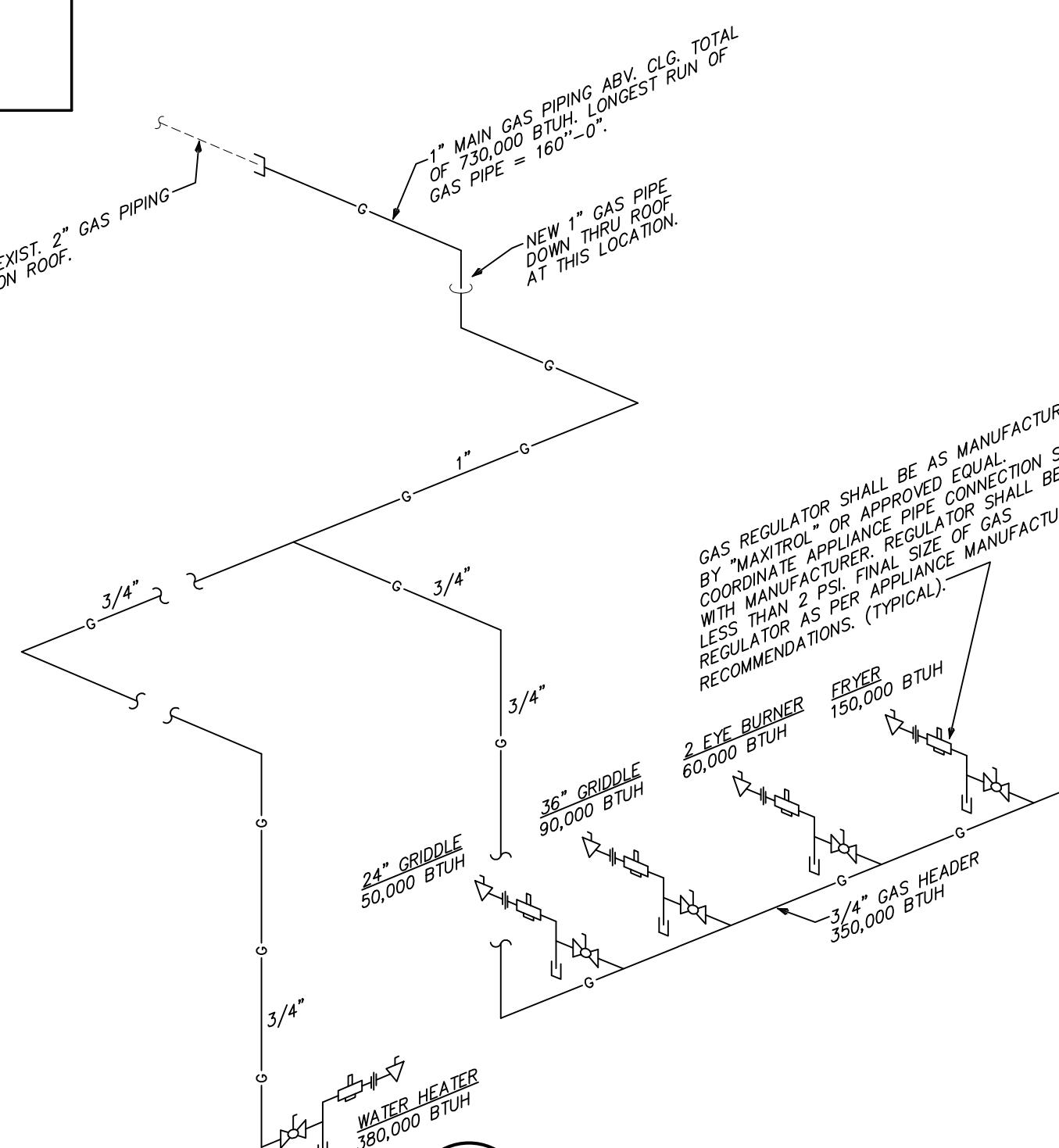


# GENERAL GAS PIPING NOTES

1. GAS PIPING AND FITTINGS SHALL BE SCHEDULE 40 BLACK IRON WITH MALLEABLE IRON FITTINGS. DIELECTRIC COUPLINGS OR UNIONS SHALL BE UTILIZED WHEN PIPING OF DISSIMILAR METAL IS CONNECTED. EXTERIOR GAS PIPING ON ROOF SHALL BE PAINTED WITH YELLOW "RUSTOLEUM" PAINT. EXPOSED GAS PIPING ON BACK WALL SHALL BE "RUSTOLEUM", PAINTED TO MATCH BUILDING. GAS PIPING CONNECTIONS SHALL BE THREADED UNLESS OTHERWISE REQUIRED BY CODE.
2. GAS PIPING SYSTEM SHALL BE INSTALLED TO THE REQUIREMENTS OF THE AGA PAMPHLET "INSTALLATION OF GAS APPLIANCES AND GAS PIPING" AND THE NFPA STANDARD #54. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND PAY ALL FEES WITH THE "LOCAL" GAS COMPANY FOR THE INSTALLATION OF THE GAS METER, GAS SERVICE, AND ITS ACCESSORIES NECESSARY FOR A COMPLETE SYSTEM.
3. GAS PIPING SHALL BE TESTED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN NFPA #54, AND ANY OTHER TESTS REQUIRED BY THE LOCAL BUILDING DEPARTMENT AND/OR THE LOCAL GAS UTILITY COMPANY.
4. THE INSTALLING SUBCONTRACTOR SHALL BE LICENSED BY THE STATE FOR THE INSTALLATION OF GAS PIPING.
5. RUNOUT PIPING, FROM THE MAIN PIPING TO APPLIANCES, SHALL BE WITH AN INVERTED TRAP CONNECTION AT THE MAIN.
6. A 12" DIRT LEG, AND A GAS COCK, SHALL BE PROVIDED AT ALL GAS APPLIANCES.
7. ALL EXPOSED GAS PIPING SHALL BE IDENTIFIED BY A YELLOW LABEL MARKED "GAS" IN BLACK LETTERS. THE MARKERS SHALL BE AT INTERVALS NOT EXCEEDING 5'.
8. ALL GAS BURNING EQUIPMENT SHALL BE INSTALLED PER NFPA #58, NFPA #54 (L.P.G.) OR NFPA #96 (COMMERCIAL COOKING EQUIPMENT).
9. GAS PIPE SIZES 2-1/2" AND GREATER SHALL BE WELDED, IF REQUIRED BY CODE.
10. GAS CONNECTIONS PER ANSI ZZ1.69



# 3 GAS ISOMETRIC

NO SCALE

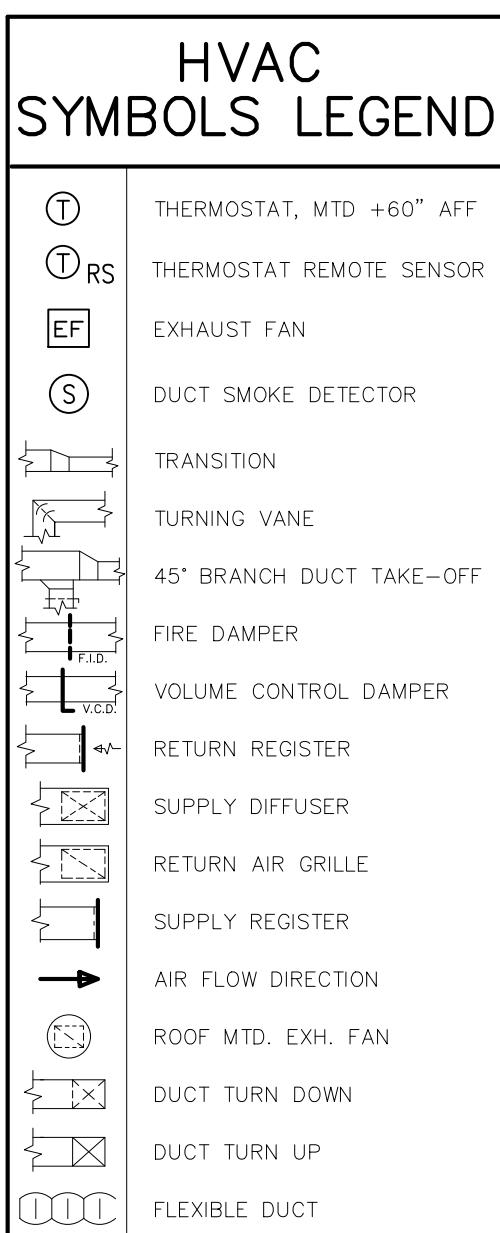
# AIR DEVICE SCHEDULE (TRANE NATIONAL ACCOUNT)

