

**GDI ENGINEERING**



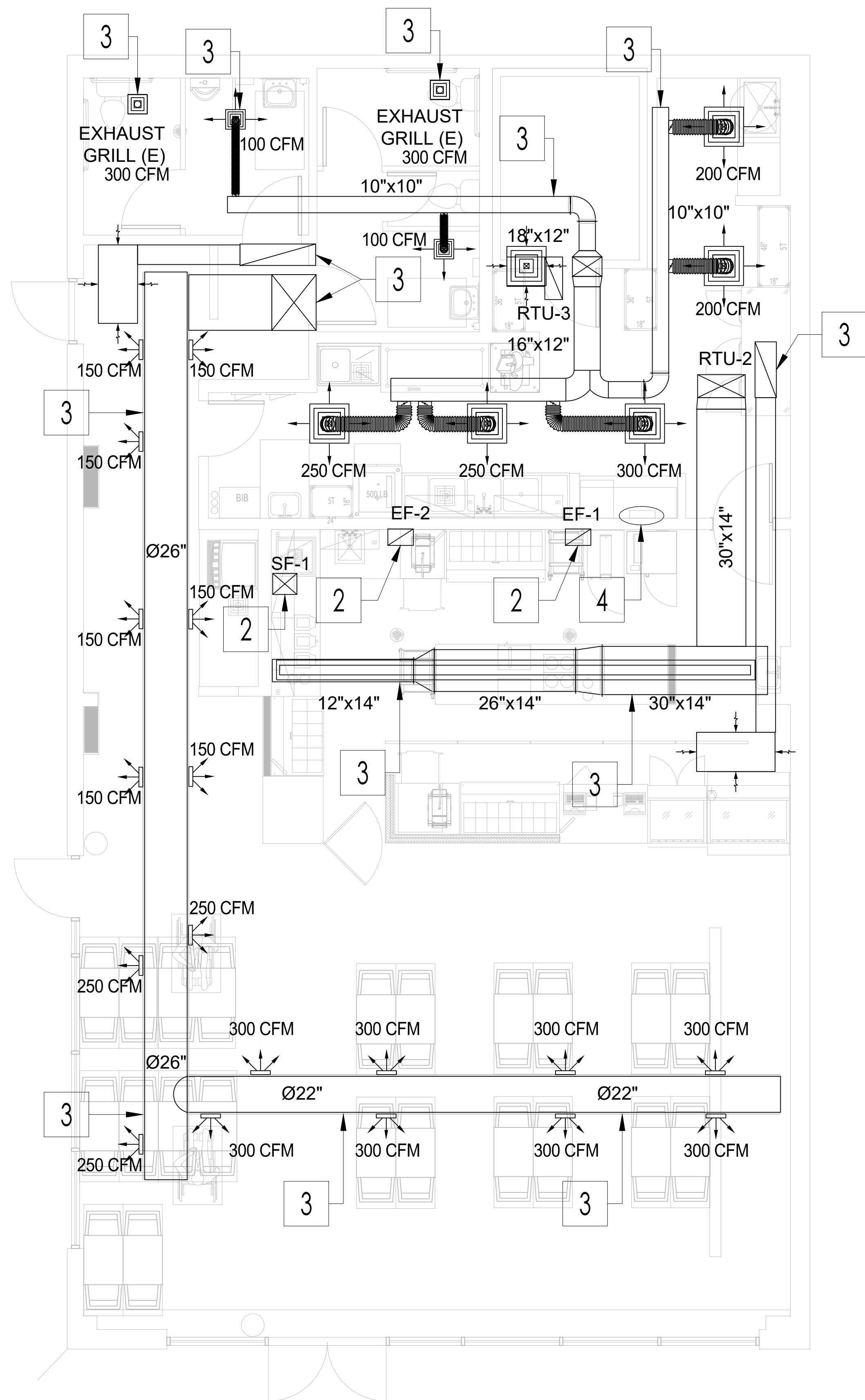
# Frullati Cafe'

Hospitality

**SAN MARCOS- Texas**

MECHANICAL KEYED NOTES:

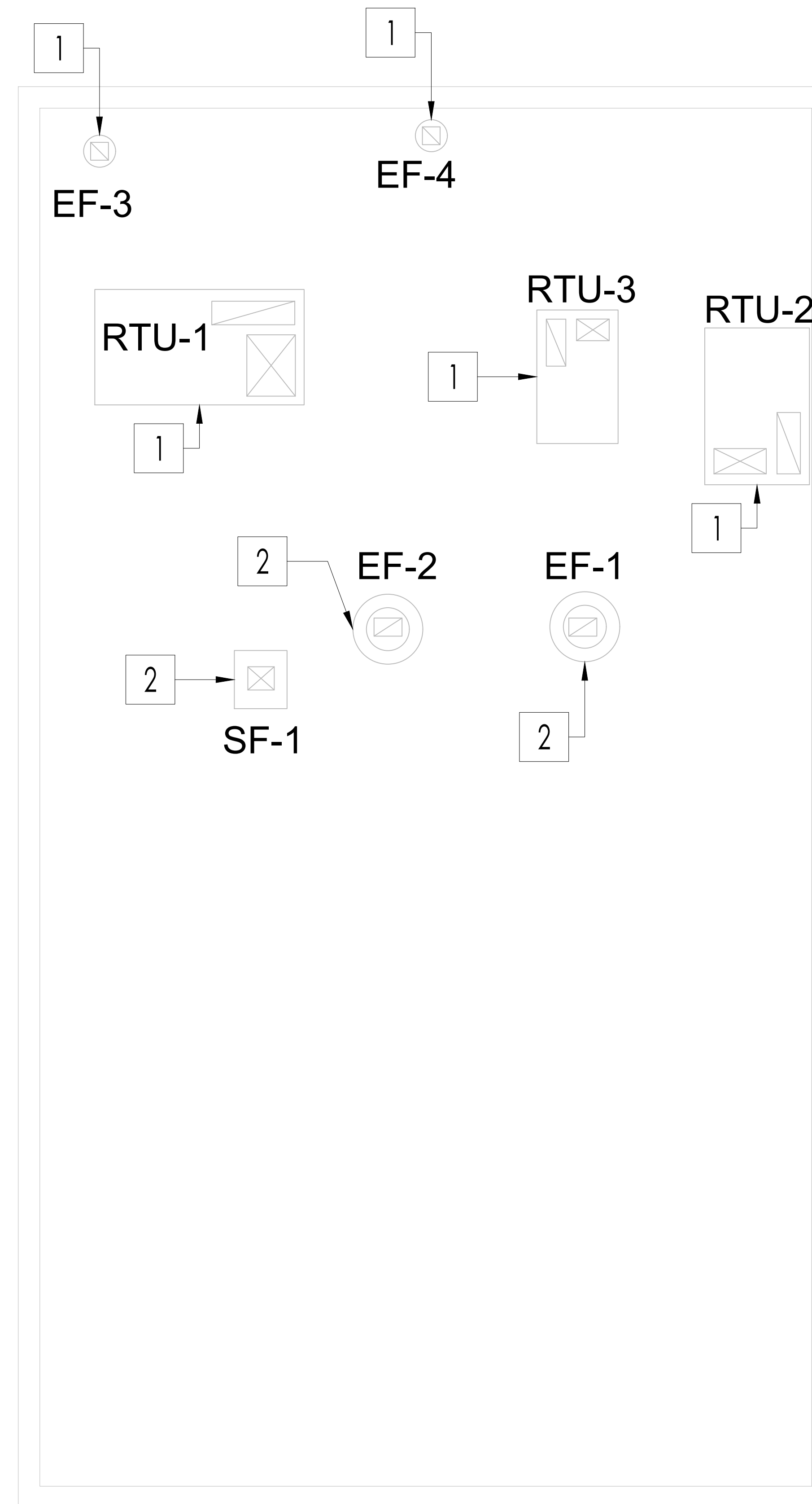
- 1 → EXISTING EQUIPMENT TO REMAIN UNCHANGED.
- 2 → REMOVE THE KITCHEN HOOD EXHAUST & SUPPLY AIR FANS, CLOSE THE ROOF OPENING - COORDINATE WITH THE ARCHITECT TO INSULATE THE EXPOSED ROOFING SIMILAR TO THE EXISTING ROOF PARTS WITH PROPER SEAMS.
- 3 → SUPPLY & RETURN AIR DUCTS & AIR OUTLETS TO REMAIN UNCHANGED.
- 4 → EXISTING THREE THERMOSTATS LOCATION BELOW THE OFFICE DESK.



MECHANICAL FLOOR PLAN

SCALE  
1/4"=1'-0"

1



ROOF FLOOR PLAN

SCALE  
1/4"=1'-0"

2

FRULLATI CAFE

STORE: 2271  
730 HOPKINS STREET, UNIT 100  
SAN MARCOS, TX 78666

MECHANICAL LAYOUTS.

Drawn By: M.F  
Date: 10.11.2023

Scale:  
PROJ.NO.:

M 2.00

SHEET NO.

