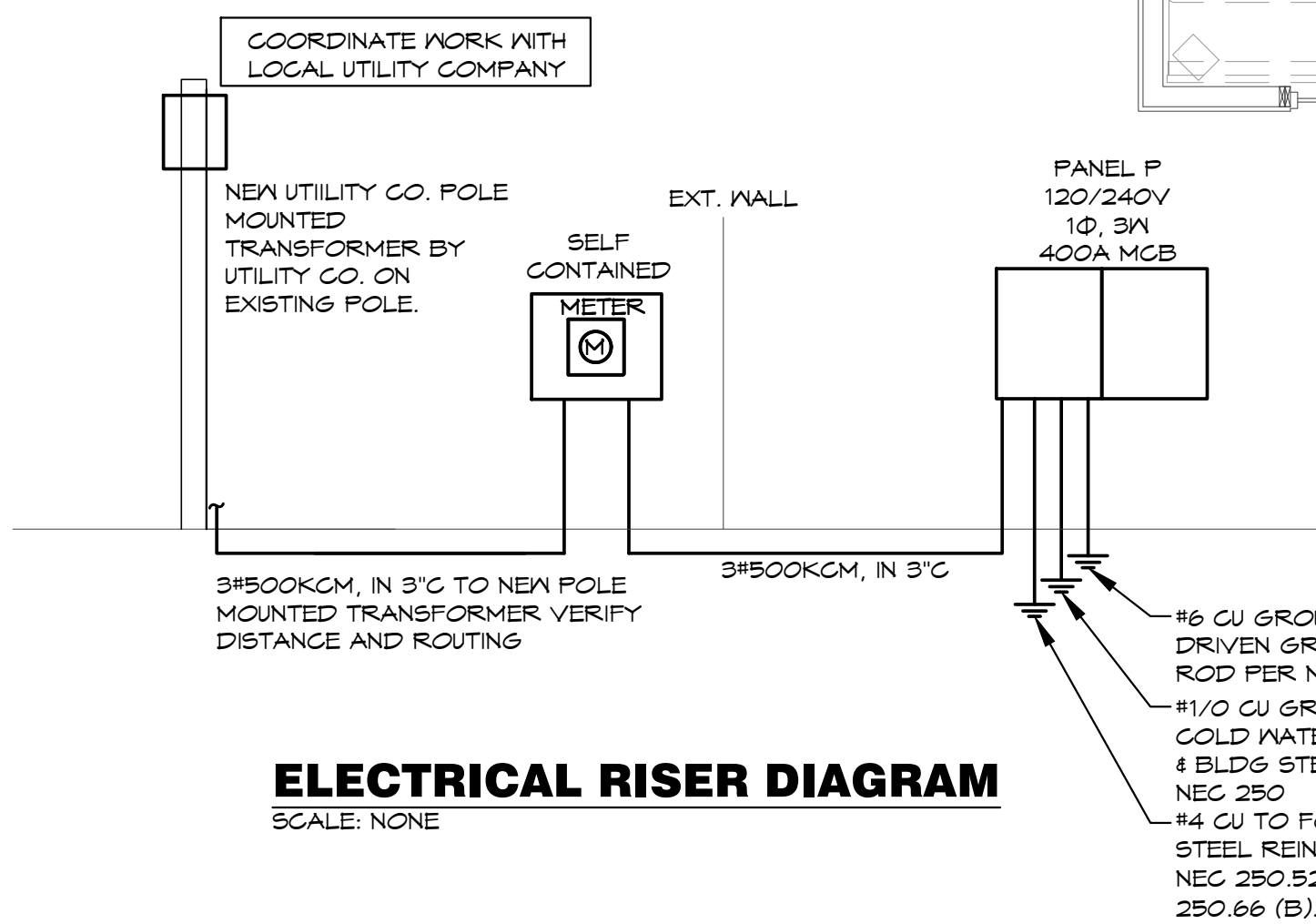
- NOTES:
- LIGHT FIXTURES DESIGNATED WITH (*) ARE FURNISHED BY OWNER AND INSTALLED BY ELECTRICAL CONTRACTOR.
 - ALL FLUORESCENT LAMPS SHALL BE 3500° KELVIN AND A MINIMUM CRI OF 82.