MARK	* TITUS MODEL NO.	MODULE SIZE	FACE SIZE	NECK SIZE	FLEX SIZE	TYPE	NOTES
A	TMSA-3	12"x12"	—	6"Ø	6"Ø	SUPPLY	1,3,5,10,11,12
B	TMSA-AA-3	24"x24"	—	6"Ø	6"Ø	SUPPLY	1,2,3,4,6,11,12
C	TMSA-AA-3	24"x24"	—	8"Ø	8"Ø	SUPPLY	1,2,3,4,6,11,12
D	TMSA-AA-3	24"x24"	—	10"Ø	10"Ø	SUPPLY	1,2,3,4,6,11,12
E	PAR-AA-3	24"x24"	—	22"x22"	14"Ø	SUPPLY	2,3,4,6,7,11,12
F	50FF-3	48"x24"	—	44"x20"	—	RETURN	2,3,4,6,8,9,11,12
G	50FF-3	24"x24"	—	20"x20"	—	RETURN	2,3,4,6,8,9,11,12
H	50F-1	—	14"x14"	12"x12"	—	EXHAUST	3,5,6,9,11,12
I	TMSA-AA-3	24"x24"	—	10"Ø	10"Ø	SUPPLY	2,3,4,6,11,12,16

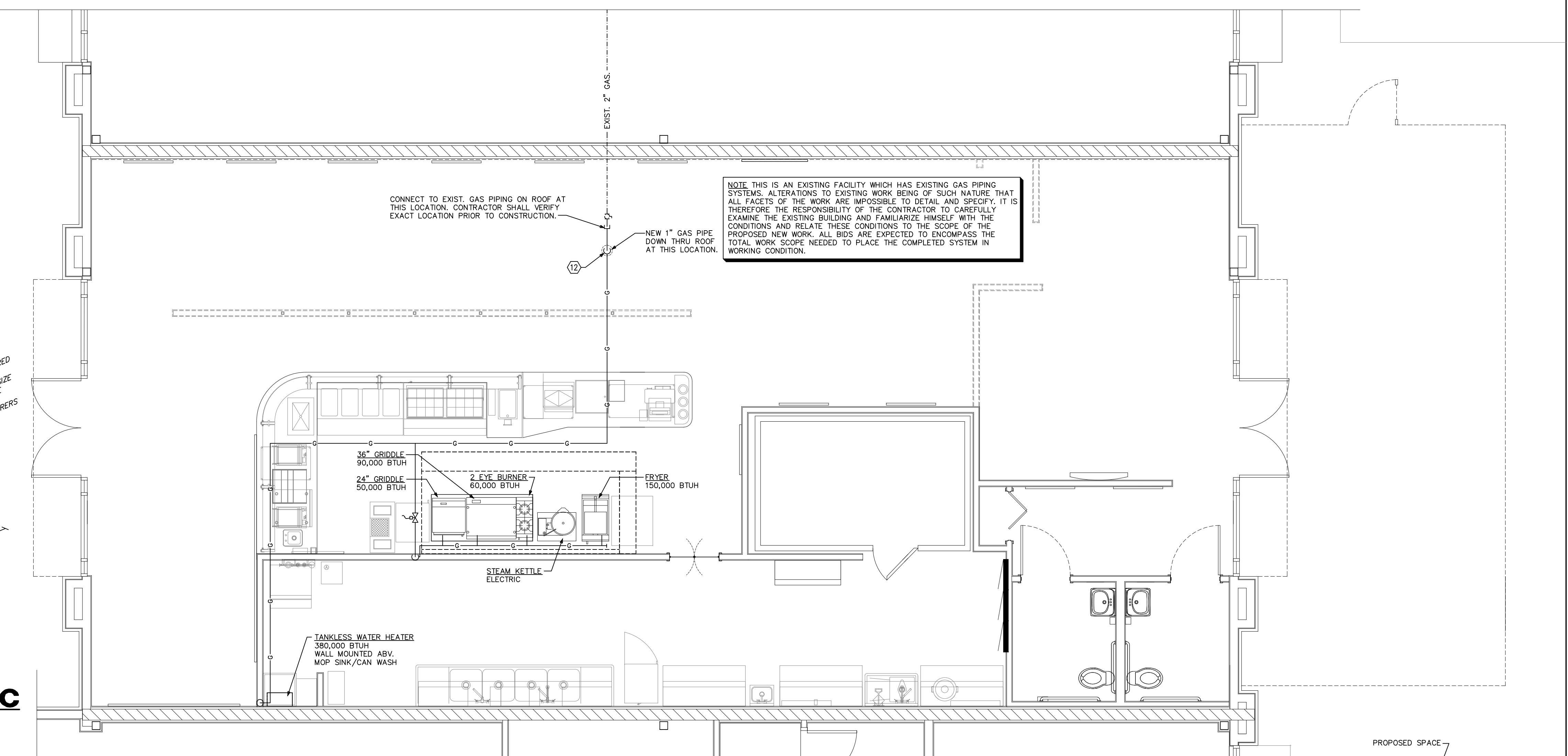
## NOTES

1. 4-WAY THROW PATTERN UNLESS NOTED OTHERWISE
2. FRAME SHALL FIT LAY-IN CEILING MODULE
3. PROVIDE AND INSTALL MANUAL VOLUME DAMPER
4. DAMPER LOCATED IN DUCTWORK.
5. FRAME SHALL BE FOR DRYWALL INSTALLATION.
6. ALUMINUM CONSTRUCTION.
7. PERFORATED SUPPLY GRILLE, PROVIDE INSULATED PLENUM ABOVE W/ SIDE ENTRY.
8. HINGED FILTER TYPE GRILLE.
9. EGGCRATE GRILLE
10. PROVIDED WITH A TRM RAPID MOUNT PLASTER FRAME.
11. WHITE FINISH.
12. G.C.(OR FRANCHISE PARTNER) PROVIDED
13. DOUBLE DEFLECTION, FRONT BLADES PARALLEL TO LONG DIMENSION.
14. DIRECT SPIRAL DUCT-MOUNTED REGISTER, AIR SCOOP DAMPER.
15. 35° DEG FIXED DEFLECTION DUCT MOUNTED.
16. 3-WAY THROW PATTERN.