**SCHEDULE No. 1**  
**EXISTING PACKAGED ROOFTOP UNIT - ELECTRIC COOLING / GAS HEAT**

TAG	PRTU-01	PRTU-02	PRTU-03
SERVES	SHOP FRONT	JUICE PREPARATION	BACK OF HOUSE
MANUFACTURER	CARRIER	CARRIER	CARRIER
MODEL	48TCD16A2A5	48TCD08A2A5	48TCD04A1A5
NOMINAL CAPACITY (TONS)	15.0	7.5	3.0
NET COOLING CAPACITY (MBH)	166.47	84.58	32.74
SELECTED SUPPLY AIR FLOW (CFM)	4800	3000	1200
OUTDOOR AIR FLOW (CFM)	900	300	200
GAS INPUT (MBH)	180	125	72
MCA	70.8	41.1	19.4
MOCP (A)	80	50	25
VOLTS / PH / Hz	208 / 3 / 60	208 / 3 / 60	208 / 3 / 60

- NOTES:**
- PRTU-1 & PRTU-2 SHOULD HAVE SMOKE DETECTOR AT THE SUPPLY AIR OUTLET OF THE ROOFTOP UNITS - INTERLOCK WITH FIRE ALARM.

**SCHEDULE No. 2**  
**EXISTING FANS**

TAG	EF-03 & EF-04
LOCATION	RESTROOMS
SELECTED FLOW (CFM)	200
SELECTED PRESSURE DROP (IN. H2O)	0.375"
ELECTRICAL (V / PH / HZ)	120 / 1 / 60
POWER	1 1/2 HP
FAN TYPE	ROOF FAN
MANUFACTURER	GREENHECK
MODEL	090G

**Ventilation Load Calculation UMC 2021**

Zone #	Room Name	IMC Occupancy Class	Area (ft²) AZ	Ra (CFM/ft²)	AZ x Ra (CFM)	Pz (Persons/1000ft²)	Persons	Rp (CFM/persons)	Rp x Persons (CFM)	Vbz Calcu.CFM	Corrected CFM After EZ=0.8	Source of OA
1	EATING AREA	RESTAURANT DINING ROOMS	900	0.18	162	70	63	7.5	472.5	635	793	RTU-01
2	PREPARATION AREA	KITCHEN (COOKING)	400	0.12	48	20	8	7.5	60	108	135	RTU-02
3	BACK-OFF HOUSE	KITCHEN (COOKING)	340	0.12	40.8	20	7	7.5	52.5	93	117	RTU-03

**Air System Sizing Summary for 01.RTU-01**

Project Name: 2.2.894.John Fullall Cafe  
Prepared By: BCE

**Air System Information**  
 Air System Name: 01.RTU-01  
 Equipment Class: PKG ROOF  
 Air System Type: SDCAV  
 Number of zones: 1  
 Floor Area: 900.0 ft²  
 Location: Austin, Texas

**Sizing Calculation Information**  
 Calculation Months: Jan to Dec  
 Sizing Date: Calculated  
 Zone CFM Sizing: Sum of space airflow rates  
 Space CFM Sizing: Individual peak space loads

**Central Cooling Coil Sizing Data**

Total coil load	5.7 Tons	Load occurs at	Aug 1000
Total coil load	62.2 MBH	OA DB / WB	86.0 / 74.0 °F
Sensible coil load	54.4 MBH	Entering DB / WB	85.4 / 69.9 °F
Latent coil load	7.8 MBH	Leaving DB / WB	61.2 / 56.6 °F
Coil CFM @ 1000	2058 CFM	Coil RSP	5.8 ft/s
Max zone CFM	2058 CFM	System Factor	0.100
Sum of peak zone CFM	2058 CFM	Reheating RH	97 %
Reheating heat rate	382.1 Btu/hr	Design supply temp	58.0 °F
CFM/Ton	182.7	Zone Total Check	1.4 F1 OK
BTU/hr-Ton	12.6	Max zone temperature deviation	0.0 °F
Water flow @ 10.0 °F rise	75.8 GPM		

**Central Heating Coil Sizing Data**

Max coil load	55.7 MBH	Load occurs at	Dec 1100
Coil CFM @ 20.0 °F drop	2058 CFM	OA DB / WB	37.0 / 20.0 °F
Max coil CFM	2058 CFM	Ent. DB / Log DB	49.9 / 75.6 °F
Water flow @ 20.0 °F drop	NA		

**Supply Fan Sizing Data**

Actual max CFM	2058 CFM	Fan motor BHP	0.00 BHP
Standard CFM	2015 CFM	Fan motor kW	0.00 kW
Actual max CFM/FP	2.39 CFM/FP	Fan static	0.20 in wg

**Outdoor Ventilation Air Data**

Design airflow CFM	900 CFM	CFM/person	14.29 CFM/person
CFM/FP	1.80 CFM/FP		

Hourly Analysis Program 5.10 Page 1 of 7

**Air System Sizing Summary for 02.RTU-02**

Project Name: 2.2.894.John Fullall Cafe  
Prepared By: BCE

**Air System Information**  
 Air System Name: 02.RTU-02  
 Equipment Class: PKG ROOF  
 Air System Type: SDCAV  
 Number of zones: 1  
 Floor Area: 400.0 ft²  
 Location: Austin, Texas

**Sizing Calculation Information**  
 Calculation Months: Jan to Dec  
 Sizing Date: Calculated  
 Zone CFM Sizing: Sum of space airflow rates  
 Space CFM Sizing: Individual peak space loads

**Central Cooling Coil Sizing Data**

Total coil load	1.8 Tons	Load occurs at	Aug 1000
Total coil load	22.4 MBH	OA DB / WB	86.0 / 74.0 °F
Sensible coil load	19.3 MBH	Entering DB / WB	85.0 / 69.4 °F
Latent coil load	3.1 MBH	Leaving DB / WB	61.1 / 56.5 °F
Coil CFM @ 1000	643 CFM	Coil RSP	6.1 ft/s
Max zone CFM	643 CFM	System Factor	0.100
Sum of peak zone CFM	643 CFM	Reheating RH	92 %
Reheating heat rate	112.7 Btu/hr	Design supply temp	58.0 °F
CFM/Ton	214.3	Zone Total Check	1.4 F1 OK
BTU/hr-Ton	9.6	Max zone temperature deviation	0.0 °F
Water flow @ 10.0 °F rise	56.0 GPM		

**Central Heating Coil Sizing Data**

Max coil load	15.0 MBH	Load occurs at	Dec 1100
Coil CFM @ 20.0 °F drop	643 CFM	OA DB / WB	37.0 / 20.0 °F
Max coil CFM	643 CFM	Ent. DB / Log DB	49.9 / 75.6 °F
Water flow @ 20.0 °F drop	NA		

**Supply Fan Sizing Data**

Actual max CFM	643 CFM	Fan motor BHP	0.03 BHP
Standard CFM	620 CFM	Fan motor kW	0.02 kW
Actual max CFM/FP	1.61 CFM/FP	Fan static	0.20 in wg

**Outdoor Ventilation Air Data**

Design airflow CFM	300 CFM	CFM/person	37.50 CFM/person
CFM/FP	0.75 CFM/FP		

Hourly Analysis Program 5.10 Page 1 of 7

**Air System Sizing Summary for 03.RTU-03**

Project Name: 2.2.894.John Fullall Cafe  
Prepared By: BCE

**Air System Information**  
 Air System Name: 03.RTU-03  
 Equipment Class: PKG ROOF  
 Air System Type: SDCAV  
 Number of zones: 1  
 Floor Area: 340.0 ft²  
 Location: Austin, Texas

**Sizing Calculation Information**  
 Calculation Months: Jan to Dec  
 Sizing Date: Calculated  
 Zone CFM Sizing: Sum of space airflow rates  
 Space CFM Sizing: Individual peak space loads

**Central Cooling Coil Sizing Data**

Total coil load	1.5 Tons	Load occurs at	Aug 1000
Total coil load	18.2 MBH	OA DB / WB	87.4 / 73.8 °F
Sensible coil load	16.3 MBH	Entering DB / WB	85.9 / 69.4 °F
Latent coil load	1.9 MBH	Leaving DB / WB	62.0 / 57.2 °F
Coil CFM @ 1000	600 CFM	Coil RSP	6.0 ft/s
Max zone CFM	600 CFM	System Factor	0.100
Sum of peak zone CFM	600 CFM	Reheating RH	92 %
Reheating heat rate	107.0 Btu/hr	Design supply temp	58.0 °F
CFM/Ton	400.0	Zone Total Check	1.4 F1 OK
BTU/hr-Ton	12.6	Max zone temperature deviation	0.0 °F
Water flow @ 10.0 °F rise	53.4 GPM		

**Central Heating Coil Sizing Data**

Max coil load	10.0 MBH	Load occurs at	Dec 1100
Coil CFM @ 20.0 °F drop	600 CFM	OA DB / WB	37.0 / 20.0 °F
Max coil CFM	600 CFM	Ent. DB / Log DB	55.2 / 79.8 °F
Water flow @ 20.0 °F drop	NA		

**Supply Fan Sizing Data**

Actual max CFM	600 CFM	Fan motor BHP	0.03 BHP
Standard CFM	590 CFM	Fan motor kW	0.02 kW
Actual max CFM/FP	1.79 CFM/FP	Fan static	0.20 in wg

**Outdoor Ventilation Air Data**

Design airflow CFM	200 CFM	CFM/person	28.57 CFM/person
CFM/FP	0.59 CFM/FP		

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**Air System Design Load Summary for 01.RTU-01**

