

GENERAL NOTES

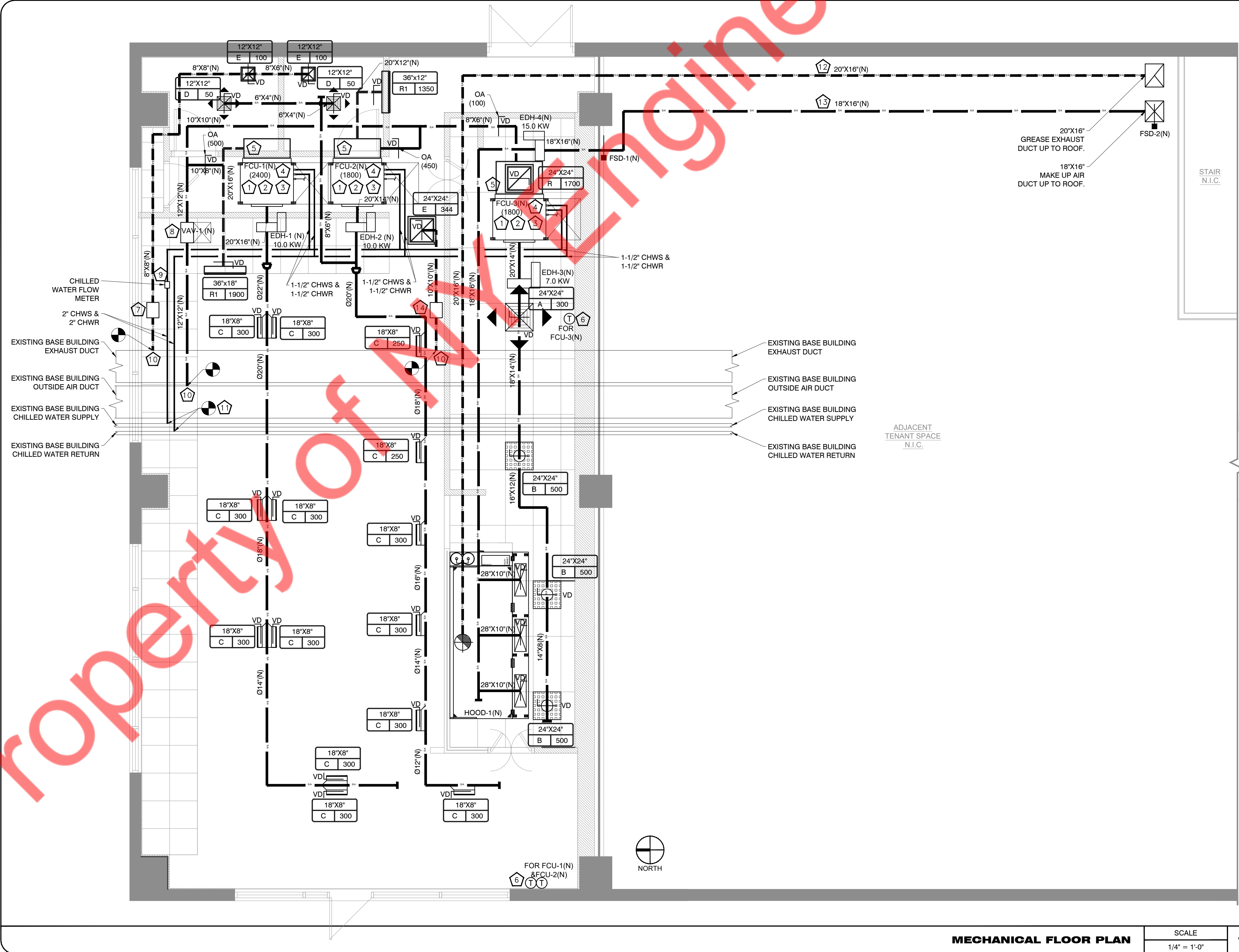
- A. CONTRACTOR SHALL BALANCE EACH DEVICE WITH THE CFM SHOWN ON PLAN.
- B. NEW DUCTWORK SHOWN ON PLAN ARE SCHEMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR PIPING AND DUCTWORK ROUTING, OFFSET AND RUN PIPING, DUCTWORK INSIDE THE STRUCTURE IF REQUIRED, PROVIDE ANY EXTRA PIPING, DUCTWORK, FITTINGS, INSULATIONS AND OTHER ACCESSORIES IN ORDER TO COMPLETE THE INSTALLATION.
- C. COORDINATE LOCATIONS AND SIZES OF INTAKE & EXHAUST OPENINGS WITH OWNER AND RESPECTIVE ENGINEER.
- D. EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
- E. DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
- F. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
- G. CONTRACTOR SHALL COORDINATE EQUIPMENT WEIGHTS AND SUPPORTS BASED ON ACTUAL EQUIPMENT SELECTED.
- H. COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
- I. ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.
- J. MOUNT DUCTWORK AS HIGH AS POSSIBLE.
- K. TEST AND BALANCE AIR SYSTEMS. PROVIDE REPORT TO G.C AND OWNER.
- L. NEW DUCTWORK IN CONCEALED AREAS MAY BE RECTANGULAR WITH EQUIVALENT CROSS SECTIONAL FLOW AREA.
- M. PROVIDE FIRE OR FIRE+SMOKE DAMPER WHEREVER DUCTS ARE CROSSING FIRE/SMOKE RATED WALLS/BARRIERS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR FIRE RATINGS OF THE WALLS.
- N. ARCHITECTURAL LAYOUT AND DIMENSIONS FOR EQUIPMENT TO TAKE PRECEDENCE OVER MEP.
- O. LIMIT FLEXIBLE DUCT LENGTH TO 5 LINEAR FEET. MAKE SURE DUCT IS FULLY STRETCHED OUT WITH NO KINKS & SHARP BENDS.
- P. PROVIDE CORD OPERATED DAMPER IN INACCESSIBLE CEILING.
- Q. PROVIDE INTERNAL INSULATION FOR ALL EXPOSED DUCTWORK AND EXTERNAL FOR ALL DUCTWORK IN CONCEALED AREAS.

KEYED NOTES

1. CHILLED WATER FAN COIL UNIT SUSPENDED FROM STRUCTURE. COORDINATE EXACT LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION. CONNECT SUPPLY AND RETURN DUCT TO FULL SIZE OF FAN COIL UNIT SUPPLY AND RETURN CONNECTION WITH FLEXIBLE CONNECTION AT UNIT.
2. PROVIDE SECONDARY DRAIN PAN UNDER FAN COIL UNIT WITH WATER LEAKAGE SENSOR AND ALARM TO SHUT DOWN THE UNIT.
3. CONNECT 1" CONDENSATE DRAIN LINES FROM FAN COIL UNITS TO THE NEAREST PLUMBING DRAIN IN AN APPROVED MANNER. INSTALL CONDENSATE DRAIN WITH 1% SLOPE TOWARD SINK. CONDENSATE DRAIN LINE SHALL BE OF COPPER PIPE. COPPER PIPE SHALL BE INSULATED AS PER REQUIRED AS PER LOCAL CODE.
4. PROVIDE ISOLATION VALVE AT INLET AND OUTLET OF FCU AND MANUFACTURER RECOMMENDED VALVE FITTING. COORDINATE WITH ELECTRICAL CONTRACTOR FOR ANY POWER REQUIREMENT AS/IF REQUIRED.
5. PROVIDE TEMPERATURE SENSORS IN RETURN AIR DUCT AND WIRE BACK TO T-STAT.
6. NEW FULLY DIGITAL 7-DAY PROGRAMMABLE TYPE THERMOSTAT WITH REMOTE SENSING CAPABILITIES, AUTO CHANGE-OVER AND AUTO SET BACK. MOUNT THERMOSTAT AT 4 FT. ABOVE FINISHED FLOOR. THERMOSTAT SERVING THE SAME TEMPERATURE ZONE SHALL BE INTERLOCKED TO PREVENT SIMULTANEOUS HEATING AND COOLING. COORDINATE LOCATION WITH THE OWNER/ARCHITECT.
7. PROVIDE AND INSTALL AUTOMATIC BALANCING DAMPER. BASIS OF DESIGN GREENHECK, MODEL ABD. BALANCE EXHAUST CFM TO 200 CFM.
8. INSTALL VAV BOX AS PER MANUFACTURER RECOMMENDATION. COORDINATE WITH ELECTRICAL CONTRACTOR FOR ELECTRICAL POWER REQUIREMENT. CONTRACTOR TO TIE IN VAV SYSTEM TO BMS SYSTEM FOR ENERGY USE MONITORING AND BILLING. COORDINATE WITH BASE BUILDING FOR BMS LOCATION AND FINAL REQUIREMENT.
9. PROVIDE CHILLED WATER FLOW METER FOR MONITORING ENERGY USAGE AND BILLING. TIE IN WITH BMS SYSTEM FOR CALCULATE TOTAL TONNAGE, KWHR PER MONTH.
10. CONTRACTOR TO CONNECT DUCTWORK TO EXISTING BASE BUILDING DUCTWORK. CONTRACTOR TO COORDINATE FINAL LOCATION OF CONNECTION POINT WITH BASE BUILDING ENGINEER
11. CONTRACTOR TO CONNECT CHILLED WATER SUPPLY AND RETURN LINE TO EXISTING BASE BUILDING CHILLED WATER LINE AND PROVIDE ISOLATION VALVE. COORDINATE WITH BASE BUILDING ENGINEER TO FINAL LOCATION OF CONNECTION POINT.
12. 20"X16" GREASE EXHAUST DUCT ROUTED THROUGH ADJACENT TENANT SPACE. COORDINATE WITH BASE BUILDING ENGINEER FOR DUCT ROUTING. AND PROVIDE 2 HOUR SHAFT ENCLOSURE AROUND THE DUCTWORK.
13. 18"X16" MAKE UP AIR DUCT ROUTED THROUGH ADJACENT TENANT SPACE. COORDINATE WITH BASE BUILDING ENGINEER FOR DUCT ROUTING.
14. PROVIDE AND INSTALL AUTOMATIC BALANCING DAMPER. BASIS OF DESIGN GREENHECK, MODEL ABD. BALANCE EXHAUST CFM TO 344 CFM.

KITCHEN EXHAUST NOTES

- A. PROVIDE CLEAN OUT AT ALL ELBOWS AND BOTTOM OF RISER AND EVERY 15 FEET HORIZONTAL KITCHEN EXHAUST DUCT.
- B. COMMERCIAL KITCHEN GREASE DUCTS SHALL BE DESIGNED FOR THE TYPE-1 OF COOKING APPLIANCE AND HOOD SERVED.
- C. IF NOT PROVIDED FACTORY FABRICATED THEN KITCHEN EXHAUST DUCT SHALL BE CONSTRUCTED OF 0.1046-INCH NO.16 GAUGE STEEL OR 0.0450-INCH NO. 18 STAINLESS STEEL.
- D. JOINTS, SEAMS AND PENETRATIONS OF GREASE DUCTS SHALL BE MADE WITH A CONTINUOUS LIQUID TIGHT WELD OR BRAZE MADE IN THE EXTERNAL SURFACE IF THE DUCT SYSTEMS.
- E. DUCT TO EXHAUST FAN CONNECTIONS SHALL BE FLANGED, GASKETED AND BOLTED TO THE INLET OF THE FAN FOR SIDE-INLET UTILITY FANS APPROVED FLEXIBLE CONNECTIONS MAY BE PROVIDED.
- F. A VIBRATION ISOLATION CONNECTOR FOR CONNECTING A DUCT TO A FAN SHALL CONSIST OF NON-COMBUSTIBLE PACKING IN A METAL SLEEVE JOINT OF APPROVED DESIGN OR SHALL BE A COATED-FABRIC FLEXIBLE DUCT CONNECTOR LISTED AND LABELED FOR THE APPLICATION. VIBRATION ISOLATION CONNECTORS SHALL BE INSTALLED ONLY AT THE CONNECTION OF A DUCT TO A FAN INLET OR OUTLET.
- G. GREASE DUCT BRACING AND SUPPORTS SHALL BE OF NON-COMBUSTIBLE MATERIAL SECURELY ATTACHED TO THE STRUCTURE AND DESIGNED TO CARRY GRAVITY AND SEISMIC LOADS WITHIN THE STREET LIMITATIONS. BOLTS, SCREWS, RIVETS AND OTHER MECHANICAL FASTENERS SHALL NOT PENETRATE DUCT WALLS.
- H. THE CLEANOUTS FOR HORIZONTAL GREASE DUCT SHALL BE LOCATED ON THE SIDE OF THE DUCT WITH THE OPENING NOT LESS THAN 1.5" ABOVE THE BOTTOM OF THE DUCT AND NOT LESS THAN 1" BELOW THE TOP OF THE DUCT.
- I. GREASE DUCT SHALL BE PERMITTED TO BE ENCLOSED IN ACCORDANCE WITH INTERNATIONAL BUILDING CODE REQUIREMENT FOR SHAFT CONSTRUCTION. SUCH GREASE DUCT SYSTEM AND EXHAUST EQUIPMENT SHALL HAVE A CLEARANCE TO COMBUSTIBLE CONSTRUCTION NOT LESS THAN 18 INCHES AND SHALL HAVE A CLEARANCE TO NONCOMBUSTIBLE CONSTRUCTION AND GYPSUM WALLBOARD ATTACHED TO NONCOMBUSTIBLE STRUCTURES OF NOT LESS THAN 6 INCHES.
- J. PROVIDE 2 LAYERS OF 1.5" FIRE WRAP AROUND KITCHEN EXHAUST GREASE DUCTS.
- K. PROVIDE MANUAL PULL STATION IN EGRESS PATH IN CASE OF EMERGENCY FOR SHUTTING OFF HOOD AND FANS.