\* OR APPROVED EQUAL

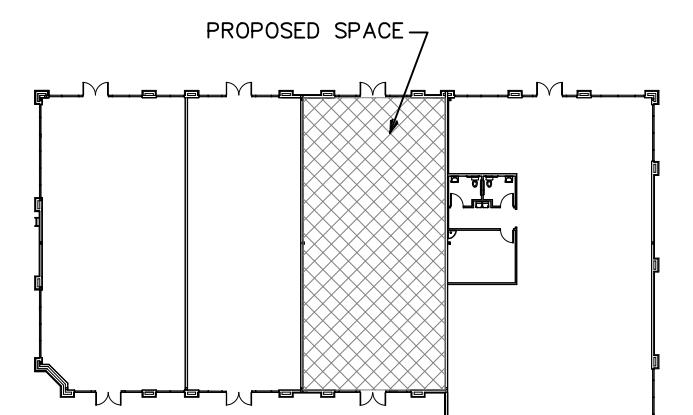


# H.V.A.C. ABBREVIATION LEGEND



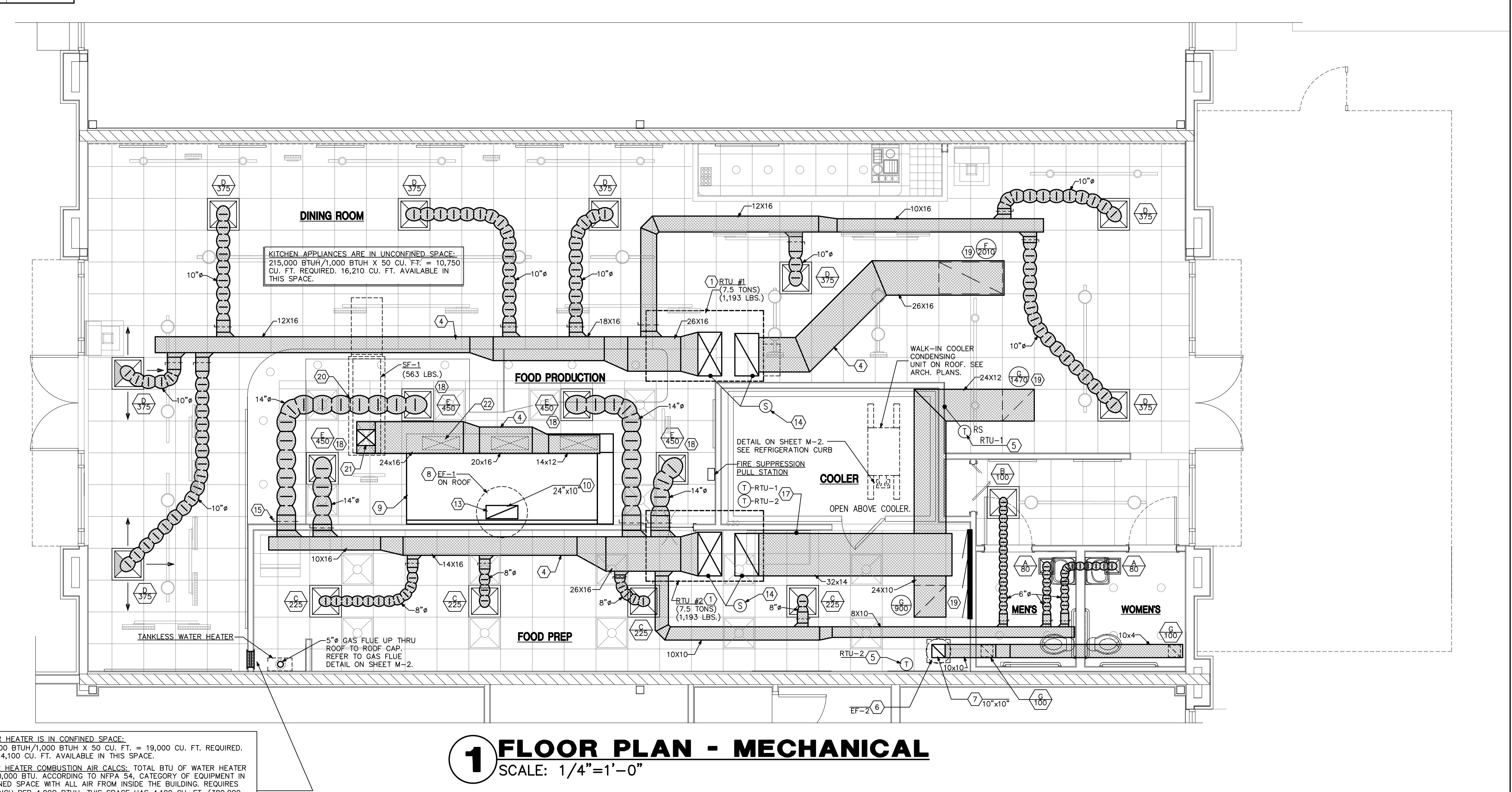
# **2 FLOOR PLAN - GAS PIPING**

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



## KEY PLAN      NO SCALE

AIR BALANCE SCHEDULE					
OUTSIDE	OUTSIDE AIR	RETURN AIR	SUPPLY AIR	EXHAUST AIR	RESULTING PRESSURES
RTU #1	993 (33%)	2007	3000		+993
RTU #2	630 (12%)	2370	3000		+630
EF-1 (HOOD 1)			2600		-2600
EF-2 (TLT. RMS.)			200		-200
SF-1 (HOOD 1)	2100				+2100
TOTAL	3723	4377	6000	2800	+923



# 1 FLOOR PLAN - MECHANICAL

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

■ SCALE:  $1/4"=1'$



HOOD NO.	TAG	MODEL	LENGTH	MAX COOKING TEMP.	EXHAUST PLenum RISER(S)			TOTAL SUPPLY CFM	HOOD CONSTRUCTION	END TO END ROW
					EXH. CFM	WIDTH	LENG. DIA.			
1	KH-1	5424 ND-2-PSP-F	12' 0.00"	450 Deg.	2800	10" 24"	2600	-0.753"	2100	430 SS Where Exposed ALONE ALONE

#### HOOD INFORMATION

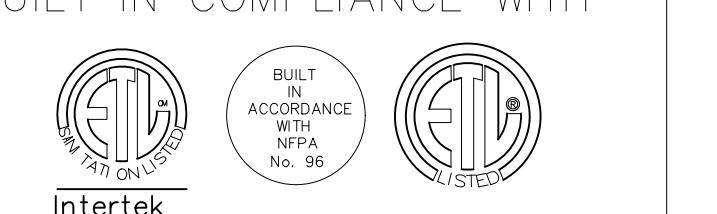
HOOD NO.	TAG	TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 9 MICRONS		LIGHT(S)	UTILITY CABINET(S)		HOOD CONFIG.	
						TYPE	GUARD	LOCATION	TYPE	SIZE	MODEL #	
1	KH-1	Captate Solo Filter	9	20"	16"	93% See Filter Spec.		8	Screw In Compact	NO	Left	Ansul R102 3.0 SC-311110FP 1 Light 1 Fan YES 804 LBS

HOOD NO.	TAG	OPTION	
		FIELD WRAPPER	17.00" High Front, Left, Right
		BACKSPLASH	120.00" High X 24.00" Long 430 SS Vertical
		BACKSPLASH	120.00" High X 24.00" Long 430 SS Vertical
1	KH-1	LEFT QUARTER END PANEL	80.00" High X 144.00" Long 430 SS Vertical
		RIGHT QUARTER END PANEL	23" Top Width, 0" Bottom Width, 23" High 430 SS
		INSULATION FOR BACK OF HOOD	

PERFORATED SUPPLY PLenum(S)					
HOOD NO.	POS.	LENGTH	WIDTH	HEIGHT	TYPE
1	KH-1	Front	156"	14"	6"
					MUA 10" 28" 700 0.222"
					MUA 10" 28" 700 0.222"
					MUA 10" 28" 700 0.222"