Project Name: 2.2.894.John Fullall Cafe  
Prepared By: BCE

ZONE LOADS	DESIGN COOLING			DESIGN HEATING		
	Details	Sensible (BTU/hr)	Latent (BTU/hr)	Details	Sensible (BTU/hr)	Latent (BTU/hr)
Window & Slight Solar Loads	507 Btu/hr	831	527	0 Btu/hr	0	0
Wall Transmission	249 Btu/hr	509	249	0 Btu/hr	1697	0
Roof Transmission	900 Btu/hr	2988	900	0 Btu/hr	1350	0
Window Transmission	507 Btu/hr	4426	507	0 Btu/hr	10267	0
Slight Transmission	0 Btu/hr	0	0	0 Btu/hr	0	0
Door Loads	0 Btu/hr	0	0	0 Btu/hr	0	0
Floor Transmission	900 Btu/hr	0	900	0 Btu/hr	0	0
Furniture	0 Btu/hr	0	0	0 Btu/hr	0	0
Ceiling	0 Btu/hr	0	0	0 Btu/hr	0	0
Overhead Lighting	720 W	2493	0	0 W	0	0
Task Lighting	0 W	0	0	0 W	0	0
Electric Equipment	300 W	1026	0	0 W	0	0
People	63	14483	7560	0	0	0
Infiltration	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0
Safety Factor	0%	1716	276	0%	420	0
>> Total Zone Loads		36993	7938		14336	0
Zone Conditioning		30000	7038		13848	0
Plenum Wall Load	0%	0	0	0	0	0
Plenum Roof Load	0%	0	0	0	0	0
Plenum Lighting Load	0%	0	0	0	0	0
Return Fan Load	2058 CFM	0	2058 CFM	0	0	0
Ventilation Load	900 CFM	10987	6423	900 CFM	4234	0
Supply Fan Load	2058 CFM	254	0	2058 CFM	-254	0
Space Fan Coil Fans	0%	0	0	0%	0	0
Duct Heat Gain / Loss	0%	0	0	0%	0	0
>> Total System Loads		34898	13361		5979	0
Central Cooling Coil		54956	13366		4166	0
Central Heating Coil		54956	13366		4166	0
>> Total Conditioning		54956	13366		4166	0

Key: Positive values are cog loads Negative values are big loads

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**Air System Design Load Summary for 02.RTU-02**

Project Name: 2.2.894.John Fullall Cafe  
Prepared By: BCE

ZONE LOADS	DESIGN COOLING			DESIGN HEATING		
	Details	Sensible (BTU/hr)	Latent (BTU/hr)	Details	Sensible (BTU/hr)	Latent (BTU/hr)
Window & Slight Solar Loads	0 Btu/hr	0	0	0 Btu/hr	0	0
Wall Transmission	439 Btu/hr	1159	439	0 Btu/hr	709	0
Roof Transmission	0 Btu/hr	0	0	0 Btu/hr	0	0
Window Transmission	0 Btu/hr	0	0	0 Btu/hr	0	0
Slight Transmission	0 Btu/hr	0	0	0 Btu/hr	0	0
Door Loads	0 Btu/hr	0	0	0 Btu/hr	0	0
Floor Transmission	400 Btu/hr	0	400	0 Btu/hr	0	0
Furniture	0 Btu/hr	0	0	0 Btu/hr	0	0
Ceiling	0 Btu/hr	0	0	0 Btu/hr	0	0
Overhead Lighting	320 W	1062	0	0 W	0	0
Task Lighting	0 W	0	0	0 W	0	0
Electric Equipment	200 W	684	0	0 W	0	0
People	8	1843	960	0	0	0
Infiltration	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0
Safety Factor	0%	546	48	0%	80	0
>> Total Zone Loads		11683	1098		744	0
Zone Conditioning		11598	1098		848	0
Plenum Wall Load	0%	0	0	0	0	0
Plenum Roof Load	0%	0	0	0	0	0
Plenum Lighting Load	0%	0	0	0	0	0
Return Fan Load	643 CFM	0	643 CFM	0	0	0
Ventilation Load	300 CFM	6841	3181	300 CFM	1489	0
Supply Fan Load	643 CFM	79	0	643 CFM	-79	0
Space Fan Coil Fans	0%	0	0	0%	0	0
Duct Heat Gain / Loss	0%	0	0	0%	0	0
>> Total System Loads		18227	4166		18077	0
Central Cooling Coil		18227	4166		15264	0
Central Heating Coil		0	0		15077	0
>> Total Conditioning		18227	4166		15264	0

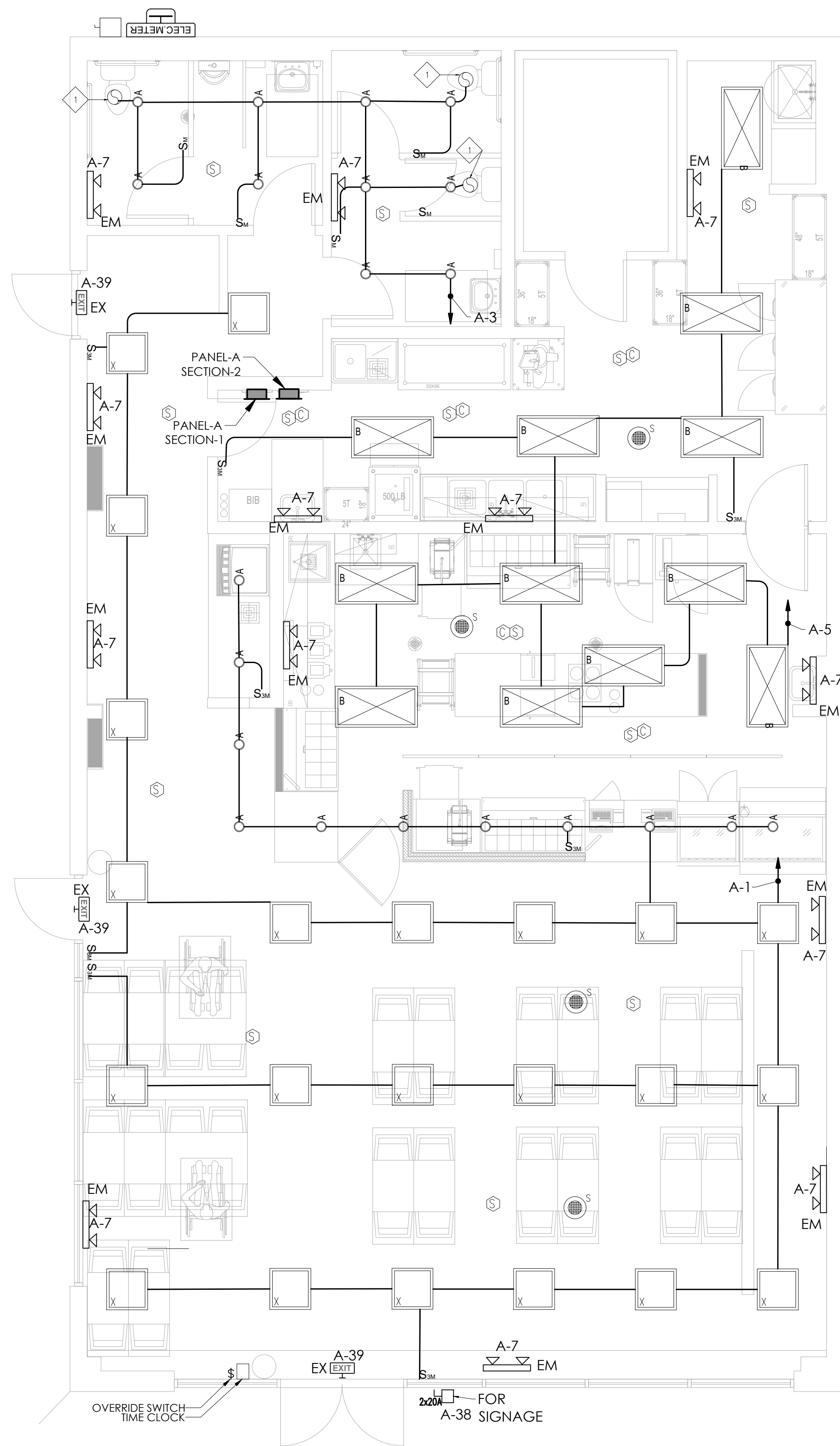
Key: Positive values are cog loads Negative values are big loads

Hourly Analysis Program 5.10 Page 3 of 7

**Air System Design Load Summary for 03.RTU-03**

Project Name: 2.2.894.John Fullall Cafe  
Prepared By: BCE

ZONE LOADS	DESIGN COOLING			DESIGN HEATING		
	Details	Sensible (BTU/hr)	Latent (BTU/hr)	Details	Sensible (BTU/hr)	Latent (BTU/hr)
Window & Slight Solar Loads	0 Btu/hr	0	0	0 Btu/hr	0	0
Wall Transmission	0 Btu/hr	0	0	0 Btu/hr	0	0
Roof Transmission	330 Btu/hr	1000	330	0 Btu/hr	0	0
Window Transmission	0 Btu/hr	0	0	0 Btu/hr	0	0
Slight Transmission	0 Btu/hr	0	0	0 Btu/hr	0	0
Door Loads	0 Btu/hr	0	0	0 Btu/hr	0	0
Floor Transmission	340 Btu/hr	0	340	0 Btu/hr	0	0
Furniture	0 Btu/hr	0	0	0 Btu/hr	0	0
Ceiling	0 Btu/hr	0	0	0 Btu/hr	0	0
Overhead Lighting	270 W	900	0	0 W	0	0
Task Lighting	0 W	0	0	0 W	0	0
Electric Equipment	200 W	684	0	0 W	0	0
People	7	1610	840	0	0	0
Infiltration	0	0	0	0	0	0
Miscellaneous	0	0	0	0	0	0
Safety Factor	0%	119	42	0%	60	0
>> Total Zone Loads		10997	882		631	0
Zone Conditioning		10929	882		600	0
Plenum Wall Load	0%	0	0	0	0	0
Plenum Roof Load	0%	0	0	0	0	0
Plenum Lighting Load	0%	0	0	0	0	0
Return Fan Load	600 CFM	0	600 CFM	0	0	0
Ventilation Load	200 CFM	4262	2000	200 CFM	549	0
Supply Fan Load	600 CFM	75	0	600 CFM	-75	0
Space Fan Coil Fans	0%	0	0	0%	0	0
Duct Heat Gain / Loss	0%	0	0	0%	0	0
>> Total System Loads		15264	2900		10016	0
Central Cooling Coil		15264	2900		15264	0
Central Heating Coil		0	0		10016	