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PROJECT

PEPPER LUNCH

REVISIONS DATES:

08/26/24	PROJ. COORD.
08/30/24	PROJ. COORD.
09/30/24	BD COMMENTS
09/30/24	LL COMMENTS

ISSUE DATE: 08.14.24
PROJECT #:
DRAWN BY: NYE
CHECKED BY: NYE

HVAC FLOOR & ROOF PLAN

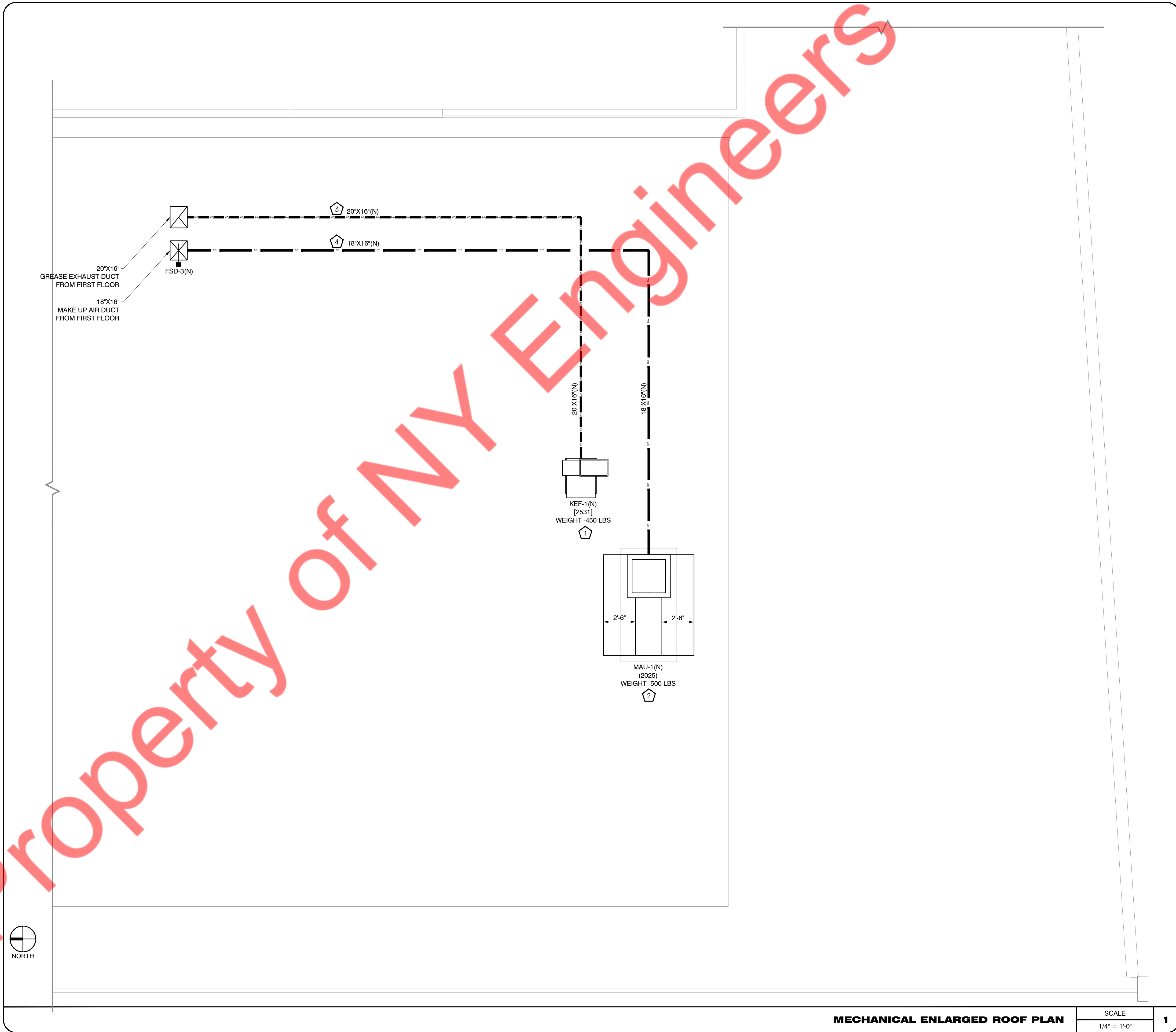
M-2

GENERAL NOTES

- COORDINATE LOCATIONS AND SIZES OF ROOF OPENINGS WITH OWNER AND STRUCTURAL ENGINEERS.
- EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
- CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
- ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.
- TEST AND BALANCE AIR SYSTEMS. PROVIDE REPORT TO GENERAL CONTRACTOR AND OWNER.
- ALL EQUIPMENT WEIGHTS ARE INCLUDING ROOF CURBS AND/OR ADAPTERS.

KEYED NOTES

- CONTRACTOR TO INSTALL KITCHEN EXHAUST FAN ON ROOF WITH REQUIRED ACCESSORIES AND AS PER MANUFACTURER RECOMMENDATION. COORDINATE WITH BASE BUILDING ENGINEER FOR FINAL LOCATION. PROVIDE EXTENDED VERTICAL DUCTWORK ON EXHAUST OUTLET TO MAINTAIN MINIMUM 3 FEET VERTICAL DISTANCE FORM HIGHEST OUTSIDE AIR INTAKE WITH 10 FEET.
- CONTRACTOR TO INSTALL MAKEUP AIR UNIT ON ROOF WITH REQUIRED ACCESSORIES AND AS PER MANUFACTURER RECOMMENDATION. COORDINATE WITH BASE BUILDING ENGINEER FOR FINAL LOCATION.
- 20"X16" GREASE EXHAUST DUCT ON ROOF. COORDINATE WITH BASE BUILDING ENGINEER FOR DUCT ROUTING. AND PROVIDE 2 HOUR SHAFT ENCLOSURE AROUND THE DUCTWORK.
- 18"X16" MAKE UP AIR DUCT ON ROOF. COORDINATE WITH BASE BUILDING ENGINEER FOR DUCT ROUTING.



CAPTIVEAIRE
 New England Office
 400 Cottage Street, Suite A, Springfield, MA 01104 Phone: (413) 263-1800 Fax: (413) 262-7556 Email: nge@captivaire.com
 www.captivaire.com

REV.	REVISION	DATE
1	AS-BUILT	5/13/2024
2	DWG. BY: 0071560	
3	DRAWN BY: MNG -37	
4	SCALE: 3/4" = 1'-0"	
5	MATCH DRAWING:	



SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

ECON-AIR HOODS ARE BUILT IN COMPLIANCE WITH

NFPA #96
NSF
UL 710 & ULCT710 STANDARDS
LISTED 30545H04-001

IMC 2021
SECTIONS 507, 508, & 509

Grease cup will be supported by 2 studs.
Studs must be spaced at least 16 inches apart.
If a drain through a concealed space exists,
and after the recommended cap.

ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TH GRADE 6 (MINIMUM) ALL-THREAD SANDWICH HANGING ANGLES AND CELINGS ANCHOR POINTS WITH 1/2" GRADE 6 MINIMUM STEEL PLAT WASHERS AND 1/2" - 13 TH GRADE 6 MINIMUM HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR POB HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT TORQUE ALL HEX NUTS TO 37 FT.LBS.

ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TH GRADE 6 (MINIMUM) ALL-THREAD SANDWICH HANGING ANGLES AND CELINGS ANCHOR POINTS WITH 1/2" GRADE 6 MINIMUM STEEL PLAT WASHERS AND 1/2" - 13 TH GRADE 6 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT TORQUE ALL HEX NUTS TO 37 FT.LBS.

\$ GREASE DUCT & CHIMNEY SPECIFICATIONS:

- PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW" DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER THE MANUFACTURES INSTALLATION GUIDE.
- PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER MANUFACTURES LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16" PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12".
- DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW" 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

VERIFY CEILING HEIGHT

HEIGHT REQUIRED TO VERIFY THAT HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS

HVAC DISTRIBUTION NOTE

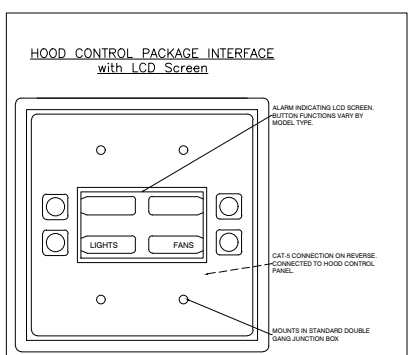
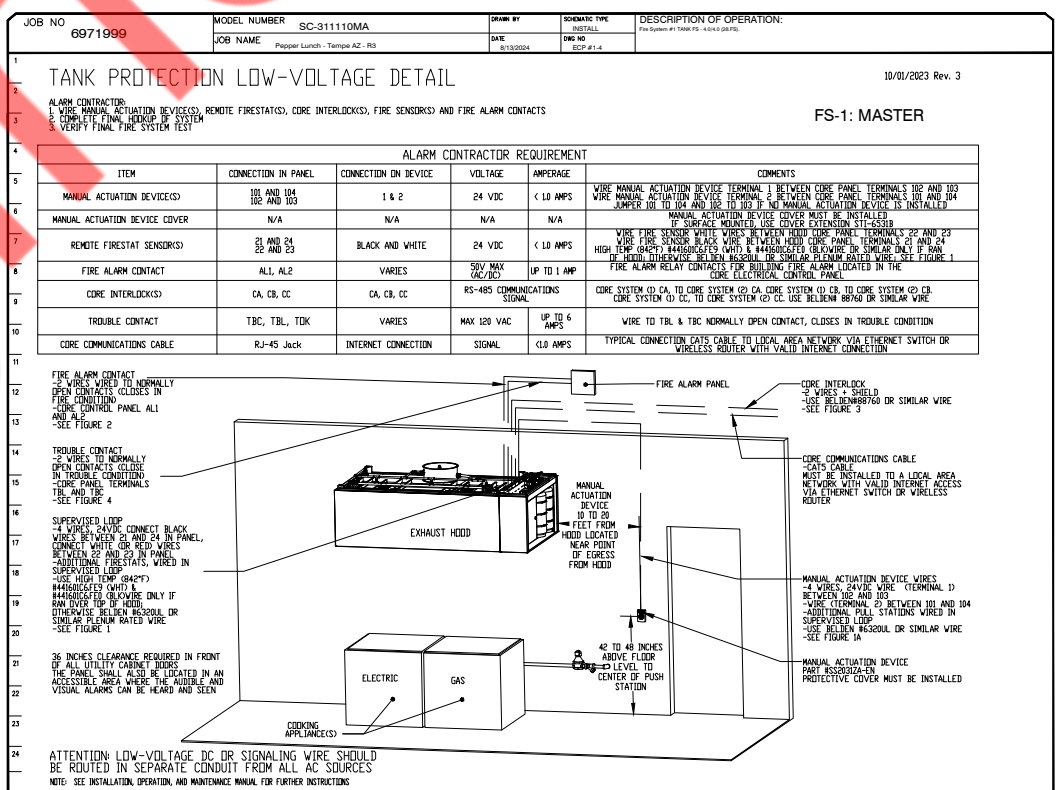
HIGH VELOCITY DIFFUSERS OR HVAC RETURNS SHOULD NOT BE PLACED WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.

SHEET NO.

[illegible][illegible]



DATE:	8/13/2024
DWG.#:	6971999
DRAWN BY:	MRG - 37
SCALE:	3/4" = 1'-0"
MASTER DRAWING	
SHEET NO.	5



REVISIONS	
NO.	DESCRIPTION
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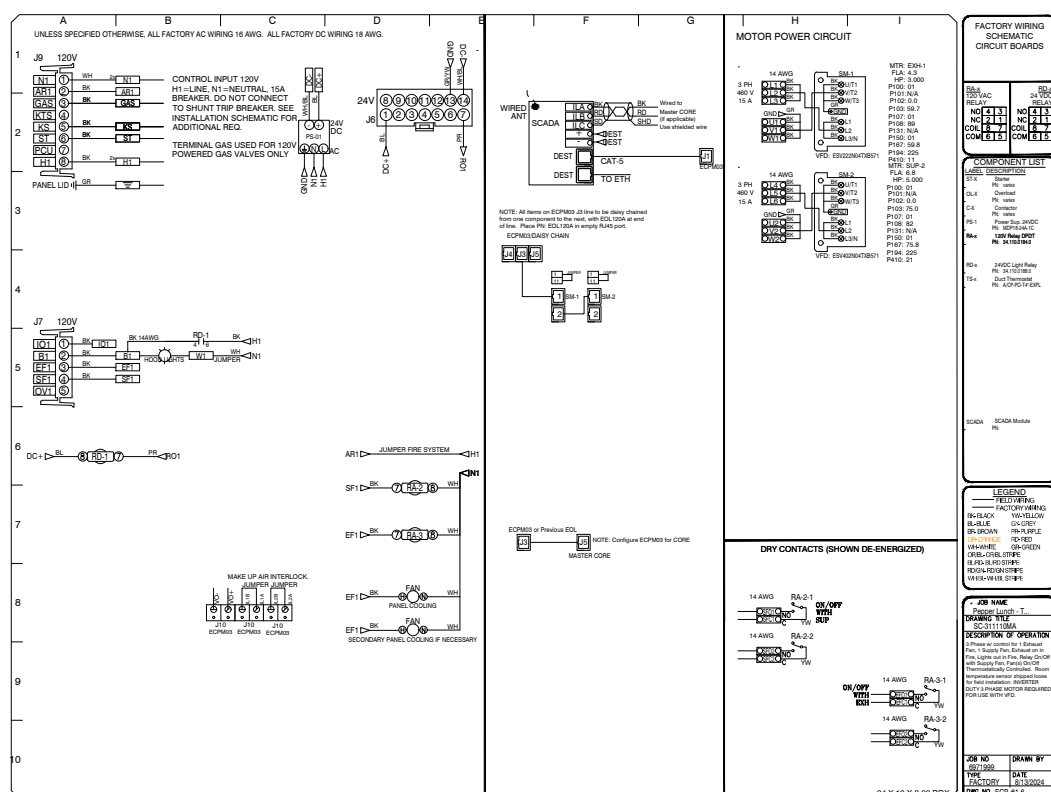


CAPTIVE AIR
INC.



New England Office
www.captiveair.com
405 Cottage Street, Suite 4, Somers, MA 01906-4300 FAX: (508) 994-4300 E-MAIL: info@captiveair.com

DATE: 8/13/2024	DWG.#: 6971909	DRAWN BY: MRG - 37	SCALE: 3/4" = 1" - 0"
MASTER DRAWING			
SHEET NO. 6			

[illegible]

DATE: 8/13/2024
DWG.#: 0971999
DRAWN BY: MRG - 37
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO.

SC- Specification:

The Electrical Package, typically MA, is designed to thermostatically activate the exhaust fans for an exhaust hood whenever elevated temperatures are sensed in the exhaust system. This option will meet the requirements of 2012 IMC 507.2.1.1 & 2015 IMC 507.1.1 by providing a thermostat(s) mounted in the duct or hood riser to sense increased exhaust temperatures.

Controls shall be listed by ETL (UL 508A). The control enclosure shall be NEMA 1 rated and listed for installation inside of the exhaust hood utility cabinet. The control enclosure may be constructed of stainless steel or painted steel.

Temperature probes(s) located in the duct riser shall be constructed of Stainless Steel. A room temperature sensor is also provided for field installation in the kitchen space in order to start the fan(s) based on the temperature differential between the room and the exhaust air in the duct, rather than fixed set-points. The system is factory pre-set to activate the fans at 10 deg F° above the room temperature.

Once the duct temperature reaches the activation point, the exhaust fans will be activated. The controls also provide hysteresis to prevent cycling of the fans after the cooking appliances have been turned off and the heat in the exhaust system is reduced. The hysteresis is factory set 2 degrees and will keep the exhaust running until the temperature falls 2 degrees below the activation set point. A hysteresis timer also exists to keep the fans running for at least 30 min after being activated by the temperature rise.

The activation and hysteresis settings may be field adjusted on the board LCD interface located inside the control enclosure to meet application needs.

The panel is factory configured to shut down supply fans, turn on the exhaust fans and turn off the hood lights in a fire condition.