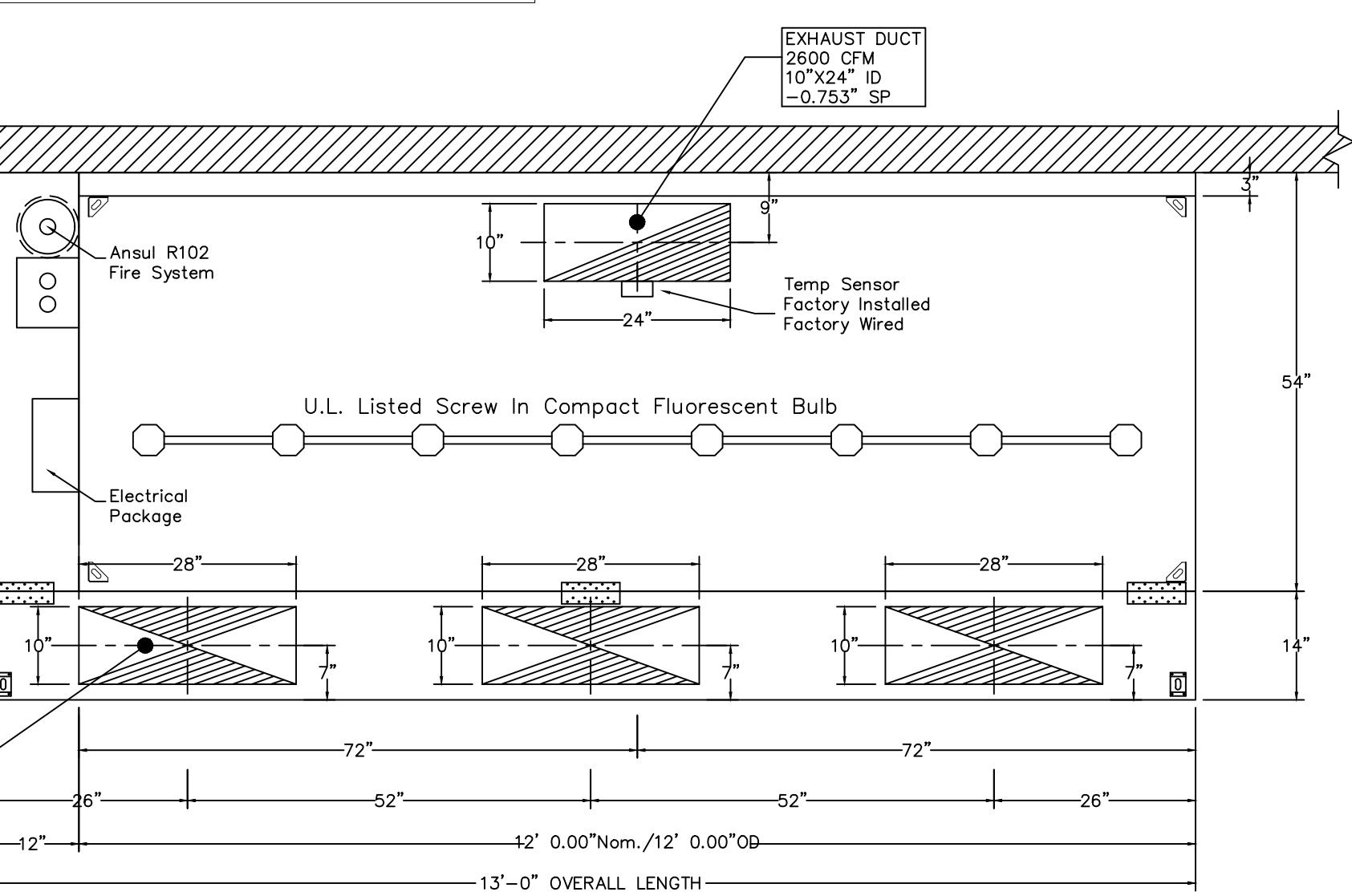
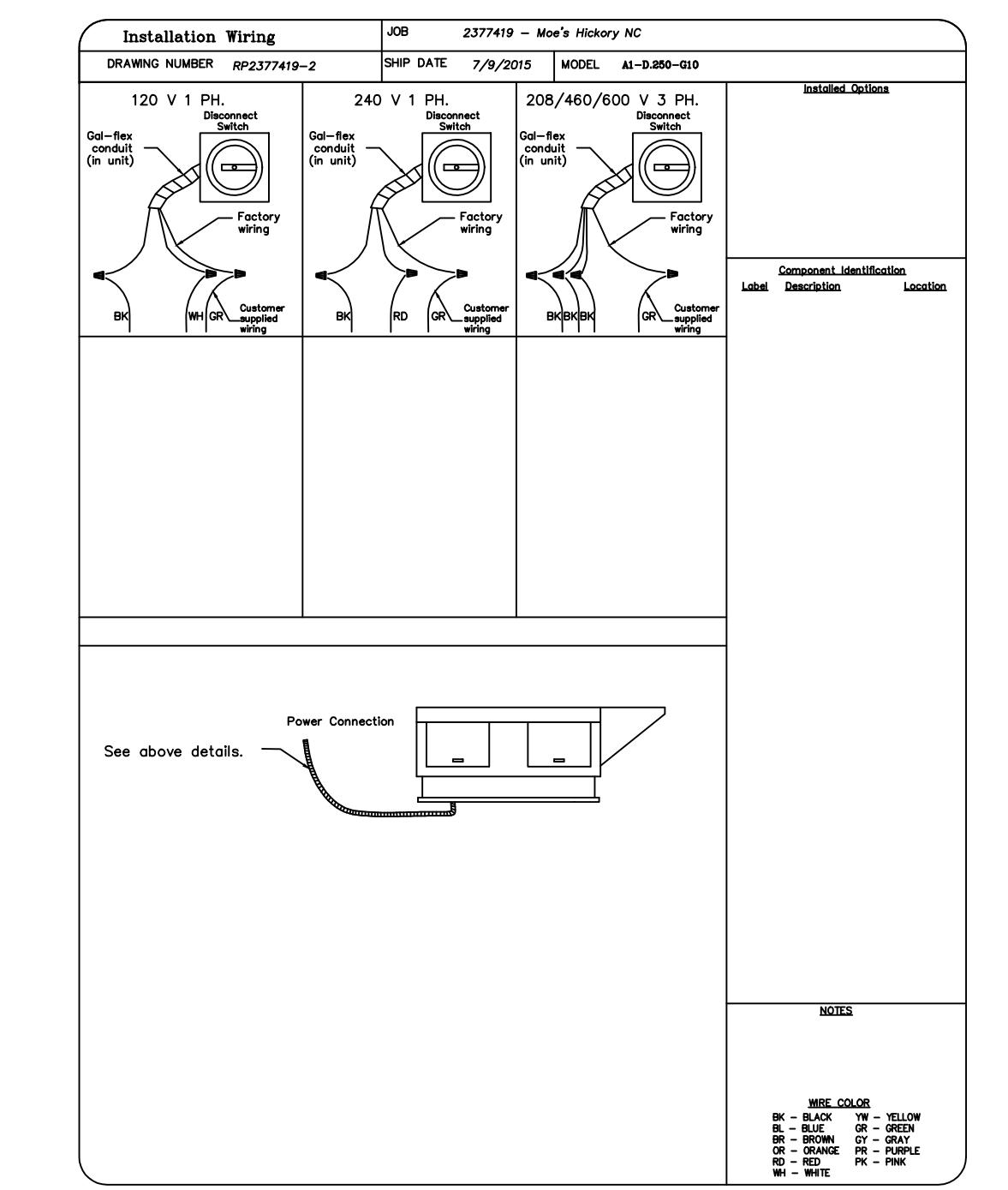
IT IS HIGHLY RECOMMENDED THAT HVAC DIFFUSERS AND/OR RETURNS NOT BE PLACED WITHIN 10' OF THE EXHAUST HOOD. IF DIFFUSERS/RETURNS MUST BE CLOSER THAN 10' TO THE HOOD, THEY SHOULD BE PERFORATED OR 2 WAY DIRECTED AWAY FROM THE HOOD CANOPY. HIGH VELOCITY AIRFLOWS DIRECTED TOWARDS THE HOOD CAN NEGATIVELY IMPACT HOOD PERFORMANCE.