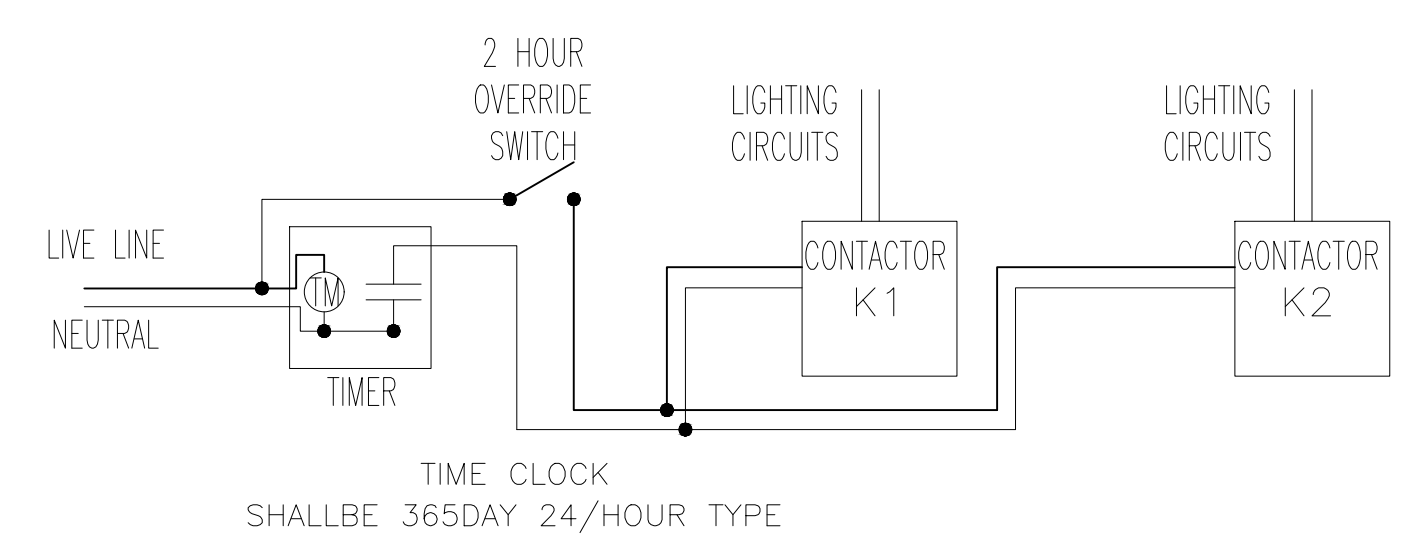


### ELECTRICAL LEGEND

- CONTECH LIGHTING: RF6-L-1-30K-C-G-WHT  
6" RECESSED DOWNLIGHT - 15W LED 1000 LUMENS - TRIM SHALL BE WHITE
- EXISTING 2' X 2' LIGHT FIXTURES  
LPT-22-232U-SAID-EB2-UNV (2) FBO32/841 US ECO 32 W
- MAXLITE: MLVT-24-D-30W-CS, ORDER CODE 104867  
2X4LAY - 1 IN LED PANEL - 30W - TRIM SHALL BE WHITE
- JUNCTION BOX FOR EXHAUST FANS
- DIMMER
- OCCUPANCY SENSOR
- ONE WAY LIGHTING SWITCH
- TWO WAYS LIGHTING SWITCH
- EMERGENCY LIGHTING WALL MOUNTED WITH INTERNAL BACK UP BATTERY WITH MINIMUM 90 MINS AUTONOMY
- EXIT SIGN WALL MOUNTED WITH INTERNAL BACK UP BATTERY WITH MINIMUM 90 MINS AUTONOMY
- SELF CONTAINED SMOKE/CARBON MONOXIDE (120 W/BATTERY BACKUP) - CEILING MOUNTED
- SELF CONTAINED SMOKE/CARBON MONOXIDE (120 W/BATTERY BACKUP) - CEILING MOUNTED

Lighting Fixture Schedule:							Total (W)	1,420.74
Symbol	Number	Type	Make	Model	Wattage	Unit	Quantity	Subtotal (W)
	A	SPOT LIGHT	CONTECH	RF6-L-1-30K-C-G-WHT	16	W	6"	336.00
	X	2X2 LED LIGHT	H.E WILLIAMS INC	LPT-22-232U-SAID-EB2-UNV	32	W	FBO32/842 US ECO 32W FINISH WHT - LENS-SMOOTH SIDE DOWN-QHEL LOW POWER FACTOR BALLAST	704.00
	B	2X4 LED LIGHT	MAXLITE	MLVT-24-D30W-CS	30	W	ORDER CODE 104667 2x4LAY IN LED PANEL SHALL BE WHITE	360.00
	EM	Emergency with Battery	Lithonia	EU2C M6	0.56	W	Wall mounted emergency light. Dual LED heads with test switch indicator. 120-277V/60Hz. 0.56W	7.84
	EX	Exit Sign	Lithonia	LHQM LED R M6	4.3	W	LED Exit/Unit Combo Red Letters, White. Equipped test switch and status indicator.120/277V. 60Hz. 4.3W	12.90

SHEET NOTES:  
 PROVIDE HEAVY DUTY JUNCTION BOX, FLUSH IN CEILING (OR WALL) FOR EXHAUST FANS



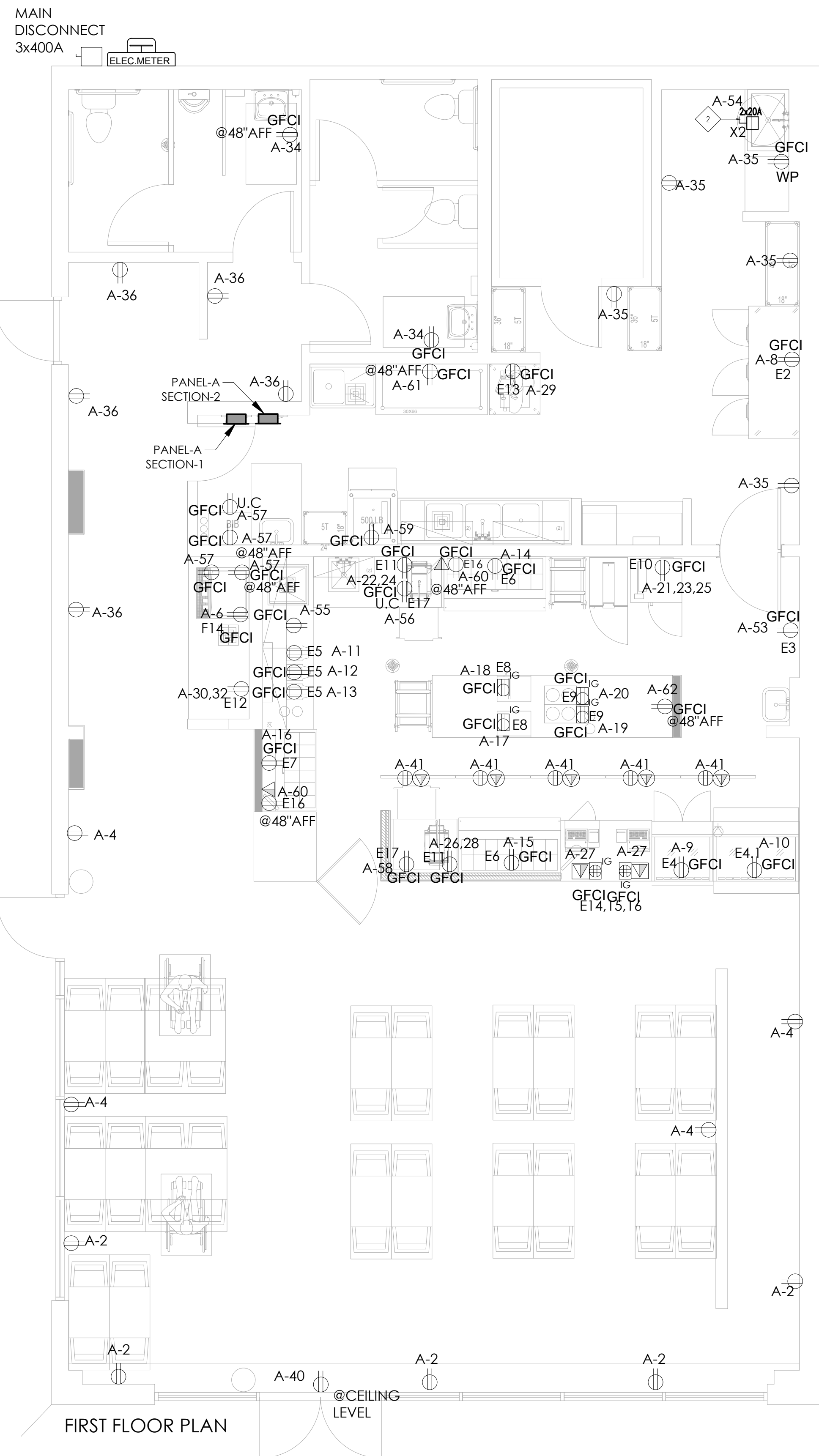
THE MAXIMUM SETTING FOR THE OVERRIDE CONTROL SHALL NOT EXCEED 2HOURS.