[illegible]

System Checksums
By Trial

FCU-1(N) & FCU-2(N)

Fan Coil

COOLING COIL PEAK					CLG SPACE PEAK			HEATING COIL PEAK				TEMPERATURES			
Peaked at Time:		Mo/Hr: 8 / 14			Mo/Hr: Sum of			Mo/Hr: Heating Design							
Outside Air:		OADB/WB/HR: 105 / 70 / 53			OADB: Peaks			OADB: 39							
	Space Sens. + Lat.	Plenum Sens. + Lat	Net Total	Percent Of Total	Space Sensible	Percent Of Total		Space Peak	Coil Peak	Percent					
	Btu/h	Btu/h	Btu/h	(%)	Btu/h	(%)		Space Sens	Tot Sens	Of Total					
								Btu/h	Btu/h	(%)					
Envelope Loads							Envelope Loads								
Skylite Solar	0	0	0	0	0	0	Skylite Solar	0	0	0.00	SADB	55.0	90.0		
Skylite Cond	0	0	0	0	0	0	Skylite Cond	0	0	0.00	Ra Plenum	76.1	71.4		
Roof Cond	0	0	0	0	0	0	Roof Cond	0	0	0.00	Return	76.1	71.4		
Glass Solar	8,680	0	8,680	8	18,790	30	Glass Solar	0	0	0.00	Ret/OA	86.0	60.6		
Glass/Door Cond	11,190	0	11,190	10	10,698	17	Glass/Door Cond	-13,074	-13,074	14.23	Fn MtrTD	0.0	0.0		
Wall Cond	1,704	3,084	4,788	4	2,363	4	Wall Cond	-1,044	-3,120	3.40	Fn BldTD	0.0	0.0		
Partition/Door	0	0	0	0	0	0	Partition/Door	0	0	0.00	Fn Frict	0.0	0.0		
Floor	0	0	0	0	0	0	Floor	-2,783	-2,783	3.03					
Adjacent Floor	0	0	0	0	0	0	Adjacent Floor	0	0	0					
Infiltration	4,084	0	4,084	4	4,284	7	Infiltration	-5,125	-5,125	5.58					
Sub Total ==>	25,658	3,084	28,742	27	36,135	58	Sub Total ==>	-22,026	-24,101	26.23					
Internal Loads							Internal Loads								
Lights	4,857	1,214	6,072	6	4,656	7	Lights	0	0	0.00					
People	40,944	0	40,944	38	15,391	25	People	0	0	0.00					
Misc	6,068	0	6,068	6	5,814	9	Misc	0	0	0.00					
Sub Total ==>	51,870	1,214	53,084	50	25,861	41	Sub Total ==>	0	0	0.00					
Ceiling Load	498	-498	0	0	591	1	Ceiling Load	-249	0	0.00					
Ventilation Load	0	0	26,169	25	0	0	Ventilation Load	0	-34,382	37.43					
Adj Air Trans Heat	0	0	0	0	0	0	Adj Air Trans Heat	0	0	0					
Dehumid. Ov Sizing	0	0	0	0	0	0	Ov/Undr Sizing	-34,056	-34,056	37.07					
Ov/Undr Sizing	0	0	0	0	0	0	Exhaust Heat	0	671	-0.73					
Exhaust Heat	0	-1,342	-1,342	-1	0	0	OA Preheat Diff.	0	0	0.00					
Sup. Fan Heat	0	0	0	0	0	0	RA Preheat Diff.	0	0	0.00					
Ret. Fan Heat	0	0	0	0	0	0	Additional Reheat	0	0	0.00					
Duct Heat Pkup	0	0	0	0	0	0	Underflr Sup Ht Pkup	0	0	0.00					
Underflr Sup Ht Pkup	0	0	0	0	0	0	Supply Air Leakage	0	0	0.00					
Supply Air Leakage	0	0	0	0	0	0	Grand Total ==>	-56,331	-91,868	100.00					
Grand Total ==>	78,026	2,458	106,653	100.00	62,587	100.00	Grand Total ==>	-56,331	-91,868	100.00					

AIRFLOWS		
	Cooling	Heating
Diffuser	2,828	2,828
Terminal	2,828	2,828
Main Fan	2,828	2,828
Sec Fan	0	0
Nom Vent	950	950
AHU Vent	950	950
Infil	142	142
MinStop/Rh	0	0
Return	2,969	2,969
Exhaust	1,092	1,092
Rm Exh	0	0
Auxiliary	0	0
Leakage Dwn	0	0
Leakage Ups	0	0

ENGINEERING CKS		
	Cooling	Heating
% OA	33.6	33.6
cfm/ft²	2.00	2.00
cfm/ton	318.14	
ft²/ton	159.32	
Btu/hr·ft²	75.32	-64.88
No. People	92	

COOLING COIL SELECTION										AREAS			HEATING COIL SELECTION						
	Total Capacity		Sens Cap.	Coil Airflow	Enter DB/WB/HR			Leave DB/WB/HR			Gross Total	Glass		Capacity	Coil Airflow	Ent	Lvg		
	ton	MBh	MBh	cfm	°F	°F	gr/lb	°F	°F	gr/lb		ft²	(%)	MBh	cfm	°F	°F		
Main Clg	8.9	106.7	91.7	2,828	86.0	64.5	57.2	55.0	51.7	52.1	Floor	1,416		Main Htg	-91.9	2,828	60.6	90.0	
Aux Clg	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Part	0		Aux Htg	0.0	0	0.0	0.0	
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	Int Door	0		Preheat	0.0	0	0.0	0.0	
Total	8.9	106.7									ExFlr	117		Humidif	0.0	0	0.0	0.0	
											Roof	0	0	0	Opt Vent	0.0	0	0.0	0.0
											Wall	2,000	641	32	Total	-91.9			
											Ext Door	75	75	100					

Project Name:
Dataset Name:

TRACE® 700 v6.3.3 calculated at 04:49 PM on 09/30/2024
Alternative - 1 System Checksums Report Page 1 of 2

NY ENGINEERS

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PROJECT

PEPPER LUNCH

REVISIONS DATES:
08/26/24 PROJ COORD.
08/30/24 PROJ COORD.
09/30/24 BD COMMENTS
09/30/24 LL COMMENTS

ISSUE DATE: 08.14.24
PROJECT #:
DRAWN BY: NYE
CHECKED BY: NYE

HEAT LOAD CALCULATION
(1 OF 2)

M-7

System Checksums
By Trial

FCU-3(N)

Fan Coil

COOLING COIL PEAK					CLG SPACE PEAK			HEATING COIL PEAK			TEMPERATURES		
Peaked at Time:		Mo/Hr: 8 / 14			Mo/Hr: Sum of		Mo/Hr: Heating Design		Mo/Hr: 39		Cooling		Heating
Outside Air:		OADB/WB/HR: 105 / 70 / 53			OADB: Peaks		OADB: 39				SADB	55.0	90.0
											Ra Plenum	75.2	72.0
											Return	75.2	72.0
											Ret/OA	77.1	69.9
											Fn MtrTD	0.0	0.0
											Fn BldTD	0.0	0.0
											Fn Frict	0.0	0.0
Space Sens. + Lat.					Plenum Sens. + Lat		Net Total		Percent Of Total				
Btu/h					Btu/h		Btu/h		Btu/h				
Envelope Loads					Envelope Loads		Envelope Loads		Envelope Loads				
Skylite Solar					0		0		0		0.00		
Skylite Cond					0		0		0		0.00		
Roof Cond					0		0		0		0.00		
Glass Solar					0		0		0		0.00		
Glass/Door Cond					0		0		0		0.00		
Wall Cond					0		0		0		0.00		
Partition/Door					0		0		0		0.00		
Floor					0		0		0		0.00		
Adjacent Floor					0		0		0		0		
Infiltration					1,889		1,889		5		4.87		
Sub Total ==>					1,889		0		1,889		5		
Internal Loads					Internal Loads		Internal Loads		Internal Loads				
Lights					1,620		405		2,025		5		
People					1,403		0		1,403		4		
Misc					30,717		0		30,717		77		
Sub Total ==>					33,740		405		34,145		85		
Ceiling Load					31		-31		0		0		
Ventilation Load					0		0		4,010		10		
Adj Air Trans Heat					0		0		0		0		
Dehumid. Ov Sizing					0		0		0		0		
Ov/Undr Sizing					0		0		0		0		
Exhaust Heat					0		-34		-34		0		
Sup. Fan Heat					0		0		0		0		
Ret. Fan Heat					0		0		0		0		
Duct Heat Pkup					0		0		0		0		
Underflr Sup Ht Pkup					0		0		0		0		
Supply Air Leakage					0		0		0		0		
Grand Total ==>					35,660		340		40,010		100.00		
					34,857		100.00		Grand Total ==>				
					-31,372		-34,991		100.00				

SCOPE OF WORK

1. REUSE THE EXISTING (1) 200A, 277/280V, 3–PHASE, 4–WIRE ELECTRICAL SERVICE FOR PROJECT SPACE FROM THE EXISTING SES3 BOX IN SERVICE ROOM.
2. REUSE EXISTING (1) 200A, 277/280V, 3–PHASE, 4–WIRE ELECTRICAL DISCONNECT SWITCH IN SES3 BOX FOR THE PROJECT SPACE.
3. PROVIDE NEW (1) 200A, 277/280V, 3–PHASE, 4–WIRE ELECTRICAL METER IN EXISTING METER SOCKET IN SES3 BOX FOR THE PROJECT SPACE IF IT IS NOT AVAILABLE METER SOCKET.
4. PROVIDE NEW (1) 200A(M.C.B.), 120/208V, 3–PHASE, 4–WIRE ELECTRICAL PANEL "A". (1) PROVIDE NEW 45 KVA, 3–PHASE PRIMARY 277/480V AND SECONDARY 120/208V CEILING HUNG TRANSFORMER.
5. PROVIDE NEW (1) 100A(M.C.B.), 120/208V, 3–PHASE, 4–WIRE ELECTRICAL PANEL "B".
6. ALL NECESSARY EQUIPMENT, WIRING AND LIGHTING FOR THE PROPOSED SPACE INCLUDING WIRING FOR VENTILATION EQUIPMENT. COORDINATE WITH GC FOR LOW VOLTAGE WIRING.

ELECTRICAL PLAN NOTES

1. ELECTRICAL CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THIS SET.
2. CONTRACTOR TO VERIFY THAT ALL EQUIPMENT SHOWN AS EXISTING MATCHES THE DESCRIPTIONS AND SPECIFICATIONS SHOWN ON DRAWINGS AND SCHEDULES. IF DIFFERENT, NOTIFY ARCHITECT/ENGINEER BEFORE BIDDING, ORDERING, OR PROCEEDING WITH WORK.
3. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW ELECTRICAL WORK INDICATED. CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT, CONTRACTOR SHALL NOTIFY THE OWNER OR HIS REPRESENTATIVE AS SOON AS POSSIBLE AFTER DISCOVERY OF THE PROBLEM AND SHALL NOT PROCEED WITH THAT PORTION OF THE WORK UNTIL OWNER HAS DIRECTED CORRECTIVE ACTION TO BE TAKEN.
4. ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATIONS INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. EXISTING CONDITIONS OF ELECTRICAL EQUIPMENT, LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING HIS BID.
5. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) 2017 AND ORDINANCES OF THE AUTHORITY HAVING JURISDICTION.
6. DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION FOR ALL EQUIPMENT. CONFIRM WITH OWNER'S REPRESENTATIVE.
7. ALL ELECTRICAL NOT BEING REUSED MUST BE REMOVED IN ITS ENTIRETY.
8. ALL CONDUIT IN OR UNDERGROUND OR IN CONCRETE MUST BE RIGID GALVANIZED STEEL.
9. CIRCUIT BREAKERS AND PANELS TO BE BOLT ON TYPE
10. ALL EQUIPMENT SHALL BE APPROVED BY UL OR OTHER NATIONALLY RECOGNIZED TESTING COMPANY.
11. ALL RECEPTACLES SHALL BE GROUNDED AS REQUIRED BY NEC 250.146
12. SUBMIT SERVICE ENTRANCE EQUIPMENT FOR SEPARATE APPROVAL.
13. ALL LOW VOLTAGE MUST BE IN CONDUIT TO ABOVE THE DROP CEILING. BRIDAL RINGS OR "J" HOOKS REQUIRED.
14. SEPARATE PERMITS ARE REQUIRED FOR ALL LOW VOLTAGE SUCH AS TELEPHONE, DATA, THERMOSTAT, MUSIC, ALARMS ETC.
15. SEPARATE PERMIT REQUIRED FOR SIGNAGE.
16. PRIOR TO ANY CONSTRUCTION WORK BEGINNING AN ON–SITE MEETING WITH GENERAL CONTRACTORS IS REQUIRED.
17. ELECTRICIAN MUST BE ON SITE FOR ALL INSPECTIONS.
18. MINIMUM WIRE SIZE SHALL BE #12 A.W.G. EXCLUDING CONTROL WIRING. ALL CONDUCTORS SHALL BE COPPER AND UNLESS OTHERWISE NOTED THHN INSULATION.
19. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, PLASTIC AND CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS, AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
20. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
21. ELECTRICAL SYSTEM SHALL BE COMPLETE AND EFFECTIVELY GROUNDED AS REQUIRED BY THE N.E.C. OR LOCAL CODES.
22. ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABELS WHERE APPLICABLE.
23. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY ENGINEER/ARCHITECT.
24. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
25. ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE THAT CERTIFICATE OF OCCUPANCY IS ISSUED. WARRANTY SHALL BE PROVIDED IN WRITING. PROVIDE COPY TO LL.
26. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
27. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
28. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR TO OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT.
29. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER AND TELEPHONE COMPANIES.
30. CONTRACTOR SHALL COORDINATE WITH MECHANICAL DRAWINGS AND PROVIDE ALL NECESSARY CONTROL WIRING.
31. ALL CIRCUIT BREAKERS FEEDING MECHANICAL EQUIPMENT SHALL BE HACR TYPE CIRCUIT BREAKERS.
32. PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES, DEVICES, ETC. FOR ALL OUTLETS AS INDICATED.
33. MATERIALS, PRODUCTS, AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SUCH AS APPEAR ON THE UL LIST OF APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF N.E.C. NEMA, AND IECE.
34. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR CUT SHEETS OF LIGHTING FIXTURES, SWITCHES, AND OTHER ELECTRICAL ITEMS FOR APPROVAL BY ENGINEER/ARCHITECT.
35. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, PATCHING AND FIRED CAULKING REQUIRED OF HIS WORK.
36. ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS W/TYPE WRITTEN DIRECTORIES.
37. ALL ELECTRICAL AND COMMUNICATIONS OUTLETS TO BE AT 24" A.F.F. UNLESS NOTED OTHERWISE, AND VERTICALLY MOUNTED.
38. ALL LIGHT SWITCHES TO BE AT 42" A.F.F.
39. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. ALL ELECTRICAL WIRING FOR HVAC SYSTEM INCLUDING CONTROLS, THERMOSTATS, POWER, ETC. SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
40. BREAKER AND PANELS — ALL CURRENT CARRYING BUSSES SHALL BE COPPER. ALL GROUND BUS BARS SHALL BE COPPER. PANEL BOARD ENCLOSURES SHALL BE FURNISHED WITHOUT PRE–PUNCHED CONCENTRIC HOLES. A.I.C. RATINGS SHALL BE AS INDICATED ON PANEL BOARD SCHEDULES.
41. DISCONNECT SWITCHES SHALL BE H.P. RATED, GENERAL DUTY, QUICK–MAKE, QUICK–BREAK ENCLOSURES AS REQUIRED BY EXPOSURE.
42. MOTOR STARTERS SHALL BE MANUAL OR MAGNETIC, WITH OVERLOAD RELAYS IN EACH HOT LEG.
43. THE TERM "PROVIDE" USED IN THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS INDICATES THE CONTRACT SHALL FURNISH AND INSTALL.
44. CONTRACTOR SHALL CONFIRM WITH ANY AND ALL REQUIREMENTS SUCH AS: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, TRANSFORMER SIZE, SCHEDULED DOWN TIME FOR OWNERS CONFIRMATION, ETC.. ANY CONFLICTS SHALL BE BROUGHT TO ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK.
45. VOLTAGE DROP FOR ALL BRANCH CONDUCTORS SHALL NOT EXCEED 3%. WHERE VOLTAGE DROP EXCEEDS 3%, CONTRACTOR SHALL INCREASE SIZE OF CONDUCTORS.
46. CONTRACTOR SHALL PROVIDE GFI TYPE BREAKER FOR ALL EXTERIOR 120V CIRCUITS OR GFI PROTECTION — FOR THE WHOLE CIRCUIT.
47. GAS PIPING SHALL BE BONDED.
48. ELECTRICAL CONTRACTOR SHALL COORDINATE SERVICE ENTRY WITH SERVICE PROVIDER PRIOR TO DETERMINING EXACT LOCATION OF THE METER BOX IN ORDER TO AVOID DISCREPANCIES BETWEEN DRAWINGS AND JOB CONDITIONS.
49. ALL OUTDOOR EQUIPMENT SHALL BE WEATHERPROOF.
50. OPERATION MANUALS AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER.
51. ABSOLUTELY NO FLEXIBLE CONDUIT IS PERMITTED IN DEMISING WALLS. FLEXIBLE CONDUIT IS PERMITTED FOR SHORT FINAL CONNECTIONS ONLY (6'–0" OR LESS).
52. EXPOSED CONDUIT SHALL BE INSTALLED IN STRAIGHT LINES, PARALLEL OR IN RIGHT ANGLES TO THE BUILDING STRUCTURE. DO NOT LOOP EXCESS FLEXIBLE CONDUIT IN CEILING SPACE OR WALL CAVITY. NO CONDUIT TO BE SUPPORTED FROM THE ROOF DECK.
53. CABLE TYPES AC AND NM CABLES ARE NOT ACCEPTABLE. TYPE MC CABLE, ELECTRIC METALLIC TUBING (EMT) AND RIGID GALVANIZED CONDUIT ARE PERMITTED.
54. ALL EQUIPMENT, DEVICES AND FIXTURES SHALL BE GROUNDED IN COMPLIANCE WITH NEC AND UL REQUIREMENTS.
55. ALL PANELS TO BE UL LABELED WITH BOLT–ON TYPE CIRCUIT BREAKERS.
56. TENANT IS REQUIRED TO MAKE A FIELD SURVEY OF THE EXISTING ELECTRICAL SERVICE TO ENSURE THAT THE TOTAL CONNECTED LOAD DOES NOT EXCEED THE ELECTRIC SERVICE. ANY/ALL MODIFICATIONS OR UPGRADES NEEDED ARE SUBJECT TO LANDLORD'S PRIOR APPROVAL AND WILL BE COMPLETED BY TENANT/TENANT'S GC AT TENANT'S SOLE EXPENSE.
57. ALL ELECTRICAL PANELS TO BE MOUNTED ON PLYWOOD BACKER BOARD.
58. PANEL PHASE LOADS TO BE BALANCED WITHIN 10%.