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH



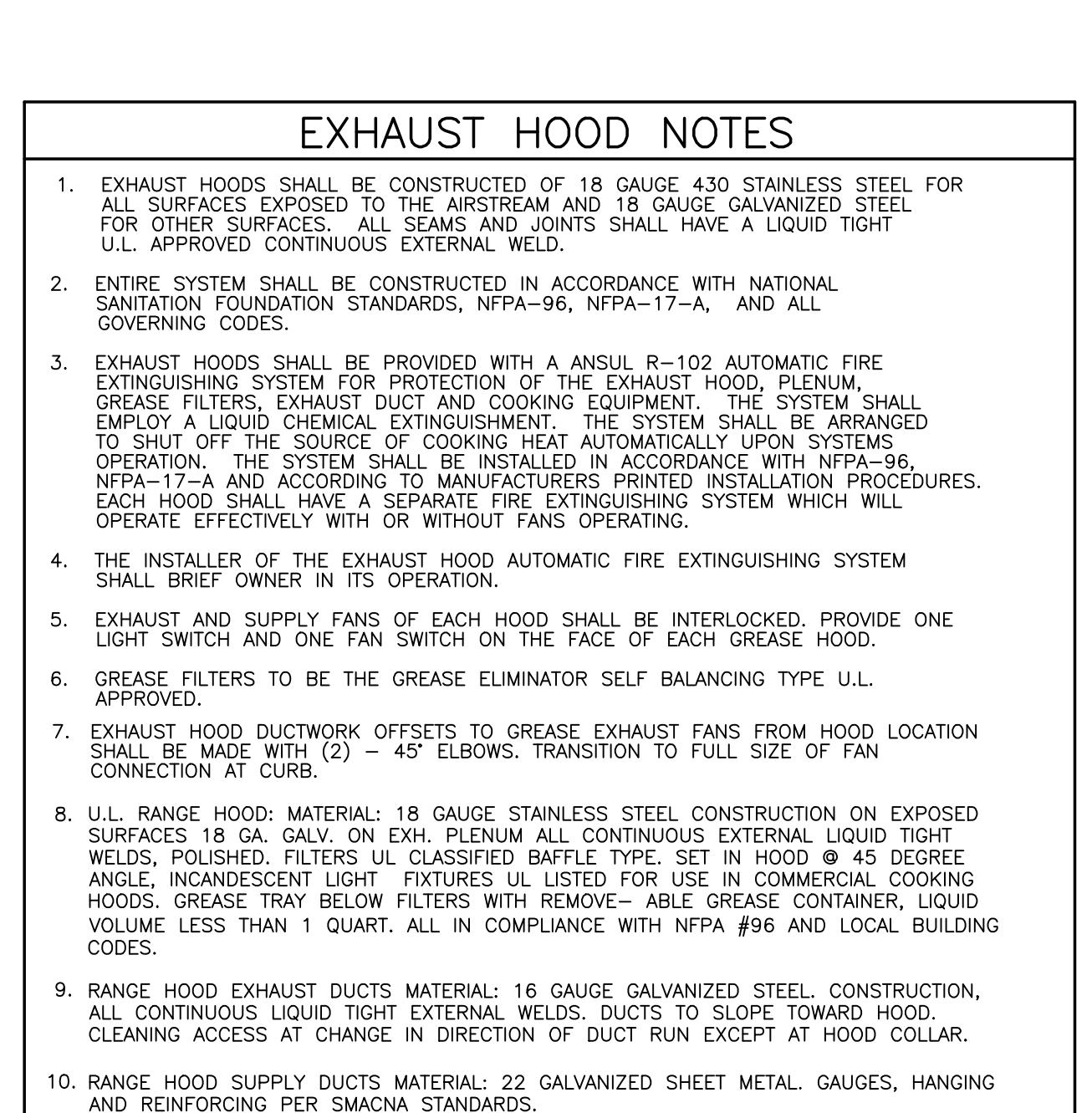
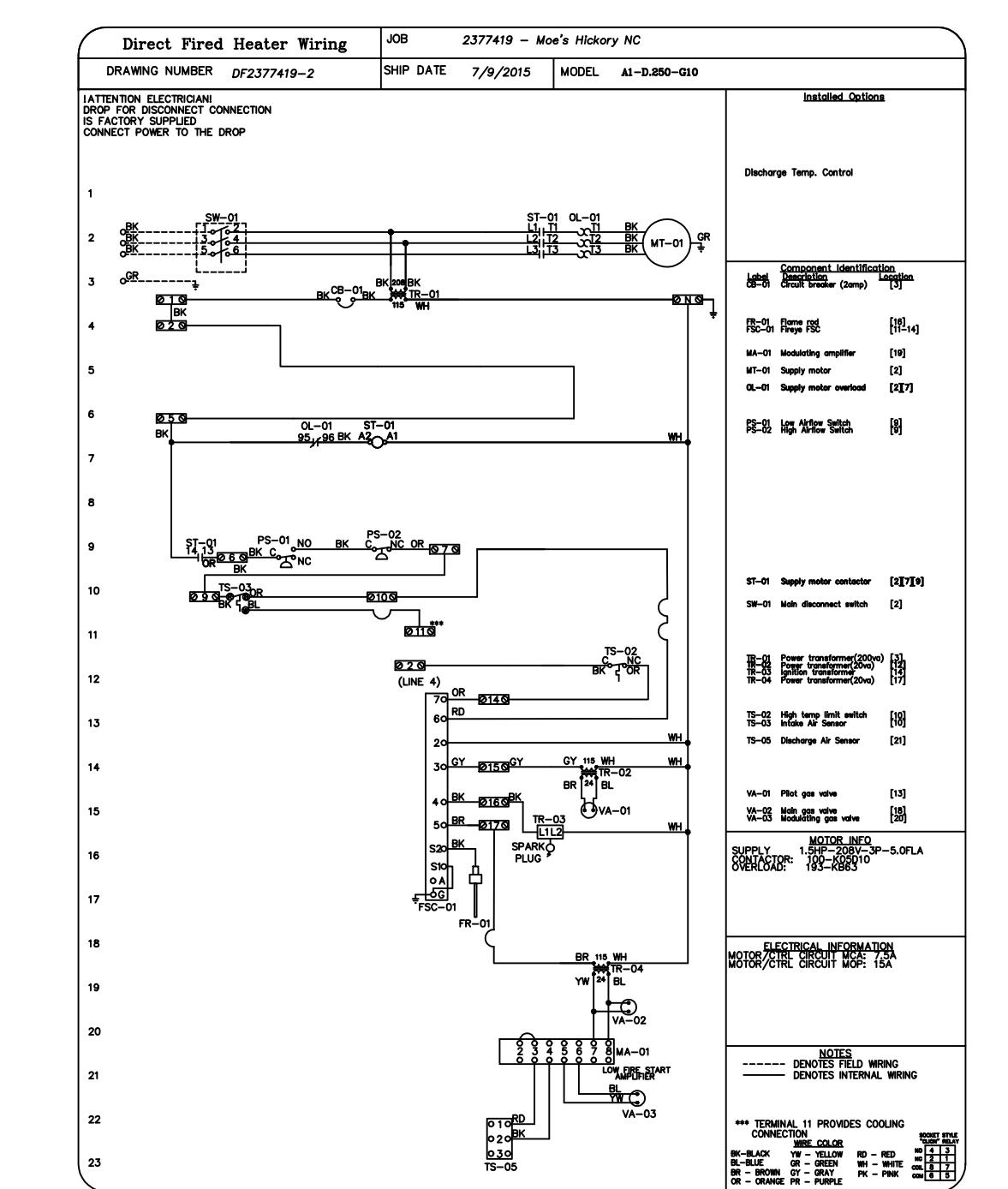
NFPA #96  
UL 710 & ULC710 STANDARDS  
E.T.L. LISTED 3054804-001

FOR QUESTIONS, CALL THE  
CaptiveAire, Inc. commercial kitchen ventilation  
4501 Circle 75 Pkwy, Ste E-5280 Atlanta, GA 30339  
800.882.6626 | M. 470.232.2948 | F. 919.227.5964  
Wes Henson <wes.henson@captiveaire.com>



PLAN VIEW - Hood #1 (KH-1)  
12' 0.00" LONG 5424ND-2-PSP-F

NOTE: Additional hanging angles provided for hoods 12' and longer.