FRULLATI CAFE  
 STORE: 2271  
 730 HOPKINS STREET, UNIT 100  
 SAN MARCOS, TX 78666

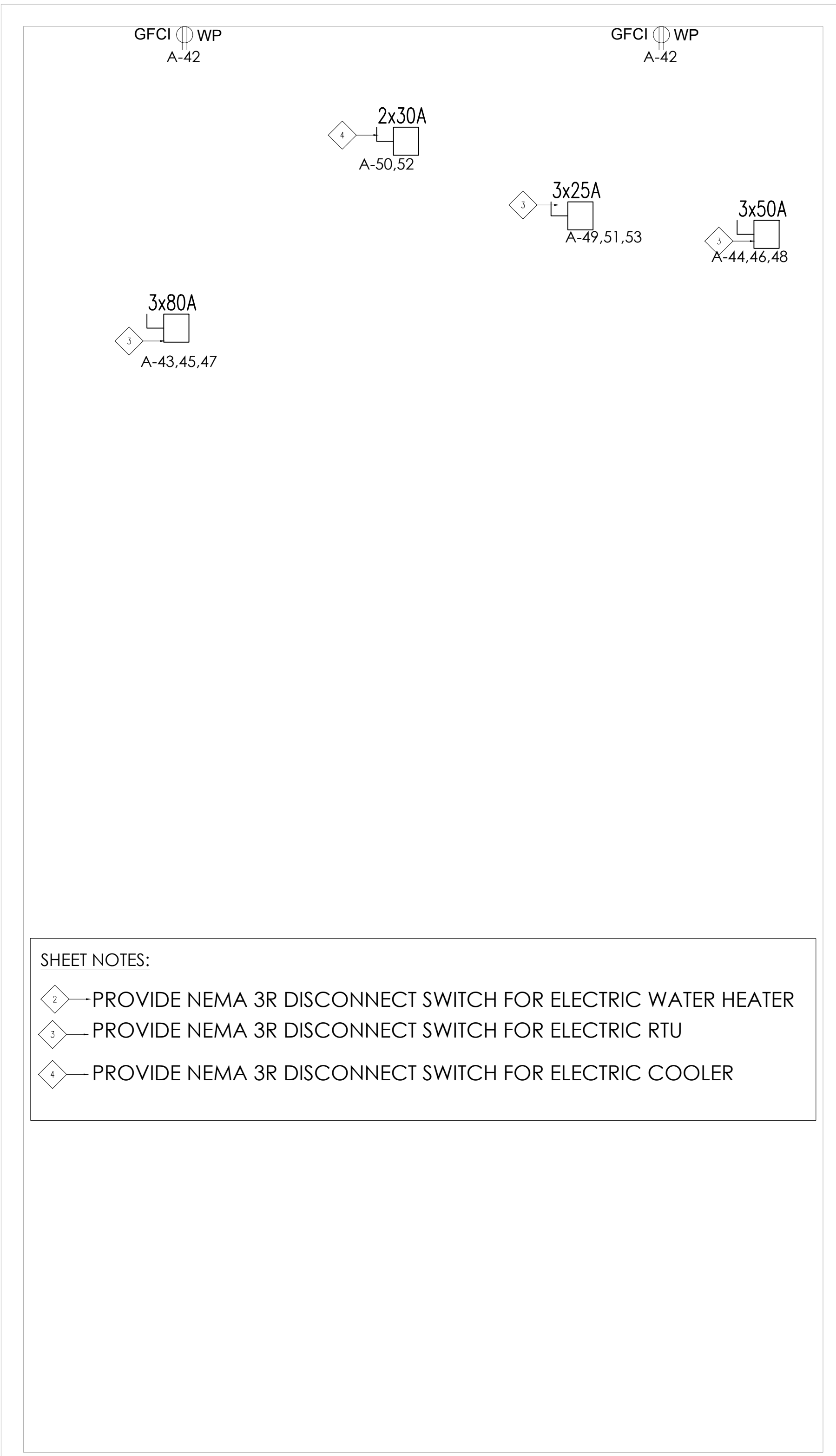
### LIGHTING LAYOUT

Drawn By: A.B      Scale: 1/4" = 1'-0"  
 Date: 10.23.2023      PROJ.NO.:

## E2.01



FIRST FLOOR PLAN



ROOF PLAN

SHEET NOTES:  
 2 → PROVIDE NEMA 3R DISCONNECT SWITCH FOR ELECTRIC WATER HEATER  
 3 → PROVIDE NEMA 3R DISCONNECT SWITCH FOR ELECTRIC RTU  
 4 → PROVIDE NEMA 3R DISCONNECT SWITCH FOR ELECTRIC COOLER

**ELECTRICAL LEGEND**

- EXX DUPLX RECEPTACLE - WALL MOUNTED @ +18" AFF UNLESS. U.D DENOTES: UNDER COUNTER NOTED GFCI DENOTES: GROUND FAULT PROTECTION EXX DONTES: NUMBER OF EQUIPMENT AS PER EQUIPMENT SCHEDULE
- DUPLX RECEPTACLE - CEILING MOUNTED NOTED GFCI DENOTES: GROUND FAULT PROTECTION EXX DONTES: NUMBER OF EQUIPMENT AS PER EQUIPMENT SCHEDULE
- IG DUPLX RECEPTACLE - FLOOR MOUNTED IG DENOTES: IG TYPE EXX DONTES: NUMBER OF EQUIPMENT AS PER EQUIPMENT SCHEDULE
- IG QUADRIPLEX RECEPTACLE - FLOOR MOUNTED IG DENOTES: IG TYPE EXX DONTES: NUMBER OF EQUIPMENT AS PER EQUIPMENT SCHEDULE
- IG QUADRIPLEX RECEPTACLE - WALL MOUNTED @ +18" AFF UNLESS NOTED GFCI DENOTES: GROUND FAULT PROTECTION
- YxXXA NON-FUSED DISCONNECT SWITCH - SIZE AS INDICATED
- PC DAYLIGHT SENSOR TO CONTROL LUMINARIES IN DAYLIGHT ZONE
- J WALL MOUNTED ELECTRIC JUNCTION BOX
- FLOOR MOUNTED CAT6 RJ45 DATA SOCKET
- CEILING MOUNTED CAT6 RJ45 DATA SOCKET
- WALL MOUNTED CAT6 RJ45 DATA SOCKET

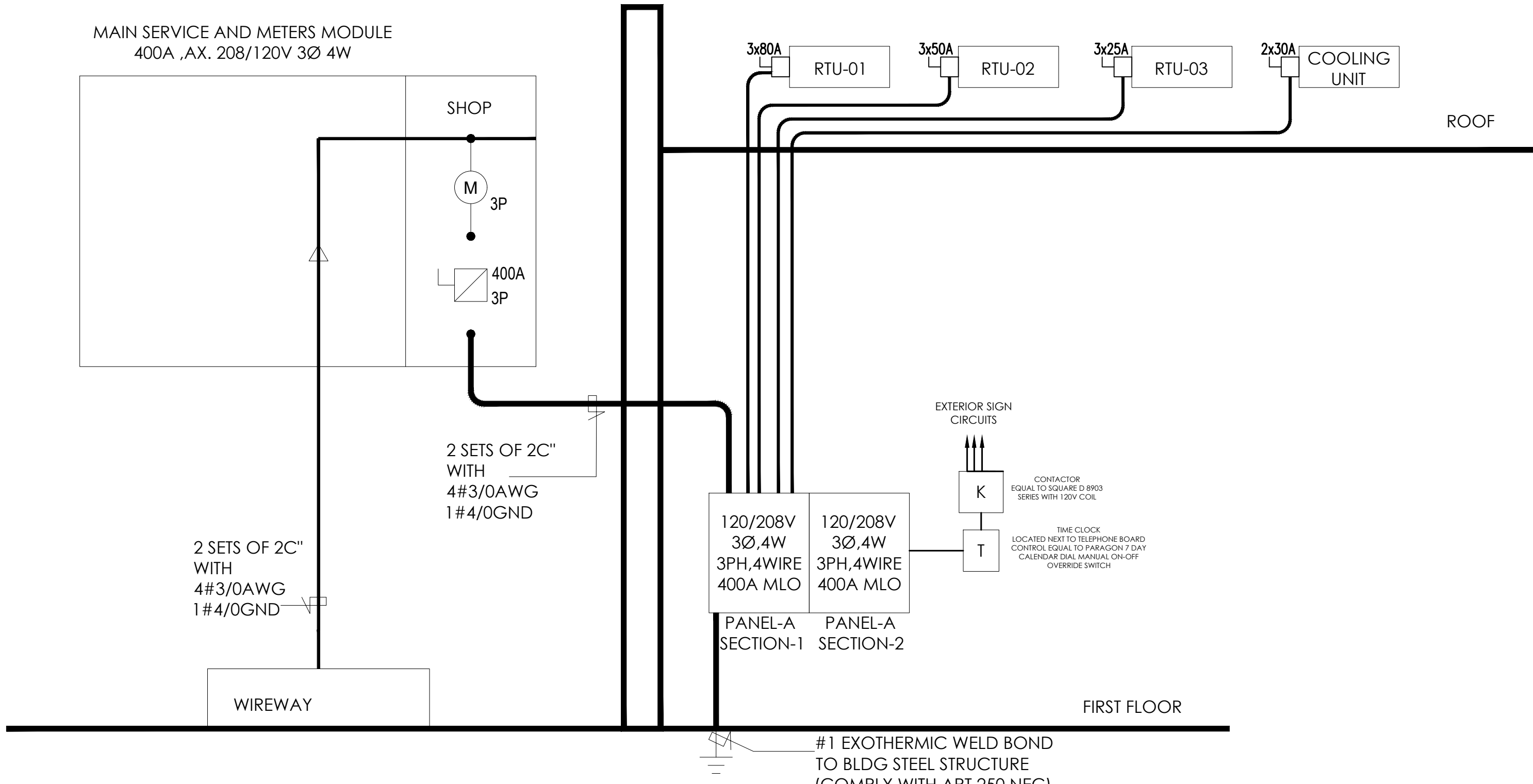
EQUIPMENT NUMBER	DESCRIPTION	QTY	MODEL NUMBER	BRAND	LOAD
F14	FOUNTAIN MACHINE/ICE BIN	1	FOUNTAIN DROP IN DISPENSER 8V	COCA COLA	120V, 20A, 1PH
E2	REACH IN FREEZER	1	T-72F-HC	TRUE MANUF	120V, 14A, 1PH
E3	NON REFRIGERATED DISPLAY CASE	1	TBD	TBD	120V, 4A, 1PH
E4	REFRIGERATED DISPLAY CASE	1	CGR3642	FEDERAL INDUSTRIES	120V, 9A, 1PH
E4.1	DRY DISPLAY CASE	1	CDG5042	FEDERAL INDUSTRIES	120V, 1.5A, 1PH
E5	BLENDERS	3	STEAL TH 875	BLENDTEC	120V, 15A, 1PH
E6	60" REFRIGATED PREP TABLE	2	TSSU-60-16D-4-ADA	TRUE MFG.	120V, 6.5A, 1PH
E7	48" REFRIGATED PREP TABLE	1	TSSU-48-18M-B-HC	TRUE MFG.	120V, 4.3A, 1PH
E8	MICROWAVE	2	RM-S10DS	AMANA	120V, 13A, 1PH
E9	SOUP WARMER	2	6120 A-CW	NEMCO	120V, 8.4A, 1PH
E10	CONVECTION OVEN	1	CTB	BLODGETT	220V, 25A, 3PH
E11	SANDWICH PRESS	2	GR14IE	STAR MFG.	220V, 15A, 1PH
E12	COFFE BREWER	1	TBD	TBD	220V, 12.5A, 1PH
E13	SLICER	1	S13	GLOBE	120V, 1A, 1PH
E14	CREDIT CARD MACHINE	2	TBD	TBD	120V, 3A, 1PH
E15	POINT OF SALE	2	TBD	TBD	120V, 3A, 1PH
E16	KIDS SCREEN	2	TBD	TBD	120V, 3A, 1PH
E17	UNDERCOUNTER REFRIGATOR	2	9404-290-DW	RANDELL	120V, 2.5A, 1PH