ELECTRICAL GENERAL NOTES:

- COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACES AVAILABLE, AND WITHOUT INTERFERENCES.
- IT IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO PROPERLY BALANCE ALL BRANCH CIRCUITS BETWEEN THE PHASES OF THE SYSTEM REGARDLESS OF CIRCUITING INDICATED.
- ALL EXPOSED RACEWAYS SHALL BE IN EMT CONDUIT, MC CABLE IS NOT PERMITTED IN EXPOSED AREAS.
- ELECTRICAL CONTRACTOR TO COORDINATE MANUFACTURER ELECTRICAL REQUIREMENTS FOR HVAC EQUIPMENT BEING FURNISHED WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF LIGHT FIXTURES AND DEVICES.
- REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR REQUIREMENTS FOR SUPPORTING TRANSFORMERS, EQUIPMENT, ETC. FROM THE STRUCTURE. PROVIDE ADDITIONAL STEEL AS REQUIRED TO PROPERLY SUPPORT SYSTEMS FROM THE STRUCTURE.
- ALL MATERIALS EXPOSED WITHIN FLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84.
- EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL PER NEC 200.4.
- KITCHEN EQUIPMENT - VERIFY ALL ELECTRICAL REQUIREMENTS AND ROUGH-IN LOCATION PRIOR TO WORK.
- ALL BRANCH CIRCUITS SHALL BE SIZED TO ALLOW FOR A MAXIMUM OF 3% VOLTAGE DROP. ALL FEEDERS SHALL BE SIZED TO ALLOW FOR A MAXIMUM OF 3% VOLTAGE DROP. ELECTRICAL CONTRACTOR SHALL VERIFY WIRING INDICATED IS SUFFICIENT AND INCREASE CONDUCTOR SIZE AS REQUIRED BASED OFF ACTUAL INSTALLED LENGTH OF CONDUCTORS.
- CONTRACTOR SHALL CONNECT ALL KITCHEN EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL NECESSARY DISCONNECTS, DEVICES, AND CORD AND PLUGS WITH THE PROPER RATINGS.
- ALL DEVICES IN THE KITCHEN AREA SHALL HAVE STAINLESS STEEL COVERPLATES. ALL OTHER DEVICES SHALL HAVE IVORY NYLON COVERPLATES. HUBBELL, LEVITON, P&S, AND GE ARE THE ONLY ACCEPTABLE MANUFACTURERS.
- ALL RECEPTACLES IN FOOD PREP AREAS SHALL BE GFI PER NEC.

PLAN NOTES:

- WP GFI RECEPTACLE MOUNTED ON EXTERIOR WALL FOR HVAC MAINTENANCE.
- PROVIDE TWIST LOCK RECEPTACLE AND PLUG W/ CORD FOR DISCONNECTING MEANS AND CONNECT TO OVEN AS REQUIRED. VERIFY EXACT ELECTRICAL REQUIREMENTS.
- CONNECT TO WALK-IN COOLER/ FREEZER. VERIFY EXACT ELECTRICAL REQUIREMENTS. CONNECT TO DOOR HEATER, LIGHTS, EVAPORATOR, CONDENSER, CONTROLS, ETC. AS REQUIRED.
- DUPLEX RECEPTACLE MOUNTED IN CEILING, DECORA WHITE COLOR, FOR DISPLAY PER NEG. LOCATE RECEPTACLE AS CLOSE AS POSSIBLE TO GLASS.
- PROVIDE LEVITON 42" STRUCTURED MEDIA ENCLOSURE WITH FLUSH MOUNT HINGED DOOR WITH DUPLEX RECEPTACLE POWER BOX AND DUPLEX RECEPTACLE LOCATED INSIDE BOX. PROVIDE MOUNTING HARDWARE FOR FIREWALL, MODEM, ETHERNET PORT SPLITTER, CABLE MODEM, AND TELEPHONE CONNECTION. PROVIDE (2) 2" CONDUITS FROM BOX TO PROPERTY LINE. (1) FOR COAX AND (1) FOR PHONE. SEE SITE PLAN SHEET E2 FOR CONTINUATION. PROVIDE ONE 2" CONDUIT TO ABOVE ACCESSIBLE CEILING FROM MEDIA BOX FOR DATA CABLES.
- PROVIDE 3/4" CONDUIT WITH PULL STRING BELOW SLAB FROM THIS LOCATION BACK TO MEDIA CABINET.
- JUNCTION BOX LOCATED AT 55" AFF WITH CONDUIT WITH PULL STRING TO ABOVE ACCESSIBLE CEILING. DUPLEX RECEPTACLE LOCATED AT 65" AFF FOR INTERCOM TO DRIVE-THRU KIOSK. VERIFY EXACT LOCATION AND ELECTRICAL REQUIREMENTS.
- TO SINGLE POLE SWITCH AT SWITCH BANK. SEE NOTE 9.
- CEILING FAN AND LIGHTING SWITCH BANK.
- TIME CLOCK AND CONTACTOR FOR SIGNAGE, POLE LIGHTS, & POLE SIGN. SEE DETAIL ON SHEET E2.
- SWITCHED DUPLEX RECEPTACLE FOR MENU BOARD. VERIFY EXACT MOUNTING LOCATION.
- 1" CONDUIT STUBBED UP FOR CONNECTION TO SERVING LINE. ROUTE WIRES THRU RACEWAY IN SERVING LINE. (ONE CIRCUIT FOR HOT WELL, ONE CIRCUIT FOR COLD WELL, AND ONE CIRCUIT FOR POS SYSTEM). POS TO HAVE DEDICATED NEUTRAL AND GROUND. CONNECT TO DEVICES PROVIDED WITH CASEWORK.
- NEMA 6-30R RECEPTACLE FOR RAPID-COOK OVEN. VERIFY ELECTRICAL REQUIREMENTS.
- UNDERGROUND ELECTRICAL SERVICE. SEE ELECTRICAL RISER DIAGRAM AND SHEET E2.
- PROVIDE COOPER #HRT146V DUPLEX RECEPTACLE WITH TWO USB CHARGING RECEPTACLES.
- JUNCTION BOX WITH TOGGLE DISCONNECT FOR SIGNAGE. CONNECT TO SIGN AS REQUIRED. VERIFY EXACT LOCATION. ROUTE CIRCUIT TO PANEL INDICATED VIA 4 POLE CONTACTOR WITH 120V COIL CONTROLLED BY 1-DAY PROGRAMMABLE TIME CLOCK LOCATED ADJACENT TO PANEL. SEE DETAIL ON SHEET E2.
- PROVIDE RECEPTACLE AND DATA FOR SECURITY SYSTEM MONITOR IN RECESSED TV CABLE/ELECTRICAL BOX PASS & SEYMOUR #TV1A. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER, MONITOR AND VIDEO CABLES TO BE FURNISHED AND INSTALLED BY SECURITY SYSTEM COMPANY.
- ONE 3/4" CONDUIT WITH PULL STRING FOR DATA COMMUNICATION BETWEEN DRIVE-THRU REGISTER AND FRONT COUNTER REGISTER. VERIFY EXACT STUB UP LOCATION.
- ONE 3/4" CONDUIT WITH PULL STRING FOR DATA BACK TO MEDIA CABINET. VERIFY EXACT STUB UP LOCATION.
- PROVIDE 3/4" CONDUIT WITH PULL STRING FROM TOP OF WALK-IN COOLER/FREEZER REFRIGERATION UNIT CONTROL MODULE STUBBED INTO BUILDING ABOVE CEILING. DATA CABLE BY OTHERS.
- CONNECT TO HOOD EXHAUST FAN PER MANUFACTURER'S INSTRUCTIONS. FAN TO BE THERMOSTATICALLY CONTROLLED. REFER TO HOOD DRAWINGS FOR MORE INFORMATION.



OKLAHOMA PE COA #CA1900PE

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ELECTRICAL PLAN

DATE
NOV. 19, 2015

DRAWN BY:
NL/BH
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EK/DS

SHEET NO.
E1