#### EXHAUST HOOD NOTES

1. EXHAUST HOODS SHALL BE CONSTRUCTED OF 18 GAUGE 430 STAINLESS STEEL FOR ALL EXPOSED SURFACES. EXHAUST HOODS SHALL NOT BE CONSTRUCTED OF GALVANIZED STEEL FOR OTHER SURFACES. ALL SEAMS AND JOINTS SHALL HAVE A LIQUID-TIGHT U.L. APPROVED CONTINUOUS EXTERNAL WELD.
2. ENTIRE HOOD SHALL BE CONSTRUCTED IN ACCORDANCE WITH NATIONAL SANITARY CODE CONSTRUCTION STANDARDS, NFPA-96, NFPA-17-A, AND ALL GOVERNING CODES.
3. EXHAUST HOODS SHALL BE PROVIDED WITH A ANSUL R-102 AUTOMATIC FIRE EXTINGUISHING SYSTEM FOR PROTECTION OF THE EXHAUST HOOD, PLenum, GREASE FILTERS, EXHAUST DUCTWORK, AND EXHAUST EQUIPMENT. THE SYSTEM SHALL OPERATE ON LIQUID AIR OR LIQUID CHEMICAL EXTINGUISHMENT. THE SYSTEM SHALL BE ARRANGED TO SHUT OFF THE SOURCE OF COOKING HEAT AUTOMATICALLY UPON SYSTEM OPERATION. NFPA-17-A AND ACCORDING TO MANUFACTURERS PRINTED INSTALLATION PROCEDURES. EACH HOOD SHALL HAVE A SEPARATE FIRE EXTINGUISHING SYSTEM WHICH WILL OPERATE INTELLIGENTLY WITH OTHER HOOD FANS OPERATING.
4. THE INSTALLER OF THE EXHAUST HOOD AUTOMATIC FIRE EXTINGUISHING SYSTEM SHALL BRIEFLY OPERATE THE SYSTEM.
5. EXHAUST AND SUPPLY FANS OF EACH HOOD SHALL BE INTERLOCKED. PROVIDE ONE LIGHT SWITCH AND ONE FAN SWITCH ON THE FACE OF EACH GREASE HOOD.
6. GREASE FILTERS TO BE THE GREASE ELIMINATOR SELF BALANCING TYPE U.L. APPROVED.
7. EXHAUST HOOD DUCTWORK OFFSETS TO GREASE EXHAUST FANS FROM HOOD LOCATION SHALL BE MADE WITH (2) - 45° ELBOWS. TRANSITION TO FULL SIZE OF FAN CONNECTION AT CURB.
8. U.L. RANGE HOOD: MATERIAL: 18 GAUGE STAINLESS STEEL CONSTRUCTION ON EXPOSED SURFACES. 18 GA. GALV. ON EXH. PLenum ALL CONTINUOUS EXTERNAL LIQUID TIGHT WELDS. POLISHED. FILTERS UL CLASSIFIED BAFFLE TYPE. SET IN HOOD @ 45 DEGREE ANGLE. LIQUID TIGHT EXHAUST DUCTS. LIQUID TIGHT EXHAUST HOODS. LIQUID TIGHT HOODS. GREASE TRAY BELOW FILTERS WITH REMOVEABLE GREASE CONTAINER. LIQUID VOLUME LESS THAN 1 QUART. ALL IN COMPLIANCE WITH NFPA #96 AND LOCAL BUILDING CODES.
9. RANGE HOOD EXHAUST DUCTS MATERIAL: 16 GAUGE GALVANIZED STEEL CONSTRUCTION. ALL CONTINUOUS LIQUID TIGHT EXTERNAL WELDS. DUCTS TO SLOPE TOWARD HOOD. CLEANING ACCESS AT CHANGE IN DIRECTION OF DUCT RUN EXCEPT AT HOOD COLLAR.
10. RANGE HOOD SUPPLY DUCTS MATERIAL: 22 GALVANIZED SHEET METAL. GAUGES, HANGING AND REINFORCING PER SMACNA STANDARDS.

#### EXHAUST FAN INFORMATION - Job#2377419

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES
1	EF-1	NCA16HPFA	2600	1.250	1287	1.500	1.0170	3	208	5.0	147	14.1

#### MUA FAN INFORMATION - Job#2377419

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	CFM	ESP.	RPM	H.P.	B.H.P.	Ø	VOLT	FLA	WEIGHT (LBS.)	SONES	BURNER EFFICIENCY(%)
2	SF-1	A1-D-250-G10	G10	A1-D-250	2100	0.550	1120	1.500	0.9270	3	208	5.0	565	19.8	92

#### GAS FIRED MAKE-UP AIR UNIT(S)

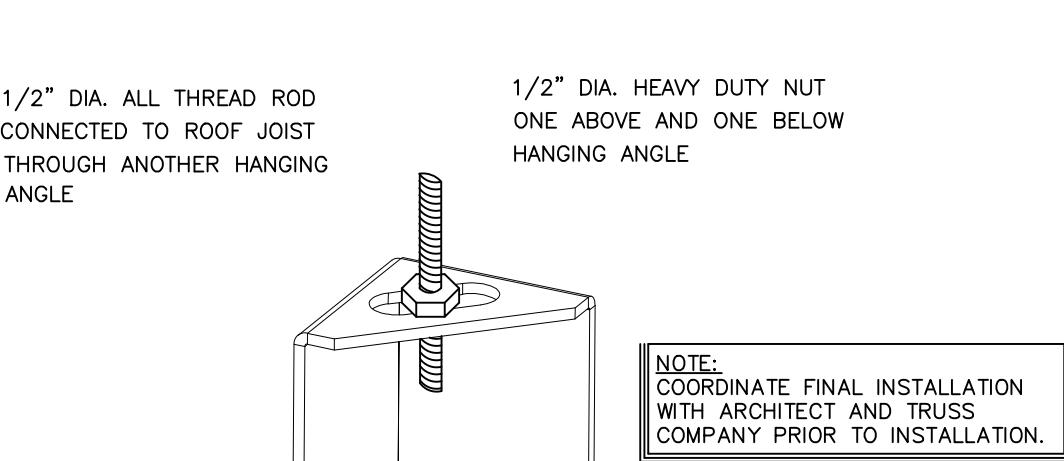
FAN UNIT NO.	TAG	INPUT AIR DENSITY	INPUT BTU'S	OUTPUT BTU'S	TEMP. RISE	REQUIRED INPUT GAS PRESSURE	GAS TYPE
2	SF-1	YES	153829	141523	65 deg F	7 in. w.c. - 14 in. w.c.	Natural