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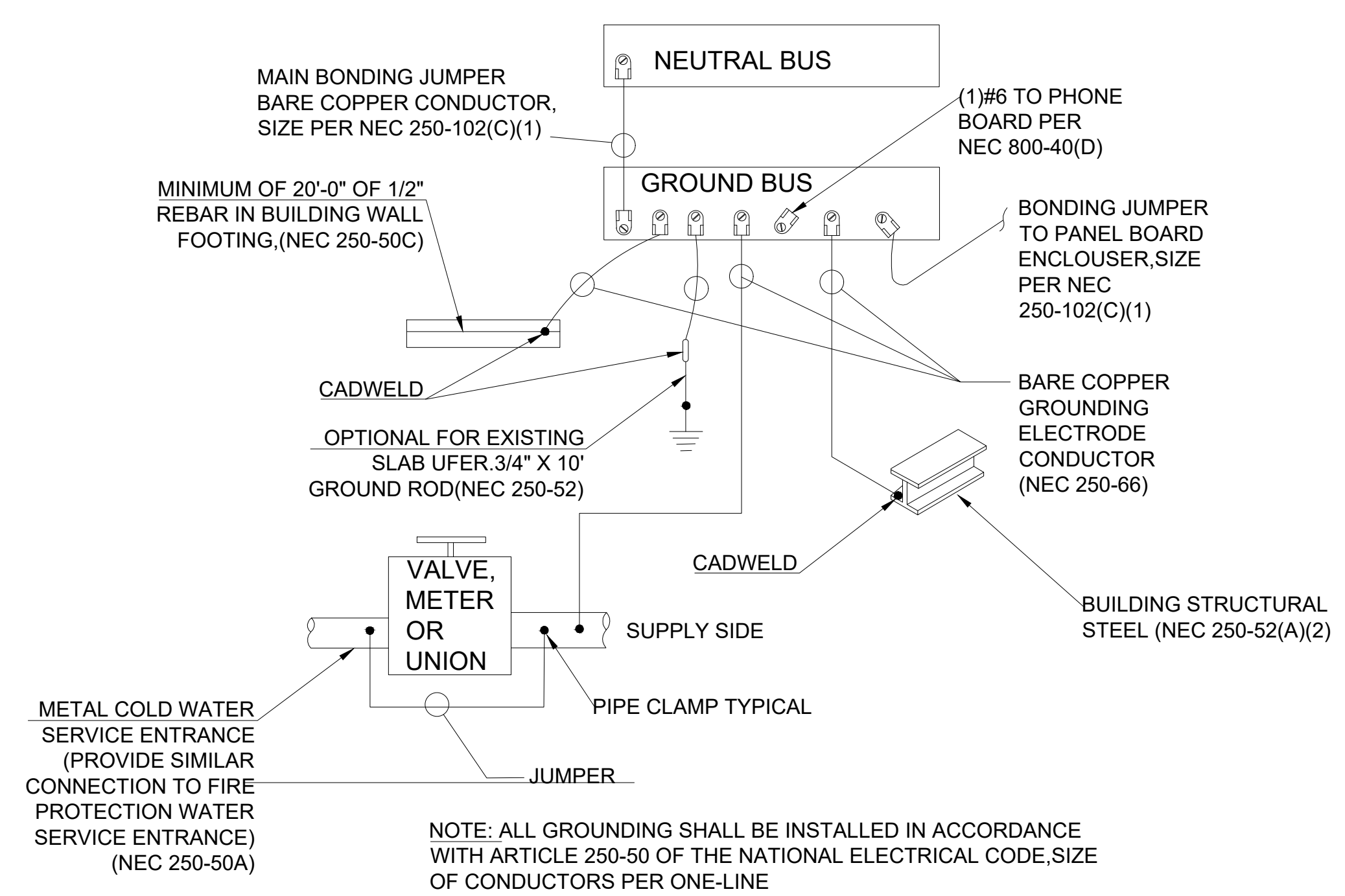
POWER LAYOUT

Drawn By: A.B Scale: 1/4" = 1'-0"  
 Date: 10/23/2023 PROJ.NO.:

E3.01



- ELECTRICAL SINGLE DIAGRAM NOTES:**
- E.C. SHALL ENSURE THE ELECTRIC SERVICE IS PROPERLY BONDED AND GROUNDED PER NEC ARTICLES 230 AND 250
  - CONDUCTORS SIZE ARE BASED ON COPPER CONDUCTORS. E.C. SHALL NOTIFY ENGINEER AND MAKE THE CHANGES IF E.C. USE ALUMINUM CONDUCTORS.
  - REFER TO DWG.2/E200 FOR GROUNDING AND BONDING DETAILS



**GROUNDING DETAIL**

Location: KITCHEN									
* LOAD SUMMARY	CL	DF	CONNECTED LOAD			DEMAND TOTAL	PANELBOARD DESIGNATION		
			A	B	C		SYSTEM VOLTAGE	BUS SIZE	SYSTEM TYPE
L Lighting	2.54	1.25	1.59	0.69	0.36	3.17	208/120V, 3Ø, 4W	400	NORMAL
R Convenience Recept	10.65	0.97	0.90	1.80	7.95	10.33	400A-3P C/B Bus Plug	500kcmil - #2G CU	1
H Heating (Space)	0.50	1.25			0.50	0.63	400A MLO	FULLY RATED	80%
C Cooling		1.00					NO	50	0.430
A HVAC	51.35	1.00	17.80	17.80	15.76	51.35	FEEDER LENGTH (FT)	10	TYPE 1
P Process		1.00					FEEDER V. DROP (%)		
O Other Continuous		1.25					FAULT CURRENT		
K Kitchen	43.83	6.00	16.73	10.84	16.27	28.49	KAIC RATING		
N Noncontinuous		1.00					ENCLOSURE		
M Motor		1.00							
<b>Total</b>	<b>108.87</b>		<b>37.01</b>	<b>31.02</b>	<b>40.84</b>	<b>93.96</b>			