GENERAL LIGHTING NOTES

- A. WHERE LIGHT FIXTURE IS FOLLOWED BY "NL", THIS FIXTURE IS DESIGNATED AS A NIGHT LIGHT AND SHALL BE CONNECTED TO AN UNSWITCHED HOT CONDUCTOR.
- B. UPPER CASE LETTER NEXT TO LIGHT FIXTURE DENOTES FIXTURE TYPE.
- C. ALL EMERGENCY FIXTURES SHALL BE CONNECTED TO AN UNSWITCHED HOT CONDUCTOR.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	EXHAUST FAN
	KITCHEN EXHAUST FAN (REFER TO MECHANICAL PLANS)
	SPEAKERS
	JUNCTION BOX
	BATTERY BACK UP EXIT LIGHT
	BATTERY BACK UP EMERGENCY LIGHT
	WALL SWITCH (SINGLE, DOUBLE,)
	WALL SWITCH (3 WAY, 4 WAY)
	WALL SWITCH (TIMER)
	DIMMER WALL SWITCH
	OCCUPANCY SENSOR WALL SWITCH
	VARIABLE SPEED SWITCH
	SINGLE RECEPTACLE
	DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE, 46" TO AFF AT KITCHEN, BATHS AND TOPS
	HALF SWITCHED DUPLEX RECEPTACLE
	230 VOLT RECEPTACLE
	QUADRUPLEX RECEPTACLE
	FLOOR MOUNTED. FLUSH DUPLEX RECEPTACLE
	FLOOR MOUNTED. FLUSH QUAD. RECEPTACLE
	FLOOR MOUNTED. FLUSH 230 VOLT RECEPTACLE
	CEILING MOUNTED DUPLEX RECEPTACLE
	ELECTRICAL PANEL
	DISCONNECT SWITCH
	USB CHARGER RECEPTACLE
	TELEVISION OUTLET
	DATA OUTLET
	TELEPHONE/DATA OUTLET
	TELEPHONE OUTLET
	FLOOR MTD. FLUSH TELEPHONE/DATA OUTLET
	QUAD. DATA OUTLET RJ45
	THERMOSTAT DEVICE
	MOTOR SWITCH
	30A NON FUSED DISCONNECT SWITCH
	60A NON FUSED DISCONNECT SWITCH
	100A NON FUSED DISCONNECT SWITCH

ABBREVIATIONS:

ABOVE FINISH FLOOR= A.F.F.
COUNTER TOP LEVEL= C
GROUND FAULT INTERRUPTER= GFI
BATHROOM EXHAUST FAN=BEF
WATER HEATER= WH
KITCHEN EXHAUST FAN=KEF
AUTHORITY HAVING JURISDICTION=A.H.J.
NIGHT LIGHT=NL
AIR COOLED CONDENSING UNIT=ACCU

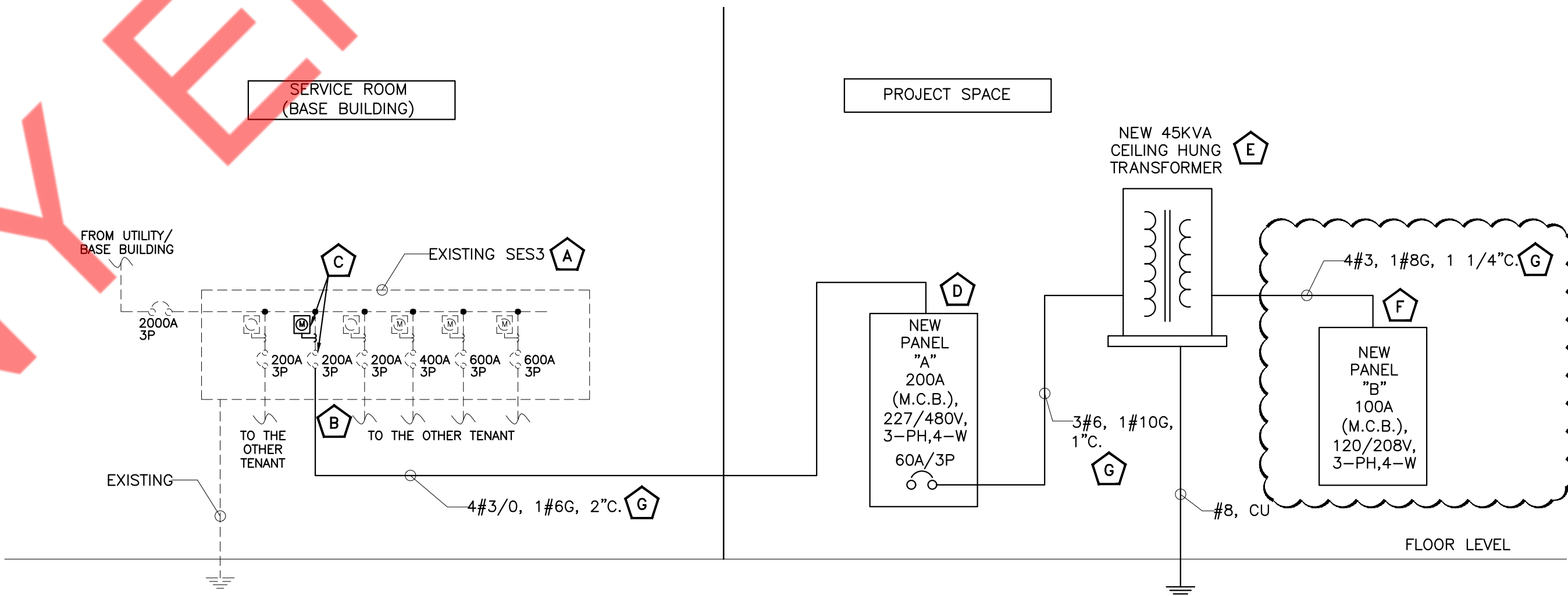
AIR HANDLING UNIT=AHU
ELECTRICAL CONTRACTOR=E.C.
EXHAUST FAN = EF
VAPOR PROOF= VP
WEATHER PROOF= WP
UNDER CABINET= UC
VERIFY PRIOR TO INSTALL= VH
PUSH BUTTON= PB
BELOW COUNTER= BC
FAN COIL UNIT = FCU
MOTORIZED DAMPER= MD
ELECTRIC DUCT HEATER = EDH

LIGHTING FIXTURE SCHEDULE

	TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLT	LAMP WATTAGE	MOUNTING
	A	LED PANEL 2' X 4'	ELITE	24–FPL1–LED–ML	120	34 – 53 WATTS	MOUNTED WITHIN CLG. TILE GRID
	B	6" LED DOWNLIGHT	LITE LINE	S4R6	120	11– 43 WATTS	SURFACE MOUNT
	C	14" GLOBE PENDANT LIGHT	FOUNDRY LIGHTING	SEA GULL LEO	120	TBD	2'–6" TO 3'–0" ABOVE
	D	14" BARN PENDANT LIGHT	BARN LIGHT ELECTRIC	AVALON	120	11– 43 WATTS	2'–6" TO 3'–0" ABOVE
	F	TRACK LIGHT	CONETCH LIGHTING	CTL905	120	7 – 34 WATTS	BTM OF FIXTURE 09'–0" A.F.F
	G	STRIP LIGHT	CORE LIGHTING	LSM–20	120	2 WATTS PER FEET	–
	H	48" LED STRIP LIGHT	SOLID STATE LUMINAIRES	MINI COVELINE	120	19.6 WATTS	–
	X	EXIT SIGN	BESTLIGHTING	CTXTEU	120	2.2 WATTS	–
	X1	EXIT/EMERGENCY COMBO SIGNS	BESTLIGHTING	EZXTEU	120	2.2 WATTS	–
	X2	EMERGENCY EXIT DISCHARGE LED LIGHT	BESTLIGHTING	TBD	120	4.5 WATTS	–
	Y2	WALL MOUNTED EMERGENCY LIGHTS	BEST LIGHTING	LEDR-1	120	1 WATTS	–
	T	TIMER WALL SWITCH	LEVITON	LEVAVPT241PZ VIZIA	120	–	–
	OS	OCCUPANCY WALL SWITCH	SENSORWORX	SWX–121–WH	120	–	–
	OS	CEILING OCCUPANCY SENSOR	SENSORWORX	SWX–221–B	120	–	–

NOTES:

1. E.C. SHALL COORDINATE WITH ARCHITECT FOR FINAL FIXTURE COUNT AND TYPE.
2. COORDINATE EXACT CONTROL REQUIREMENTS WITH OWNER.
3. E.C SHALL PROVIDE REQUIRED POWER PACKS AND RELAYS SUITABLE FOR THE ABOVE LIGHT FIXTURES IN COORDINATION WITH THE LIGHTING VENDOR. BASE BID ACCORDINGLY.



ELECTRICAL RISER KEYED WORK NOTES:

- A EXISTING 277/480V, 3–PHASE, 4–WIRE, SES3 BOX SHALL REMAIN IN SERVICE ROOM. E.C. SHALL COORDINATE WITH UTILITY / OWNER / BASE BUILDING FOR EXACT POWER DISTRIBUTION.
- B EXISTING 200A, 277/480V, 3–PHASE, 4–WIRE ELECTRICAL SERVICE FROM UTILITY/BASE BUILDING FOR THE PROJECT SPACE SHALL REMAIN. E.C SHALL GET INFORMATION ABOUT THE EXISTING POWER DISTRIBUTION PRIOR TO COMMENCING ANY WORK AND INFORM ENGINEER ON RECORD FOR ANY DISCREPANCIES. BASE BID ACCORDINGLY.
- C EXISTING 200A, 277/480V, 3–PHASE, 4–WIRE METER, DISCONNECT SWITCH FOR THE PROJECT SPACE. SHALL REMAIN. E.C TO FIELD VERIFY THE EXACT LOCATION, SIZE & OPERABLE CONDITION OF EXISTING METER AND DISCONNECT SWITCH. REPLACE IF INOPERABLE. BASE BID ACCORDINGLY.
- D NEW 200A(M.C.B.), 277/480V, 3–PHASE, 4–WIRE ELECTRICAL PANEL "A". E.C. SHALL COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER.
- E PROVIDE NEW 45 KVA, 3–PHASE PRIMARY 277/480V AND SECONDARY 120/208V CEILING HUNG TRANSFORMER. E.C. TO COORDINATE THE EXACT LOCATION WITH ARCHITECT/ OWNER. E.C. SHALL PROCURE ALL THE ACCESSORIES REQUIRED TO MOUNT TRANSFORMER ON THE CEILING. BASE BID ACCORDINGLY.
- F NEW 100A(M.C.B.), 120/208V, 3–PHASE, 4–WIRE ELECTRICAL PANEL "B". E.C. SHALL COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER.
- G E.C TO FIELD VERIFY THE EXACT LENGTH OF THE CABLE AND CHECK THE VOLTAGE DROP IS UNDER LIMIT PER NEC BEFORE INSTALLATION.

RISER DIAGRAM GENERAL NOTE:

1. ABOVE RISER DIAGRAM IS FOR REFERENCE PURPOSES ONLY. E.C. SHALL VERIFY EXACT POWER DISTRIBUTION IN FIELD AND INFORM ENGINEER ON RECORD FOR ANY DISCREPANCY.
2. E.C. SHALL VERIFY INCOMING SERVICE AMPERAGE, WIRE SIZING AND DISTRIBUTION.
3. E.C. TO COORDINATE FAULT CURRENT (Isc) RATING WITH UTILITY COMPANY AND AHJ PRIOR TO COMMENCING ANY WORK.
4. E.C. TO VERIFY OPERABLE CONDITIONS OF EXISTING DEVICES IN FIELD, REPLACE/RECTIFY IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
5. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER/LANDLORD/BASE BUILDING FOR THE EXACT SCOPE OF WORK/LIABILITIES.