#### PAN OPTIONS

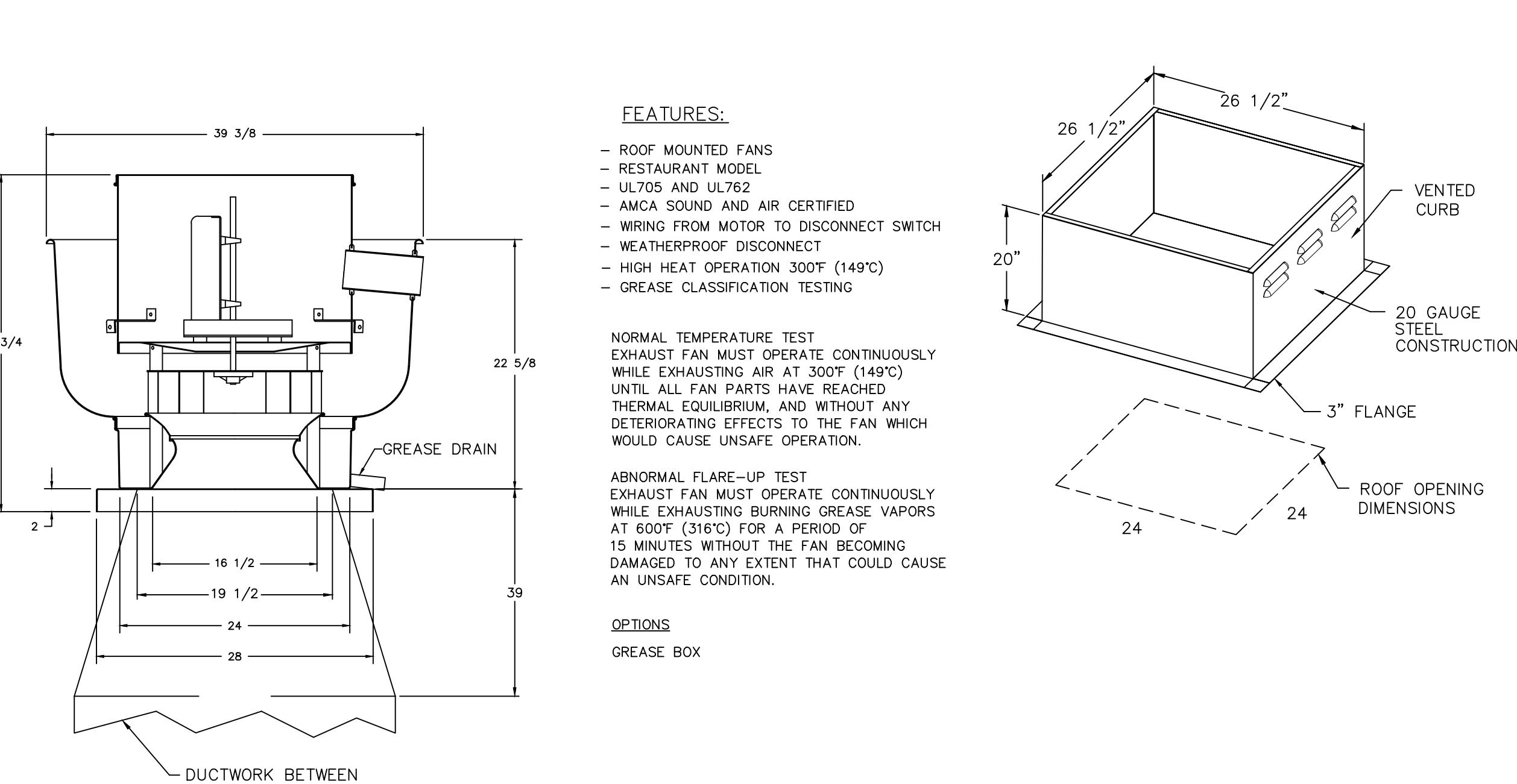
FAN UNIT NO.	TAG	OPTION (Qty. - Descr.)
1	EF-1	1 - Grease Box
2	SF-1	1 - Low Fire Start
2	SF-1	1 - Inlet Pressure Gauge, 0-35"
2	SF-1	1 - Manifold Pressure Gauge, -5 to 15" w.c.

#### CURB ASSEMBLIES

NO.	ON FAN	WEIGHT	ITEM	SIZE
1	# 1	34 LBS	Curb	26.500" W x 26.500" L x 24.000" H Vented Hinged
2	# 2	63 LBS	Curb	21.000" W x 21.000" L x 20.000" H Insulated

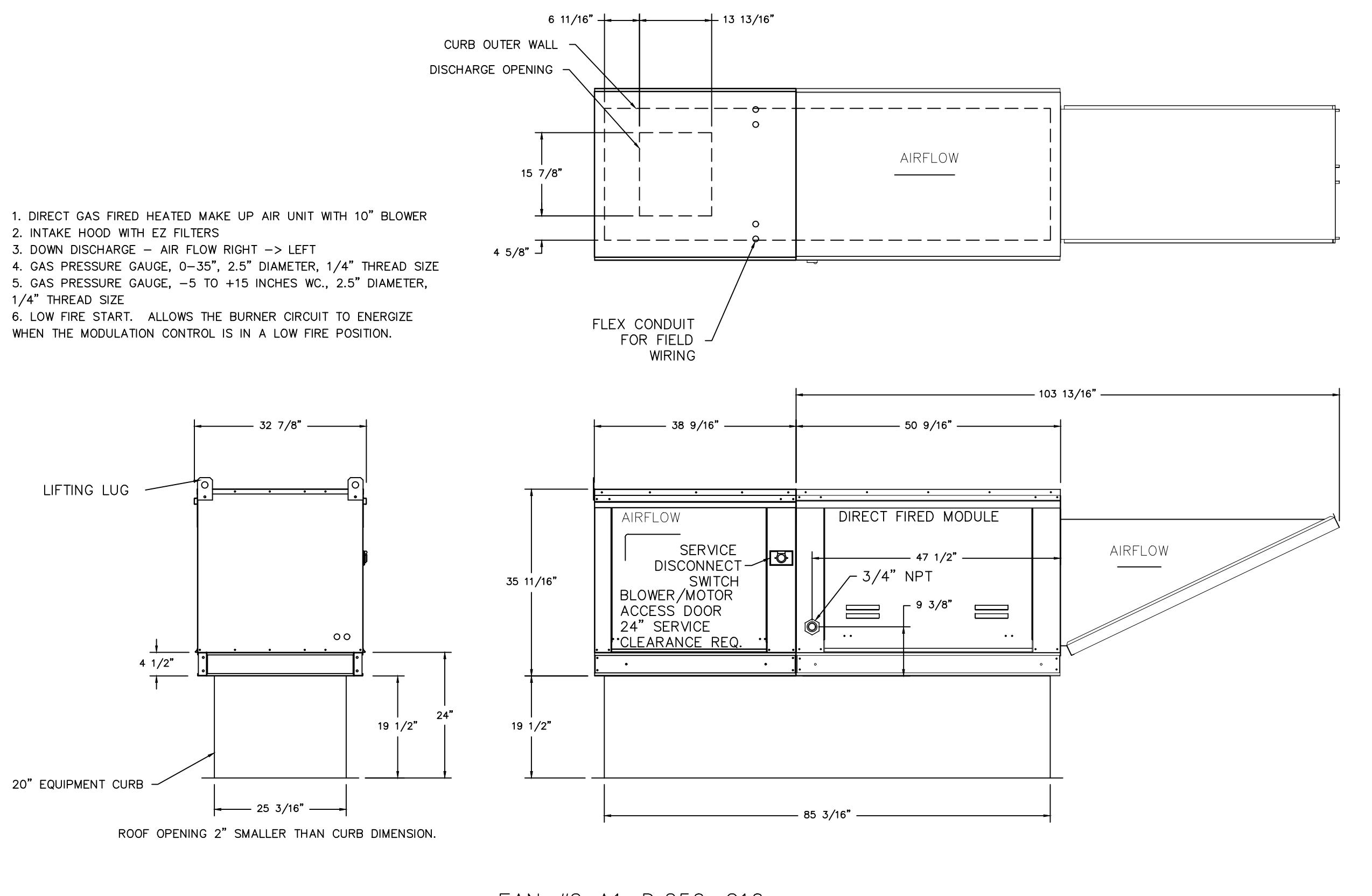


ND-2 HANGING ANGLE DETAIL



FAN #1 NCA16HPFA - EXHAUST FAN (EF-1)