DESCRIPTION	WIRE	GRD	CB	KVA	A	B	C	KVA	CB	WIRE	GRD	DESCRIPTION
1 LIGHTING COSTUMER AREA AND CORRIDOR	L 2x 14 AWG - #14G	-#14G	15A-2P	0.88	1.78		0.90	2.56	20A-1P	2x 12 AWG - #12G	-#12G	COSTUMER AREA SOCKETS 1
3 LIGHTING BATHROOM	L 2x 14 AWG - #14G	-#14G	15A-2P	0.39		1.11	0.72	2.04	20A-1P	2x 12 AWG - #12G	-#12G	COSTUMER AREA SOCKETS 2
5 LIGHTING KITCHENS	L 2x 14 AWG - #14G	-#14G	15A-2P	0.36			2.76	2.40	20A-1P	2x 12 AWG - #12G	-#12G	ICE BIN
7 EMERGENCY LIGHTING	L 2x 14 AWG - #14G	-#14G	15A-2P	0.01	1.69			1.68	20A-1P	2x 12 AWG - #12G	-#12G	REACH IN FREEZER
9 REFRIGATED DISPLAY CASE	K 2x 12 AWG - #12G	-#12G	20A-1P	1.08	1.26		0.18	2.52	20A-1P	2x 12 AWG - #12G	-#12G	DRY DISPLAY CASE
11 BLENDER 1	K 2x 12 AWG - #12G	-#12G	20A-1P	1.80			3.90	1.80	20A-1P	2x 12 AWG - #12G	-#12G	BLENDER 2
13 BLENDER 3	K 2x 12 AWG - #12G	-#12G	20A-1P	1.80	2.58		0.78	5.16	20A-1P	2x 12 AWG - #12G	-#12G	60" REFRIGATED PREP TABLE 1
15 60" REFRIGATED PREP TABLE 2	K 2x 12 AWG - #12G	-#12G	20A-1P	0.78	1.30		0.52	2.60	20A-1P	2x 12 AWG - #12G	-#12G	48" REFRIGATED PREP TABLE
17 MICROWAVE 1	K 2x 12 AWG - #12G	-#12G	20A-1P	1.50			3.00	1.50	20A-1P	2x 12 AWG - #12G	-#12G	MICROWAVE 2
19 SOUP WARMER 1	K 2x 12 AWG - #12G	-#12G	20A-1P	1.01	2.02	0.54	1.01	4.58	20A-1P	2x 12 AWG - #12G	-#12G	SOUP WARMER 2
21 CONVECTION OVEN	K 3x 8 AWG - #8G	-#8G	40A-3P	3.00			4.65	1.65	20A-2P	3x 12 AWG - #12G	-#12G	SANDWICH PRESS 1
23 CONVECTION OVEN	K 3x 8 AWG - #8G	-#8G	40A-3P	3.00			4.65	1.65	20A-2P	3x 12 AWG - #12G	-#12G	SANDWICH PRESS 2
25 CONVECTION OVEN	K 3x 8 AWG - #8G	-#8G	40A-3P	3.00			4.65	1.65	20A-2P	3x 12 AWG - #12G	-#12G	SANDWICH PRESS 2
27 CASHIER/KIDS SCREEN/POS	K 2x 12 AWG - #12G	-#12G	20A-1P	1.00		2.65	1.65	5.30	20A-1P	2x 12 AWG - #12G	-#12G	COFFEE BREWER
29 SLICER	K 2x 12 AWG - #12G	-#12G	20A-1P	0.12			1.62	1.50	20A-2P	3x 12 AWG - #12G	-#12G	BATHROOM SOCKETS
31 UNDERCOUNTER REFRIGATOR 1	K 2x 12 AWG - #12G	-#12G	20A-1P	0.30	1.80		1.50	3.60	20A-1P	2x 12 AWG - #12G	-#12G	CORRIDOR SOCKETS
33 UNDERCOUNTER REFRIGATOR 1	K 2x 12 AWG - #12G	-#12G	20A-1P	0.30	0.66		0.36	1.32	20A-1P	2x 12 AWG - #12G	-#12G	SIGNAGE
35 GENERAL SOCKETS	R 2x 12 AWG - #12G	-#12G	20A-1P	0.72			1.62	0.90	20A-1P	2x 12 AWG - #12G	-#12G	SHOW WINDOW
37 FIRE ALARM	L 2x 12 AWG - #12G	-#12G	20A-1P	0.20	0.70		0.50	1.40	20A-1P	2x 12 AWG - #12G	-#12G	ROOF RECEPTACLES
39 EXIT LIGHTS	L 2x 14 AWG - #14G	-#14G	15A-2P	0.20	0.38		0.18	0.76	20A-1P	2x 12 AWG - #12G	-#12G	
41 CEILING DIGITAL MONITORS	R 2x 12 AWG - #12G	-#12G	20A-1P	0.90			5.83	4.93	20A-1P	2x 12 AWG - #12G	-#12G	
<b>Total Connected Load</b>				<b>37.01</b>	<b>31.02</b>		<b>36.51</b>					

Location: KITCHEN									
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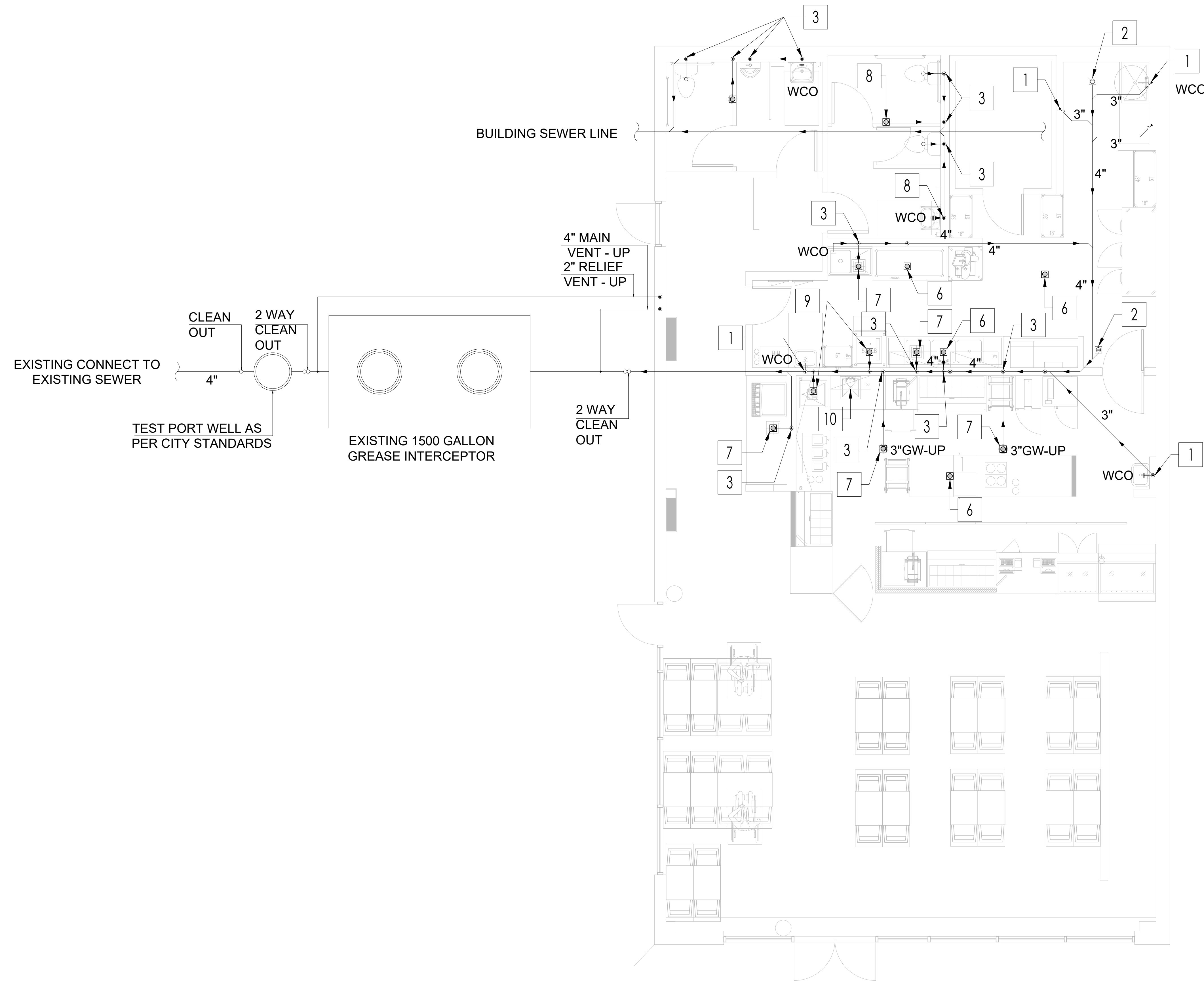
DESCRIPTION	WIRE	GRD	CB	KVA	A	B	C	KVA	CB	WIRE	GRD	DESCRIPTION
43 RTU-01	A 3 4 AWG - #8G	-#8G	80A-3P	8.50	13.43		4.93	26.86	60A-3P	3x 6 AWG - #6G	-#6G	RTU-02
45 RTU-01	A 3 4 AWG - #8G	-#8G	80A-3P	8.50	13.43		4.93	26.86	60A-3P	3x 6 AWG - #6G	-#6G	RTU-02
47 RTU-01	A 3 4 AWG - #8G	-#8G	80A-3P	8.50	13.43		4.93	26.86	60A-3P	3x 6 AWG - #6G	-#6G	RTU-02
49 RTU-03	A 3 10 AWG - #10G	-#10G	25A-3P	2.33	4.37		2.04	8.74	30A-2P	2x 10 AWG - #10G	-#10G	COOLER UNIT
51 RTU-03	A 3 10 AWG - #10G	-#10G	25A-3P	2.33	4.37		2.04	8.74	30A-2P	2x 10 AWG - #10G	-#10G	COOLER UNIT
53 RTU-03	A 3 10 AWG - #10G	-#10G	25A-3P	2.33	4.37		2.04	8.74	30A-2P	2x 10 AWG - #10G	-#10G	COOLER UNIT
55 RECEPTACLES FOR TEA MACHINE	K 2x 12 AWG - #12G	-#12G	20A-1P	0.50	1.00		0.50	2.00	20A-1P	2x 12 AWG - #12G	-#12G	NON REFRIGATED DISPLAY CASE
57 GENERAL SOCKETS	R 2x 12 AWG - #12G	-#12G	20A-1P	0.72		1.22	0.50	2.44	20A-1P	2x 12 AWG - #12G	-#12G	NON REFRIGATED DISPLAY CASE
59 ICE MACHINE	K 2x 12 AWG - #12G	-#12G	20A-1P	1.00			0.50	2.00	20A-1P	2x 12 AWG - #12G	-#12G	KDS SCREEN
61 SMALL APPLIANCES	K 2x 12 AWG - #12G	-#12G	20A-1P	1.50	3.00		1.50	6.00	20A-1P	2x 12 AWG - #12G	-#12G	SMALL APPLIANCES
63 SPACE												SPACE
65 SPACE												SPACE
67 SPACE												SPACE
69 SPACE												SPACE
71 SPACE												SPACE
73 SPACE												SPACE
75 SPACE												SPACE
77 SPACE												SPACE
79 SPACE												SPACE
81 SPACE												SPACE
83 SPACE												SPACE
<b>Total Connected Load</b>				<b>37.01</b>	<b>31.02</b>		<b>36.51</b>					