ELECTRICAL RISER

SCALE
1/4" = 1'-0"

1

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PROJECT

PEPPER LUNCH

REVISIONS DATES:

- 08/26/24 PROJ COORD.
- 08/30/24 PROJ COORD.
- 09/30/24 BD COMMENTS
- 09/30/24 LL COMMENTS

ISSUE DATE: 08.14.24
PROJECT #:

DRAWN BY: NYE

CHECKED BY: NYE

ELECTRICAL PLAN
NOTES AND RISER
DIAGRAM

E-1

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PROJECT

PEPPER LUNCH

REVISIONS DATES:

08/26/24 PROJ. COORD.

08/30/24 PROJ. COORD.

09/30/24 BD COMMENTS

09/30/24 LL COMMENTS

ISSUE DATE: 08.14.24

PROJECT #:

DRAWN BY: NYE

CHECKED BY: NYE

LIGHTING PLAN AND
LOW VOLTAGE PLAN

E-2

ELECTRICAL LIGHTING PLAN KEYED WORK NOTES:

- A** CONNECT ALL EMERGENCY EGRESS AND NIGHT LIGHTING FIXTURES TO THE NEAREST LIGHTING BRANCH CIRCUIT AHEAD OF ALL SWITCHING AND CONTROLS PER STATE AND LOCAL CODES.
- B** E.C. SHALL COORDINATE EXACT LOCATION OF TIMER SWITCH BANK WITH ARCHITECT/OWNER.
- C** LIGHTING CONTROL NEAR THE ELECTRICAL PANEL SHALL NOT BE WITH ONLY AUTOMATIC MEANS AS PER NEC 110.26(D).
- D** PROVIDE CEILING MOUNTED RECEPTACLE FOR SHOW WINDOW AS REQUIRED BY CODE. VERIFY WITH LOCAL ENERGY AGENCY. VERIFY EXACT LOCATION WITH ARCHITECT. SHOW WINDOW RECEPTACLE TO BE PROVIDED BY TIME CLOCK PER TENANT GUIDELINES.
- E** JUNCTION BOX WITH TOGGLE DISCONNECT PER NEC FOR CONNECTION TO BUILDING MOUNTED SIGNAGE. VERIFY EXACT LOCATION AND CONNECT TO SIGN PER MANUFACTURE'S INSTRUCTION. ROUTE CIRCUIT TO PANEL VIA TIMECLOCK AS INDICATED ON PLAN.
- F** PROVIDE CURRENT LIMITER FOR TRACK LIGHT. E.C. TO COORDINATE WITH LIGHTING MANUFACTURER FOR SUITABLE MODEL OF CURRENT LIMITER FOR TRACK LIGHTS. BASE BID ACCORDINGLY.

ELECTRICAL LIGHTING PLAN GENERAL NOTE:

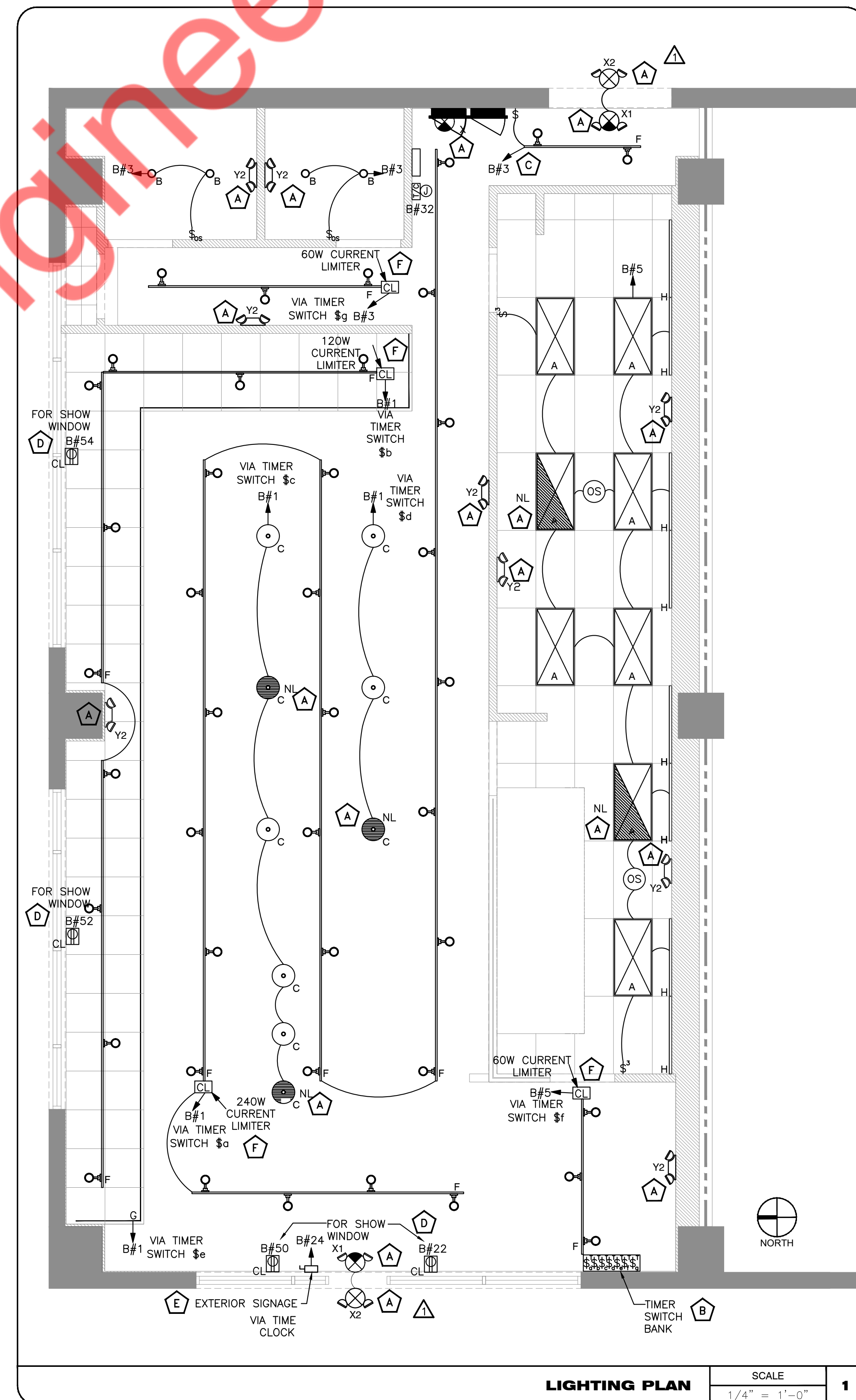
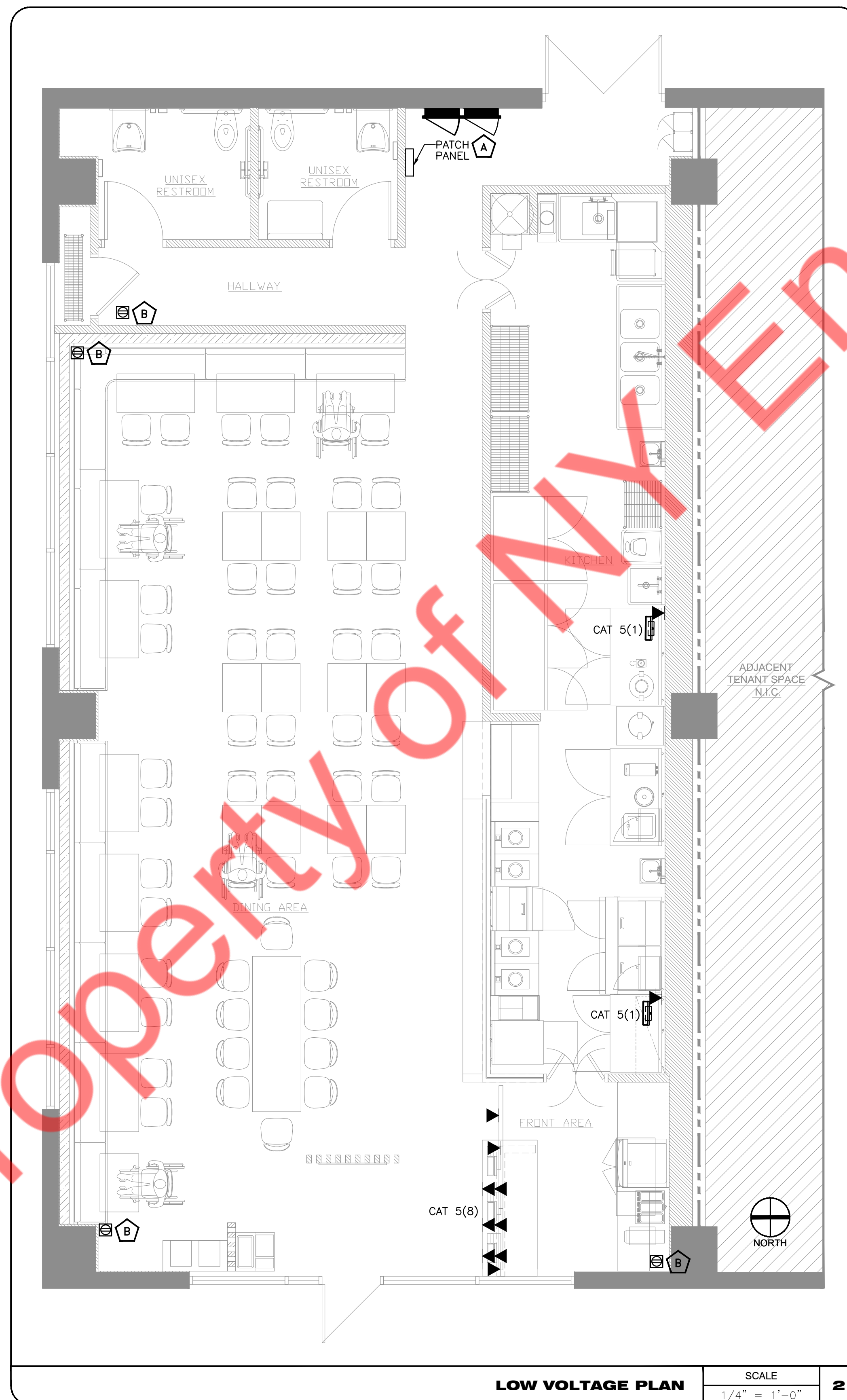
1. LIGHT BULBS SHALL BE SHIELDED, COATED, OR OTHERWISE SHATTER-RESISTANT IN AREAS WHERE THERE IS EXPOSED FOOD; CLEAN EQUIPMENT, UTENSILS, AND LINENS AS PER FOOD ESTABLISHMENT REQUIREMENTS OF HEALTH DEPARTMENT OF PINELLAS PARK CITY / PINELLAS COUNTY.

LOW VOLTAGE PLAN KEYED WORK NOTES:

- A** E.C. TO COORDINATE EXACT LOCATION & MOUNTING DETAILS OF PATCH PANEL ON FIELD WITH ARCHITECT/OWNER IN COORDINATION WITH LV VENDOR AND PROVIDE CONNECTIONS ACCORDINGLY.
- B** E.C. TO COORDINATE EXACT LOCATION/MOUNTING DETAILS & ELECTRICAL/L.V. REQUIREMENTS FOR SECURITY CAMERA ON FIELD WITH ARCHITECT/OWNER IN COORDINATION WITH LV VENDOR AND PROVIDE CONNECTIONS ACCORDINGLY.

LOW VOLTAGE PLAN GENERAL NOTE:

1. E.C. TO COORDINATE WITH G.C./L.V. VENDOR FOR EXACT QUANTITY AND POWER REQUIREMENTS FOR LOW VOLTAGE EQUIPMENTS BEFORE COMMENCING ANY WORK. BASE BID ACCORDINGLY.



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PROJECT

PEPPER LUNCH

REVISIONS DATES:

08/26/24 PROJ COORD.
08/30/24 PROJ COORD.
09/30/24 BD COMMENTS
09/30/24 LL COMMENTS

ISSUE DATE: 08.14.24
PROJECT #:
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ELECTRICAL FLOOR AND PARTIAL ROOF POWER PLAN

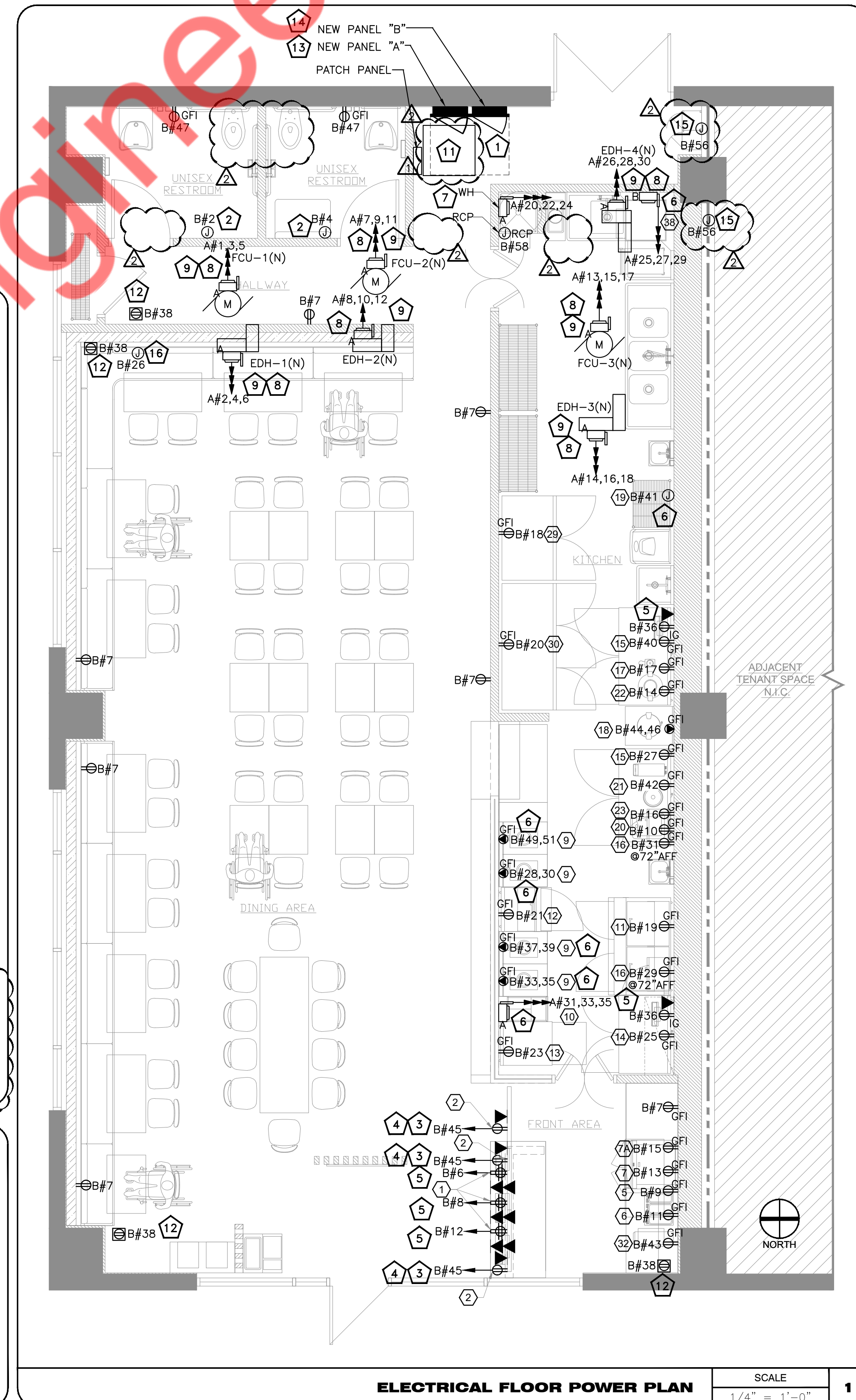
E-3

ELECTRICAL POWER PLAN KEYED WORK NOTES:

- 1 WORKING SPACE CLEARANCE SHALL NOT BE LESS THAN SPECIFIED IN TABLE 110.26(A)(1) NEC.
- 2 JUNCTION BOX FOR HAND DRYER. COORDINATE MOUNTING HEIGHT TO COMPLY WITH ADA.
- 3 PROVIDE (1) DUPLEX RECEPTACLE AND (1) CAT6 DATA CABLE AND CONNECTION FOR EACH MENUBOARD AT .COORDINATE IN FIELD FOR FINAL LOCATION WITH OWNER.
- 4 COORDINATE WITH OWNER FOR ADDITIONAL POWER AND DATA REQUIREMENTS FOR MENUBOARD PRIOR COMMENCING WORK.
- 5 PROVIDE FOUR (4) CAT 6 HOMERUN TO EACH POS AND (2) KDS CAT 6 HOMERUN TO STATION (10 TOTAL) AND ONE (1) QUAD 20 AMPS RECEPTACLE AT 24" A.F.F AT COUNTER FOR EACH POS & (1) DUPLEX AT KDS. COORDINATE EXACT LOCATION OF ELECTRICAL/DATA OUTLETS WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN.
- 6 ELECTRICAL CONTRACTOR SHALL COORDINATE ELECTRICAL CONNECTION TYPE AND POWER REQUIREMENT WITH EQUIPMENT MANUFACTURER PRIOR TO BID. MAKE POWER PROVISION ACCORDINGLY. BASE BID ACCORDINGLY.
- 7 ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE WATER HEATER "WH" MANUFACTURER FOR THE EXACT POWER REQUIREMENTS PRIOR TO ROUGH-IN. BASE BID ACCORDINGLY.
- 8 ELECTRICAL CONTRACTOR SHALL COORDINATE DISCONNECT AND FUSE REQUIREMENT FOR MECHANICAL UNIT WITH MECHANICAL CONTRACTOR AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN AND PROVIDE AS REQUIRED. LOCATE AS REQUIRED TO MAINTAIN NEC CLEARANCES. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR FOR EXACT LOCATION OF THE MECHANICAL UNITS IN THE FIELD.
- 9 ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION AND POWER REQUIREMENT OF THE MECHANICAL UNIT IS FIELD PROVIDE CIRCUIT AND CONTROL AS REQUIRED.
- 10 NOT USED.
- 11 NEW 45KVA, 3-PHASE PRIMARY 277/480V AND SECONDARY 120/208V CEILING HUNG TRANSFORMER. E.C. TO COORDINATE THE EXACT LOCATION WITH ARCHITECT/ OWNER. E.C. SHALL PROCURE ALL THE ACCESSORIES REQUIRED TO MOUNT TRANSFORMER ON THE CEILING. BASE BID ACCORDINGLY.
- 12 E.C. SHALL COORDINATE EXACT LOCATION & MOUNTING DETAILS OF SECURITY CAMERA AND IT'S ELECTRICAL/DATA REQUIREMENTS WITH ARCHITECT/OWNER IN COORDINATION WITH L.V. VENDOR ON THE FIELD. PROVIDE CONNECTIONS ACCORDINGLY.
- 13 PROVIDE NEW 200A(MCB), 277/480V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "A" FOR PROJECT SPACE. E.C. SHALL COORDINATE WITH ARCHITECT/OWNER FOR EXACT LOCATION IN FIELD.
- 14 PROVIDE NEW 100A(MCB), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "B" FOR PROJECT SPACE. E.C. SHALL COORDINATE WITH ARCHITECT/OWNER FOR EXACT LOCATION IN FIELD.
- 15 JUNCTION BOX FOR FIRE SMOKE DAMPER. E.C. TO FIELD VERIFY EXACT LOCATION OF MOTORIZED DAMPER WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- 16 JUNCTION BOX FOR VAV CONTROLLER. E.C. TO FIELD VERIFY EXACT LOCATION OF VAV CONTROLLER WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. E.C. SHALL PROVIDE ALL NECESSARY ACCESSORIES FOR PROPER WORKING OF VAV. BASE BID ACCORDINGLY.

ELECTRICAL POWER PLAN GENERAL WORK NOTES:

- A. ARRANGE LOAD TO MAINTAIN A BALANCE BETWEEN PHASES OF 10% OR LESS.
- B. TENANT SHALL HAVE BREAKER LOCKS ON CONTROL AND TIME CLOCK CIRCUITS.
- C. SWITCHING DUTY BREAKERS SHOULD BE INSTALLED FOR TURNING LOADS ON/OFF.
- D. ELECTRICAL DEVICES, TIME CLOCKS, PANELS, CABINETS, ETC., SHALL BE MOUNTED ON A FIRE-TREATED PLYWOOD BACKER BOARD.
- E. ELECTRICAL CONTRACTOR TO COORDINATE WITH ARCHITECT, MECHANICAL, PLUMBING AND OTHER VENDORS FOR EXACT EQUIPMENT LOCATION AND INSTALLATION REQUIREMENTS.
- F. ALL 120V, 15A AND 20A RECEPTACLE IN THE KITCHEN AREA SHALL BE GFCI IN ACCORDANCE WITH NEC ARTICLE 210.8(B). E.C SHALL VERIFY THE ACCESSIBILITY OF GFI RECEPTACLE DUE TO LOCATION AND MOUNTING HEIGHT. IF RECEPTACLE IS NOT ACCESSIBLE THEN PROVIDE GFI RATED BREAKER IN THE PANEL.
- G. ALL ELECTRICAL AND COMMUNICATIONS OUTLETS TO BE AT 24" A.F.F. UNLESS NOTED OTHERWISE, AND VERTICALLY MOUNTED.



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PROJECT

PEPPER LUNCH

REVISIONS DATES:

08/26/24 PROJ COORD.
08/30/24 PROJ COORD.
09/30/24 BD COMMENTS
09/30/24 LL COMMENTS

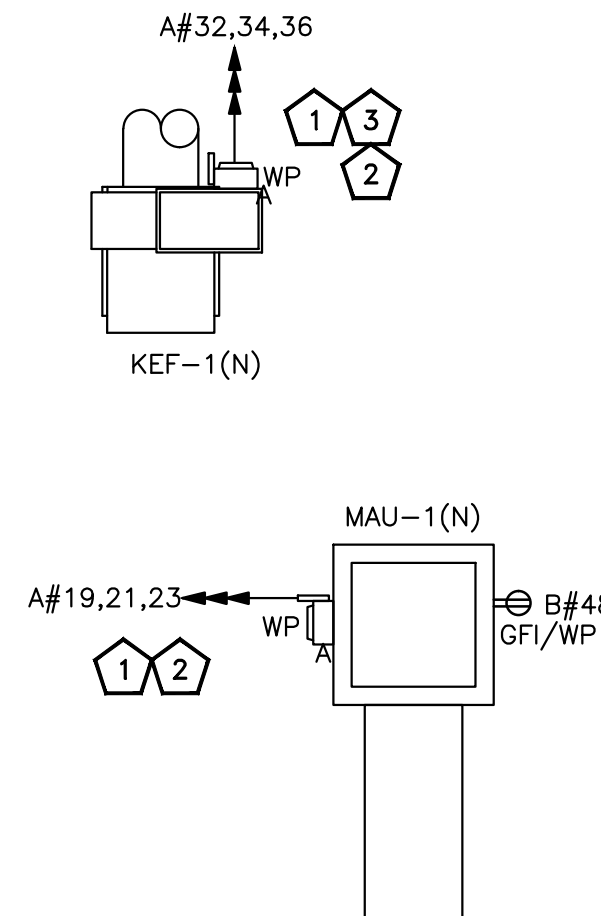
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ROOF POWER PLAN

E-4

ELECTRICAL ROOF PLAN KEYED WORK NOTES:

- 1 ELECTRICAL CONTRACTOR SHALL COORDINATE DISCONNECT AND FUSE REQUIREMENT FOR MECHANICAL UNIT WITH MECHANICAL CONTRACTOR AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN AND PROVIDE AS REQUIRED. LOCATE AS REQUIRED TO MAINTAIN NEC CLEARANCES.ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR FOR EXACT LOCATION OF THE MECHANICAL UNITS IN THE FIELD.
- 2 ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION AND POWER REQUIREMENT OF THE MECHANICAL UNIT IS FIELD PROVIDE CIRCUIT AND CONTROL AS REQUIRED.
- 3 INTERCONNECT EXHAUST FANS KEF-1(N) WITH HOOD. E.C SHALL COORDINATE VERIFY FINAL REQUIREMENT AND INTERCONNECTION DETAILS WITH MECHANICAL CONTRACTOR/OWNER BEFORE COMMENCING ANY WORK. BASE BID ACCORDINGLY.
- 4 JUNCTION BOX FOR FIRE SMOKE DAMPER. E.C. TO FIELD VERIFY EXACT LOCATION OF MOTORIZED DAMPER WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.



ROOF POWER PLAN

SCALE

1/4" = 1'-0"

1

PANEL: A(NEW)										MOUNTING: SURFACE						
277/480V		VOLTS,	3	PHASE,	4	WIRE		AIC RATING	10,000	LOCATION:	BOH					
MAIN CB		200A	MLO	NA	BUS	225A	MIN,		FED FROM:	EX. ELE. SERVICE						
NOTE: L - LIGHTING, R - RECEPTACLE, H - HVAC, E - KITCHEN EQUIPMENTS, O - OTHER/MISCELLANEOUS, * - GFI BREAKER																
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)			MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.		
1			M	1.91	3#12, #12G, 3/4"C	5.24			3#12, #12G, 3/4"C	3.33	H	EDH-1(N)	20/3P	2		
3	15/3P	FCU-1(N)	M	1.91			5.24			3.33	H			4		
5			M	1.91				5.24		3.33	H			6		
7			M	0.87		4.20				3.33	H			8		
9	15/3P	FCU-2(N)	M	0.87	3#12, #12G, 3/4"C		4.20		3#12, #12G, 3/4"C	3.33	H	EDH-2(N)	20/3P	10		
11			M	0.87				4.20		3.33	H			12		
13			M	0.87		3.20				2.33	H			14		
15	15/3P	FCU-3(N)	M	0.87			3.20			2.33	H			16		
17			M	0.87	3#12, #12G, 3/4"C			3.20	3#12, #12G, 3/4"C	2.33	H	EDH-3(N)	20/3P	18		
19			H	2.36		8.36				6.00	O			20		
21	15/3P	MAU-1(N)	H	2.36			8.36			6.00	O			22		
23			H	2.36				8.36		6.00	O			24		
25			E	8.22	3#8, #10G, 3/4"C	13.22			3#10, #10G, 3/4"C	5.00	H	EDH-4(N)	30/3P	26		
27	40*/3P	38_DISHWASHER	E	8.22			13.22			5.00	H			28		
29			E	8.22				13.22		5.00	H			30		
31			E	4.67			5.81			1.14	M			32		
33	30*/3P	10_FRYER	E	4.67	3#10, #10G, 3/4"C		5.81		3#12, #12G, 3/4"C	1.14	M	KEF-1 (N)	20/3P	34		
35			E	4.67				5.81		1.14	M			36		
37	20	SPARE				16.91				16.91	O			NEW 45KVA TRANSFORMER	60/3P	38
39	20	SPARE					16.21			16.21	O					40
41		SPACE					12.17	12.17	O	42						
		TOTAL LOAD (KVA)		56.94	56.23	52.20										
LOAD CLASSIFICATION			CONNECTED LOAD (KVA)			DEMAND FACTOR		DEMAND LOAD (KVA)		PANEL TOTAL LOAD						
TOTAL LIGHTING			L	0.00		125%		0.00								
TOTAL RECEPTACLE			R	0.00		100%		0.00		TOTAL CONNECTED LOAD		165.37	KVA			
TOTAL HVAC			H	49.07		100%		49.07		TOTAL DEMAND LOAD		151.84	KVA			
TOTAL MOTOR			M	14.35		100%		14.35		TOTAL CONNECTED CURRENT		199.14	AMP			
TOTAL KITCHEN/EQUIPMENTS			E	38.66		65%		25.13		TOTAL DEMAND CURRENT		182.85	AMP			
TOTAL OTHER/MISCELLANEOUS			O	63.29		100%		63.29		SYSTEM VOLTAGE		277/480 Wye				

PANEL SCHEDULE KEYED WORK NOTES:

A PROVIDE LOCKABLE BREAKER AS PER NATIONAL ELECTRICAL CODE 2017 SECTION 422.31. COORDINATE IN FIELD. BASE BID ACCORDINGLY.

PANEL SCHEDULE GENERAL NOTES:

- ALL CIRCUITING SHOWN IS FOR REFERENCE PURPOSE ONLY.
- ELECTRICAL CONTRACTOR TO VERIFY THE EXACT PANEL SIZES AND INCOMING FEEDER SIZE.
- E.C. SHALL VERIFY THE EQUIPMENT LOAD & RATINGS IN FIELD AND ACCORDINGLY CONSIDER THE ELECTRICAL LOAD IN PANEL BOARD SCHEDULE.