FRULLATI CAFE  
STORE: 2271  
730 HOPKINS STREET, UNIT 100  
SAN MARCOS, TX 78666

**ELECTRICAL SPECIFICATIONS,**

Drawn By: A.B Scale: NTS  
Date: 10.23.2023 PROJ.NO.:

**E4.01**



- PLUMBING KEYED NOTES**
- 1 → EXISTING WASTE DROP AND 2" VENT RISE.
  - 2 → EXISTING FLOOR CLEAN-OUT.
  - 3 → EXISTING 3" VENT STACK TO ABOVE.
  - 4 → 3" FLOOR DRAIN WITH TRAP PRIMER.
  - 5 → EXISTING GAS WATER HEATER INDIRECT WASTE CONNECTION TO REMAIN UNCHANGED.
  - 6 → CAP & SEAL EXISTING FLOOR DRAIN, TRENCH DRAIN OR FLOOR SINK.
  - 7 → REUSE EXISTING FLOOR SINK FOR EXISTING / NEW EQUIPMENT & FIXTURES.
  - 8 → RELOCATED LAVATORY CONNECTION <3' ON THE SAME WALL.
  - 9 → NEW FLOOR SINK - 12"x12" VENTED AND TRAPPED.
  - 10 → CONNECT THE HANDWASH SINK TO THE NEW ADJACENT FLOOR SINK.

**DRAINAGE FLOOR PLAN** | SCALE 1/4"=1'-0" | 1

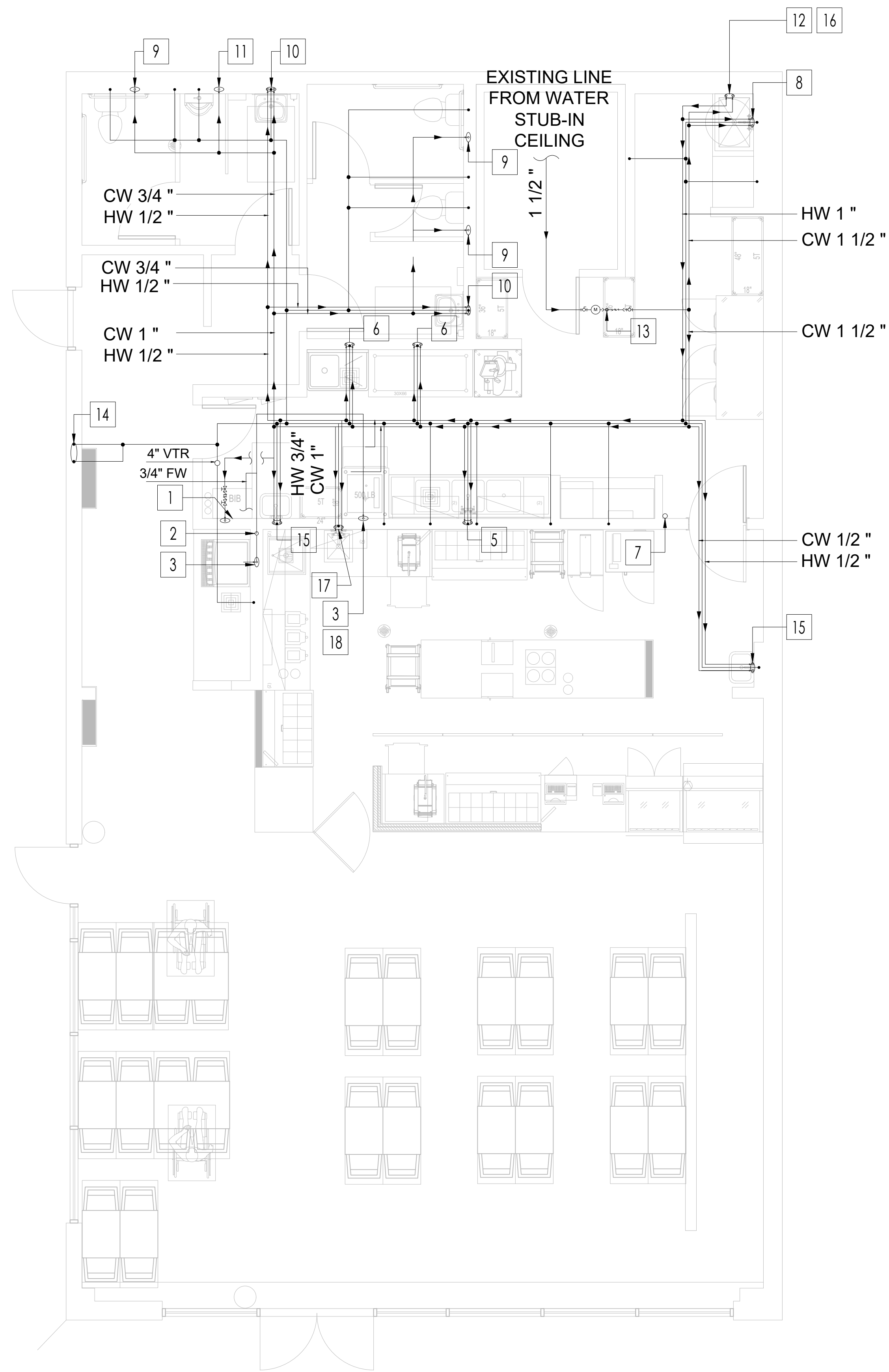
FRULLATI CAFE  
 STORE: 2271  
 730 HOPKINS STREET, UNIT 100  
 SAN MARCOS, TX 78666

LOW LEVEL PLUMBING LAYOUT.

Drawn By: M.F | Scale:  
 Date: 10.11.2023 | PROJ.NO.:

**P 2.00**

SHEET NO.



WATER SUPPLY KEYED NOTES:	
1	3/4" COLD WATER DOWN WATER FILTER. PROVIDE IN-LINE DUAL CHECK BACKFLOW PREVENTER SIMILAR TO WATTS SERIES 1 PRIOR TO FILTER. (RELOCATED)
2	1/2" FILTERED COLD WATER DOWN IN WALL TO BEVERAGE EQUIPMENT. (EXISTING)
3	1/2" FILTERED TAP TO ICE MACHINE (RELOCATED CONNECTION)
4	3/4" COLD WATER AND 140° HOT WATER TO SINK FAUCET.
5	3/4" COLD AND 140° HOT WATER DOWN TO SINK FAUCET.
6	3/4" COLD WATER AND 140° HOT WATER DOWN TO HAND SINK FAUCET.
7	DISCONNECT, CAP & SECURE THE GAS LINE DROPPING FROM THE ROOF.
8	3/4" COLD WATER AND 140° HOT WATER TO MOP SINK FAUCET.
9	1/2" COLD WATER DOWN TO TOILET.
10	1/2" COLD AND 110° HOT WATER DOWN TO LAVATORIES. TYPICAL.
11	3/4" COLD WATER DOWN TO URINAL.
12	1" COLD WATER TO WATER HEATER AND 1" 140° HOT WATER OUTLET.
13	1" DOMESTIC COLD WATER SERVICE INCOMING SERVICE. REDUCED PRESSURE ZONE VALVE ASSEMBLY. (EXISTING)
14	4" GREASE MAIN VENT LINE AND 2" GREASE INTERCEPTOR RELIEF VENT TO CONNECT TOGETHER A MINIMUM OF 6" ABOVE FINISHED FLOOR.
15	1/2" COLD WATER AND 140° HOT WATER DOWN TO HAND SINK FAUCET. (EXISTING)
16	FLUE THRU ROOF FOR WATER HEATER
17	NEW 3/4" COLD WATER AND 140° HOT WATER DOWN TO HAND SINK FAUCET.
18	3/4" RPZA BFP ON CH LINE SERVING ICE MACHINE, WATTS # 55-009-QT-S RUN DRAIN TO NEAREST FLOOR DRAIN OR MOP SINK.

WATER SUPPLY & DRAINAGE VENT PIPING FLOOR PLAN

SCALE 1/4"=1'-0" 1

FRULLATI CAFE

STORE: 2271  
730 HOPKINS STREET, UNIT 100  
SAN MARCOS, TX 78666

HIGH LEVEL PLUMBING LAYOUT.

Drawn By: M.F  
Date: 10.11.2023

Scale:  
PROJ.NO.:

P 3.00

SHEET NO.



Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17] <sup>3</sup>	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.1.1 [FI57] <sup>1</sup>	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.5 [FI16] <sup>3</sup>	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.3 [FI33] <sup>1</sup>	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

**Additional Comments/Assumptions:**

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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