PANEL: B(NEW)										MOUNTING: SURFACE				
120/208V		VOLTS,	3	PHASE,		4	WIRE		AIC RATING	10,000		LOCATION:	BOH	
MAIN CB		100A		MLO	NA		BUS	125A		MIN,		FED FROM:	45 KVA X'MER	
NOTE: L - LIGHTING, R - RECEPTACLE, H - HVAC, E - KITCHEN EQUIPMENTS, O - OTHER/MISCELLANEOUS, * - GFI BREAKER														
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)			MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
						A	B	C						
1	20	LIGHTING: DINING AREA	L	0.67	2#12, #12G, 3/4"C	1.17			2#12, #12G, 3/4"C	0.50	M	HAND DRYER	20	2
3	20	LIGHTING :HALLWAY AND RESTROOM	L	0.40	2#12, #12G, 3/4"C		0.90		2#12, #12G, 3/4"C	0.50	M	HAND DRYER	20	4
5	20	LIGHTING: KITCHEN AND FRONT AREA	L	0.48	2#12, #12G, 3/4"C			0.64	2#12, #12G, 3/4"C	0.36	R	1_POS	20	6
7	20	GENERAL RECEPTACLE	R	0.90	2#12, #12G, 3/4"C	1.26			2#12, #12G, 3/4"C	0.36	R	1_POS	20	8
9	20	5_REFRIGERATED BACK BAR CABINET	E	0.36	2#12, #12G, 3/4"C		0.72		2#12, #12G, 3/4"C	0.36	E	20_RICE DISPENSER	20	10
11	20	6_BEVERAGE DISPENSER	E	0.40	2#12, #12G, 3/4"C			0.76	2#12, #12G, 3/4"C	0.36	R	1_POS	20	12
13	20	7_SODA DISPENSER	E	1.07	2#12, #12G, 3/4"C	1.15			2#12, #12G, 3/4"C	0.08	E	22_RICE/GRAIN WARMER	20	14
15	20	7A_ICE MAKER	E	1.32	2#12, #12G, 3/4"C		1.85		2#12, #12G, 3/4"C	0.53	E	23_WARMR 7QT	20	16
17	20	17_PEPPER GRINDER	E	0.12	2#12, #12G, 3/4"C			0.81	2#12, #12G, 3/4"C	0.69	E	29_REACH-IN REFRIGERATOR	20	18
19	20	11_MEGA TOP SANDWICH/SALAD 60"	E	0.62	2#12, #12G, 3/4"C	2.14			2#12, #12G, 3/4"C	1.52	E	30_REACH-IN FREEZER	20	20
21	20	12_MEGA TOP SANDWICH/SALAD 27"	E	0.23	2#12, #12G, 3/4"C		1.23		2#12, #12G, 3/4"C	1.00	R	SHOW WINDOW RECEPTACLE	20	22
23	20	13_WORKTOP FREEZER 27"	E	0.29	2#12, #12G, 3/4"C			1.29	2#12, #12G, 3/4"C	1.00	L	EXTERIOR SIGNAGE/ TIME CLOCK	20	24
25	20	14_WORKTOP FREEZER 48"	E	0.25	2#12, #12G, 3/4"C	0.35			2#12, #12G, 3/4"C	0.10	M	VAV CONTROLLER	20	26
27	20	15_WORKTOP FREEZER 60"	E	0.35	2#12, #12G, 3/4"C		1.91		2#12, #12G, 3/4"C	1.56	E	9_INDUCTION COOKTOP	20*/2P	28
29	20	16_MICROWAVE	E	1.54	2#12, #12G, 3/4"C		3.10		2#12, #12G, 3/4"C	1.56	E		30	30
31	20	16_MICROWAVE	E	1.54	2#12, #12G, 3/4"C	1.84			2#12, #12G, 3/4"C	0.30	O	TIME CLOCK	20	32
33			E	1.56	2#12, #12G, 3/4"C		1.56					SPARE	20	34
35	20*/2P	9_INDUCTION COOKTOP	E	1.56	2#12, #12G, 3/4"C			1.92	2#12, #12G, 3/4"C	0.36	R	KDS	20	36
37			E	1.56	2#12, #12G, 3/4"C		1.96		2#12, #12G, 3/4"C	0.40	O	SECURITY CAMERA	20	38
39	20*/2P	9_INDUCION COOKTOP	E	1.56	2#12, #12G, 3/4"C			1.91	2#12, #12G, 3/4"C	0.35	E	15_WORKTOP FREEZER 60"	20	40
41	20	19_RICE WASHER	E	0.12	2#12, #12G, 3/4"C			1.92	2#12, #12G, 3/4"C	1.80	E	21_HOT WATER DISPENSER	20	42
43	20	32_BAG-N-BOX SODA SYSTEM	E	1.38	2#12, #12G, 3/4"C	3.98			2#10, #10G, 3/4"C	2.60	E	18_RICE GRAIN COOKER	30*/2P	44
45	20	43" LED MENU BOARD	L	0.90	2#12, #12G, 3/4"C		3.50			2.60	E			46
47	20	RESTROOM RECEPTACLE	R	0.18	2#12, #12G, 3/4"C			0.54	2#12, #12G, 3/4"C	0.36	R	ROOF RECEPTACLE	20	48
49			E	1.56	2#12, #12G, 3/4"C	2.96			2#12, #12G, 3/4"C	1.40	R	SHOW WINDOW RECEPTACLE	20	50
51	20*/2P	9_INDUCION COOKTOP	E	1.56	2#12, #12G, 3/4"C		2.56		2#12, #12G, 3/4"C	1.00	R	SHOW WINDOW RECEPTACLE	20	52
53	20	SPARE						1.00	2#12, #12G, 3/4"C	1.00	R	SHOW WINDOW RECEPTACLE	20	54
55	20	SPARE				0.10			2#12, #12G, 3/4"C	0.10	M	FSD	20	56
57	20	SPARE					0.08		2#12, #12G, 3/4"C	0.08	O	RCP	20	58
59	20	SPARE						0.00				SPARE	20	60
61	20	SPARE				0.00						SPARE	20	62
63	20	SPARE					0.00					SPARE	20	64
65	20	SPARE						0.00				SPARE	20	66
67		SPACE				0.00						SPACE		68
69		SPACE					0.00					SPACE		70
71		SPACE						0.00				SPACE		72
TOTAL LOAD (KVA)						16.91	16.21	12.17						
LOAD CLASSIFICATION			CONNECTED LOAD (KVA)			DEMAND FACTOR		DEMAND LOAD (KVA)		PANEL TOTAL LOAD				
TOTAL LIGHTING			L	3.45		125%		4.31						
TOTAL RECEPTACLE			R	7.28		100%		7.28		TOTAL CONNECTED LOAD		45.29	KVA	
TOTAL HVAC			H	0.00		100%		0.00		TOTAL DEMAND LOAD		34.75	KVA	
TOTAL MOTOR			M	1.20		100%		1.20		TOTAL CONNECTED CURRENT		125.86	AMP	
TOTAL KITCHEN/EQUIPMENTS			E	32.58		65%		21.18		TOTAL DEMAND CURRENT		96.57	AMP	
TOTAL OTHER/MISCELLANEOUS			O	0.78		100%		0.78		SYSTEM VOLTAGE		120/208 Wye		

KITCHEN EQUIPMENT SCHEDULE:

ITEM NO.	DESCRIPTION	VOLTAGE	PHASE	AMPS	KW
5	REFRIGERATED BACK BAR CABINET	115	1	3.1	0.36
6	BEVERAGE DISPENSER	115	1	3.5	0.40
7	SODA DISPENSER	115	1	9.3	1.07
7A	ICE MAKER	115	1	11.5	1.32
9	INDUCTION COOKTOP	208	1	15	3.12
10	FRYER	208	3	38.91	14.00
11	MEGA TOP SANDWICH/SALAD 60"	115	1	5.4	0.62
12	MEGA TOP SANDWICH/SALAD 27"	115	1	2	0.23
13	WORKTOP FREEZER 27"	115	1	2.5	0.29
14	WORKTOP FREEZER 48"	115	1	2.2	0.25
15	WORKTOP FREEZER 60"	115	1	3	0.35
16	MICROWAVE	115	1	13.4	1.54
17	PEPPER GRINDER	115	1	1	0.12
18	RICE GRAIN COOKER	208	1	25	5.20
19	RICE WASHER	115	1	1	0.12
20	RICE DISPENSER	115	1	3.13	0.36
21	HOT WATER DISPENSER	115	1	15	1.73
22	RICE/GRAIN WARMER	115	1	0.67	0.08
23	WARMR 7QT	115	1	4.6	0.53
29	REACH-IN REFRIGERATOR	115	1	6	0.69
30	REACH-IN FREEZER	115	1	13.2	1.52
32	BAG-N-BOX SODA SYSTEM	115	1	12	1.38
38	DISHWASHER	208	3	51.7	18.60

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PROJECT

PEPPER LUNCH

REVISIONS DATES:

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08/30/24 PROJ COORD.

09/30/24 BD COMMENTS

09/30/24 LL COMMENTS

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PROJECT #:

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SANITARY PLAN
& RISER

P-2

SANITARY PLAN & RISER KEY NOTES

- CONNECT NEW 4" SANITARY WASTE PIPING TO EXISTING SANITARY PIPE IN SPACE. CONTRACTOR TO FIELD VERIFY EXACT SIZE, LOCATION, ROUTING AND INVERT OF EXISTING SANITARY LINE AND UPGRADE / MAKE NECESSARY CHANGES IF REQUIRED.
- CONNECT NEW 4" GREASE SANITARY WASTE PIPING TO EXISTING GREASE SANITARY PIPING IN SPACE. CONTRACTOR TO FIELD VERIFY EXACT SIZE, LOCATION, ROUTING AND INVERT OF EXISTING SANITARY LINE AND UPGRADE / MAKE NECESSARY CHANGES IF REQUIRED.
- CONNECT NEW 3" VENT PIPE TO EXISTING VENT PIPING IN SPACE. CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION AND SIZE OF EXISTING VENT PIPE AND MAKE NECESSARY CHANGES TO THE EXISTING PIPING IF REQUIRED.

GENERAL NOTES

- SLOPE OF DRAINAGE PIPING SHALL BE 1/16" PER FOOT OF RUN FOR PIPE 8" & LARGER, 1/8" PER FOOT OF RUN FOR PIPE 3" TO 6" AND 1/4" PER FOOT OF RUN FOR PIPE 2-1/2" & SMALLER. VENT PIPING SHALL BE PITCHED TO DRAIN.
- CONTRACTOR TO FIELD VERIFY FEASIBILITY OF SLAB PENETRATION AS PER STRUCTURAL REQUIREMENT.
- ALL MATERIAL INDICATED AND IMPLIED ON THESE DRAWINGS SHALL BE NEW UNLESS OTHERWISE NOTED.
- ALL CLEANOUTS TO BE ACCESSIBLE.
- REFER SANITARY RISER DIAGRAM FOR ALL PIPE SIZES.
- SLOPE OF GREASE WASTE PIPING SHALL BE 1/4" PER FOOT OF RUN, WHERE THE GREASE WASTE PIPING IS UPSTREAM OF GREASE INTERCEPTOR.
- DO NOT CONNECT NEW GREASE WASTE LINE TO EXISTING 4" GREASE WASTE STUB IN SPACE. TANK WILL GET UNDERSIZED FOR CONNECTED TENANTS.

GREASE INTERCEPTOR SIZING

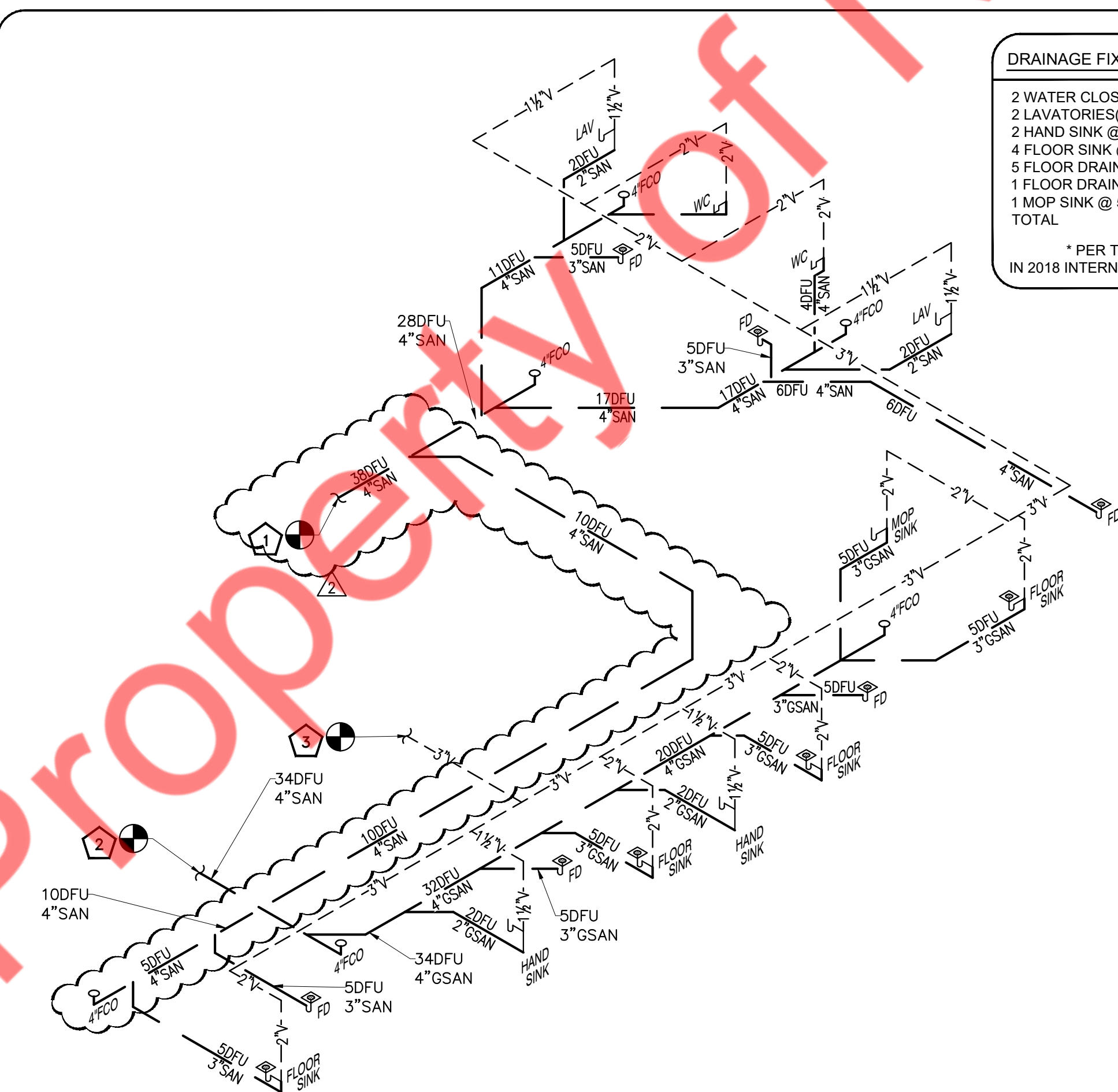
TAG	DESCRIPTION	QTY	DFU	TOTAL DFU
34	HAND SINK	02	2	4
39	MOP SINK	01	5	5
FD	FLOOR DRAIN	02	5	10
FS	FLOOR SINK	03	5	15
TOTAL DFU				34

SIZING AS PER 2018 IPC SECTION 1003.3.5.1 AND 1003.3.3
PROVIDE 1250 GALLONS EXTERIOR GREASE INTERCEPTOR

DRAINAGE FIXTURE FACTOR VALUE *

2 WATER CLOSETS(N) @ 4	= 8.0
2 LAVATORIES(N) @ 2	= 4.0
2 HAND SINK @ 2	= 4.0
4 FLOOR SINK @ 5	= 20
5 FLOOR DRAIN @ 5	= 25
1 FLOOR DRAIN @ 6	= 6.0
1 MOP SINK @ 5	= 5.0
TOTAL	= 72

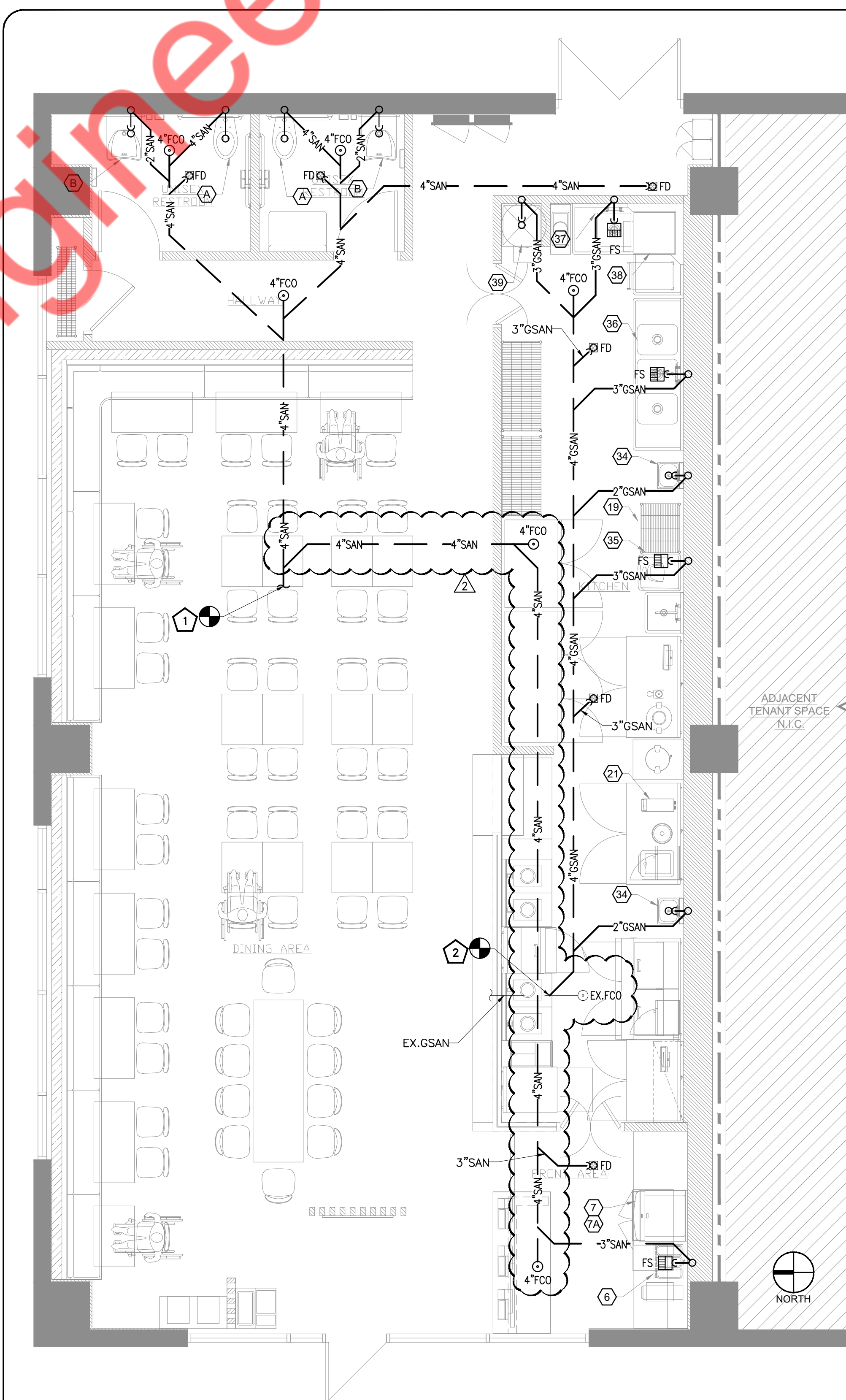
* PER TABLE 709.1 & 709.2
IN 2018 INTERNATIONAL PLUMBING CODE



SANITARY RISER

SCALE
N.T.S.

2



SANITARY PLAN

SCALE
1/4" = 1'-0"

1

WATER METER SCHEDULE

MANUFACTURER	NEPTUNE OR SIMILAR
EQUIPMENT TAG	WATER METER
STATUS	NEW
METER TYPE	TURBINE
LOW FLOW SENSITIVITY	98.5%-101.5%

NOTE:
PROVIDE WATER METER THAT COMPLIES ASU STANDARDS.

RECIRCULATION PUMP SCHEDULE

MANUFACTURER & MODEL	GRUNDFOS UP 15-18 B5
EQUIPMENT TAG	RCP
STATUS	NEW
GPM	2
WATER TEMP. (°F)	140
PUMP TYPE	INLINE
MHP	86 WATTS
V/PH/Hz	115/1/60
RPM	2280
SERVICE FACTOR	1.0

NOTE:
PROVIDE AQUA STAT WITH AUTOMATIC TIMER KIT FOR THE TEMPERATURE CONTROL OF HOT WATER SYSTEM. COORDINATE ELECTRICAL REQUIREMENTS FOR TIMER WITH ELECTRICAL CONTRACTOR.

STORAGE WATER HEATER SCHEDULE

MANUFACTURER	AO SMITH
MODEL	DRE-52
EQUIPMENT TAG	WH
STATUS	NEW
CAPACITY	50 GALLONS
QUANTITY	1
POWER REQUIREMENT	18 KW
RECOVERY	92 GPH*
UF	N/A
VOLTAGE	480/3/60
AMPERAGE	21.7
WEIGHT	265 LBS

NOTES:
1. * NON-SIMULTANEOUS OPERATION ELEMENT @ 80 °F TEMPERATURE RISE.
2. INSTALL NEW EXPANSION TANK (ET) AMTROL MODEL THERM-X-TROL ST-SC-DD, 2.0 GAL PER LOCAL CODE REQUIREMENTS.

WATER PLAN & RISER KEY NOTE

1. CONNECT NEW 1-1/2" CW LINE TO EXISTING COLD WATER LINE. CONTRACTOR TO FIELD VERIFY THE EXACT SIZE AND LOCATION OF THE EXISTING COLD WATER LINE & UPGRADE IF REQUIRED.

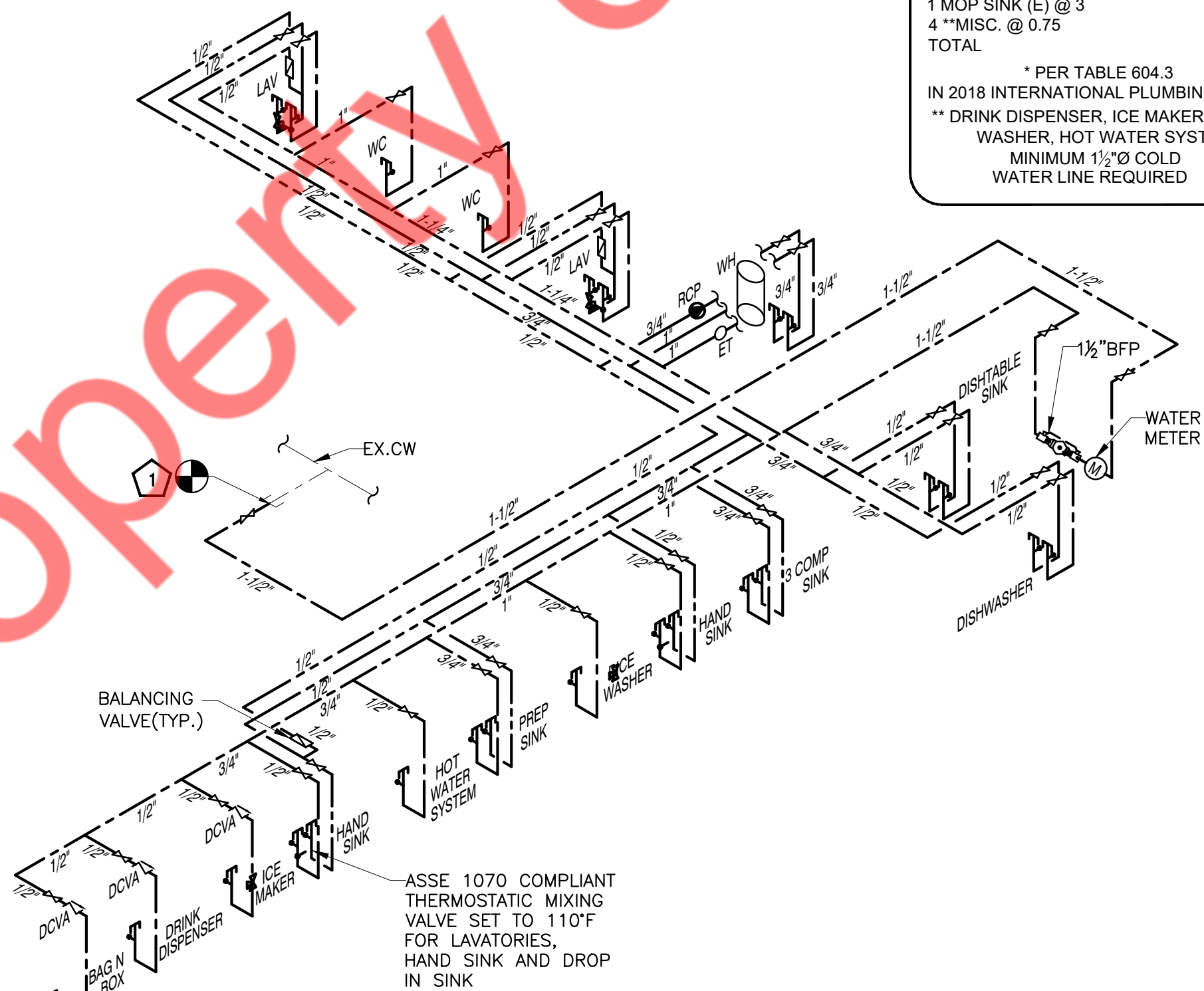
GENERAL NOTES

1. CW/HW/HWR PIPING TO BE PROVIDED WITH INSULATION AS PER 2018 INTERNATIONAL ENERGY CONSERVATION CODE (REFER SHEET P-1).
2. PROVIDE BRANCH PRV IF PRESSURE EXCEEDS 80 PSI.
3. PROVIDE ACCESS PANELS FOR WATER HAMMER ARRESTOR & SHUT-OFF VALVES AS REQUIRED.
4. REFER WATER RISER DIAGRAM FOR ALL PIPE SIZES.
5. NEW WATER HEATER DRAIN SPILLS TO MOP SINK.

FIXTURE FACTOR VALUE*

2 WATER CLOSET (N) @ 1.6	= 3.2
2 LAVATORY (N) @ 0.4	= 0.8
2 HAND SINK (N) @ 0.8	= 1.6
1 PREP SINK(N)@3	= 3.0
1 DISHTABLE SINK (N) @ 3	= 3.0
1 DISHWASHER(N)@3	= 3.0
1 - 3 COMP SINK (N) @ 3	= 3.0
1 MOP SINK (E) @ 3	= 3.0
4**MISC. @ 0.75	= 3.0
TOTAL	= 29.6

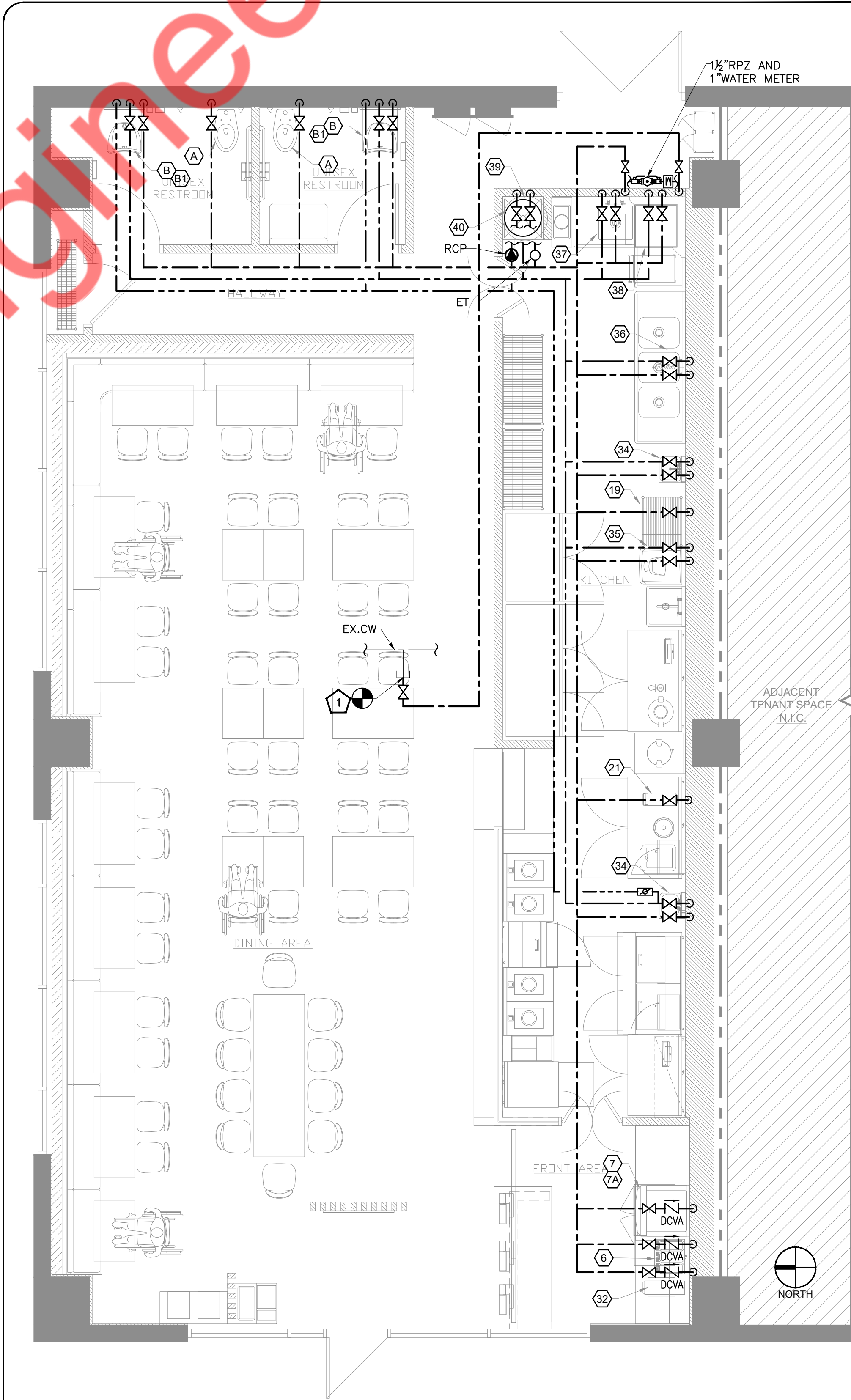
* PER TABLE 604.3
IN 2018 INTERNATIONAL PLUMBING CODE
** DRINK DISPENSER, ICE MAKER, RICE
WASHER, HOT WATER SYSTEM
MINIMUM 1 1/2" COLD
WATER LINE REQUIRED



WATER RISER

SCALE
N.T.S.

2



WATER PLAN

SCALE
1/4" = 1'-0"

1

PEPPER LUNCH

REVISIONS DATES:

- 08/26/24 PROJ. COORD.
- 08/30/24 PROJ. COORD.
- 09/30/24 BD COMMENTS
- 09/30/24 LL COMMENTS

ISSUE DATE: 08.14.24
PROJECT #:
DRAWN BY: NYE
CHECKED BY: NYE

WATER PLAN
& RISER

P-3

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