\* ROD AND NUTS TO BE SUPPLIED BY INSTALLING CONTRACTOR  
HANGING ANGLE IS PRE-PUNCHED AT FACTORY

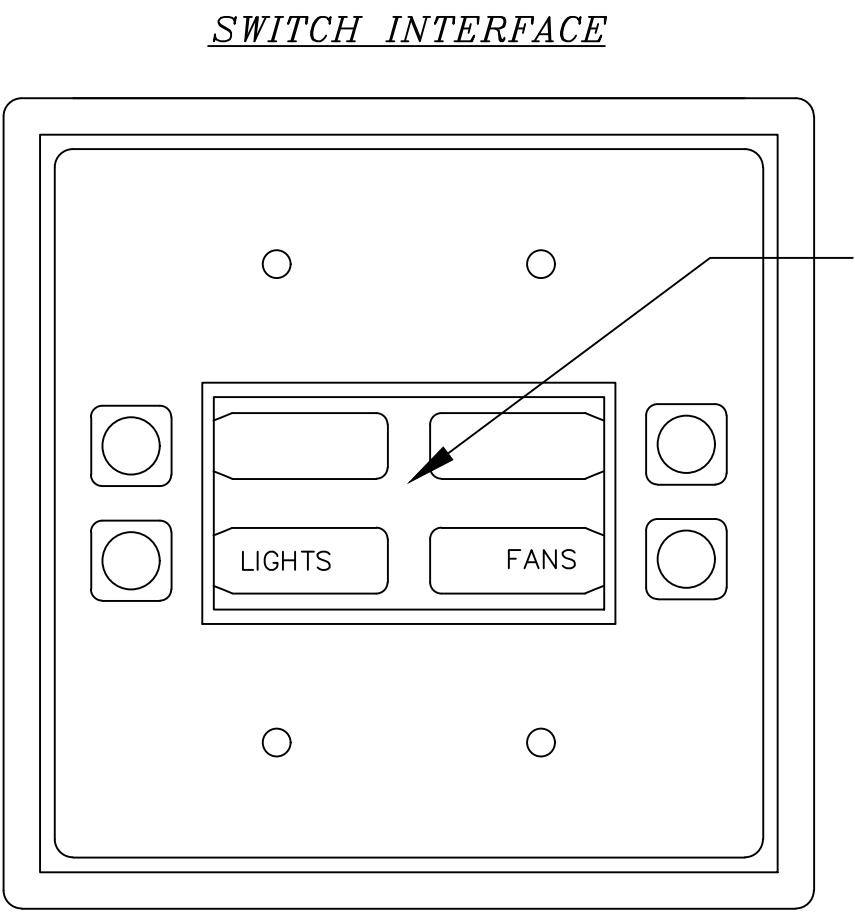


FAN #2 A1-D.250-G10 -  
HEATER (SF-1)

ELECTRICAL PACKAGES – Job#2008464											
NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	Ø	H.P.	VOLT	FLA
1		SC-311110FP	Utility Cabinet Left	Utility Cabinet Left	1 Light	Smart Controls Thermostatic Control	Exhaust	3	1.500	208	4.7
				Hood # 1	1 Fan		Supply	3	0.750	208	2.7

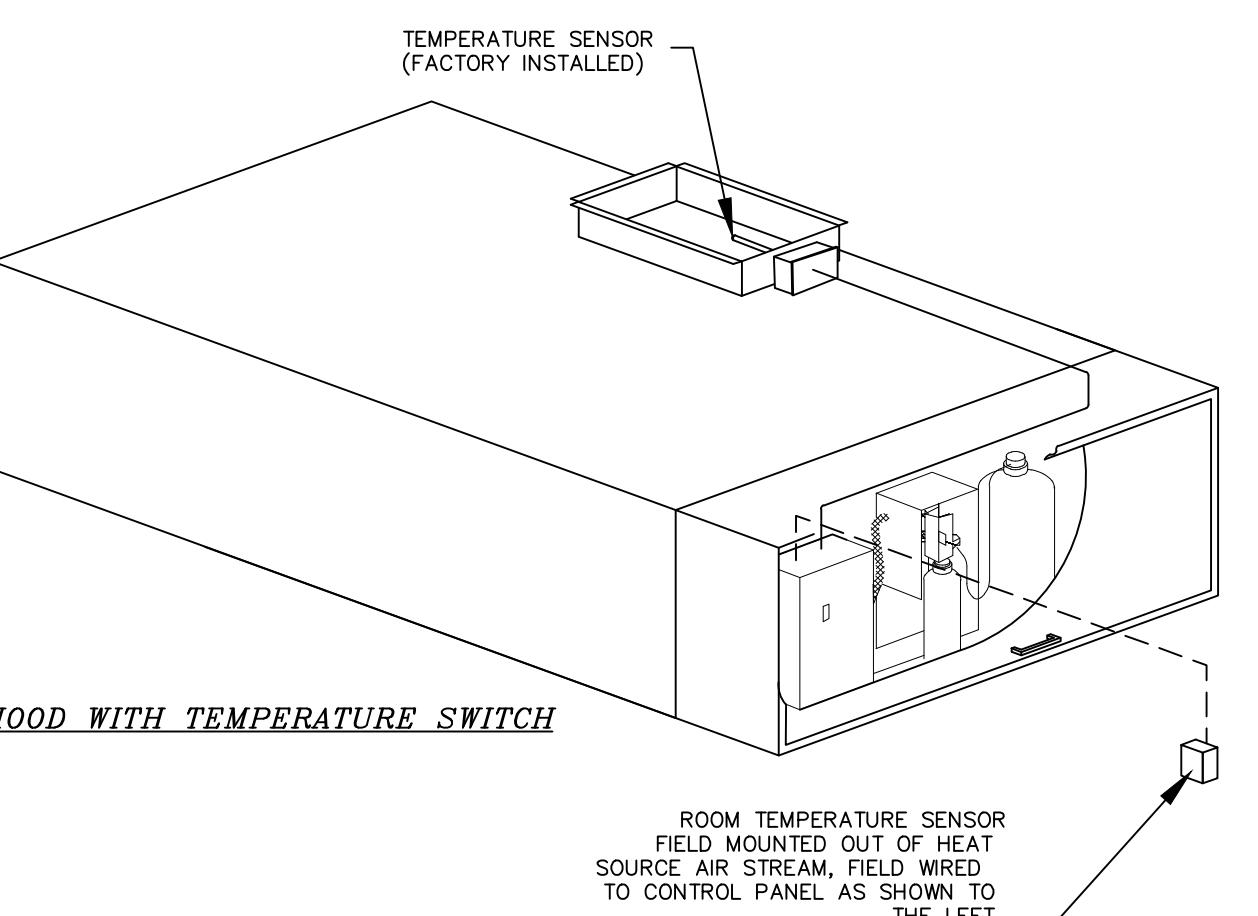
THE DIAGRAM BELOW SHOWS THE REQUIRED FIELD WIRING FOR THE CONTROL PANEL. THE DIAGRAM TO THE LOWER RIGHT SHOWS ALL WIRING (FACTORY AND FIELD) FOR REFERENCE. ALL FIELD WIRING IS TO BE DONE BY THE ELECTRICIAN OTHER THAN WIRING TO THE BUILDING FIRE ALARM SYSTEM WHICH SHOULD BE COMPLETED BY THE ALARM CONTRACTOR. 30' OF 18 AWG WIRE IS SUPPLIED FOR CONNECTION OF THE ROOM TEMPERATURE SENSOR. ROOM SENSOR TO BE FIELD MOUNTED BY ELECTRICIAN.

# FIELD WIRING



# TEMPERATURE SENSOR INTERLOCK

The Temperature Sensor Interlock option complies with IMC 507.2.1.1 and NFPA 96 11.1.1 by interlocking with cooking appliances through means of a heat sensor to automatically activate exhaust fans during cooking operations. The room temperature sensor provides a differential reference point for the hood temperature sensor.



### TYPICAL HOOD WITH TEMPERATURE SWITCH

## SPECIFICATIONS

THE RESTAURANT FIRE SUPPRESSION SYSTEM SHALL BE THE PRE-ENGINEERED TYPE WITH A FIXED NOZZLE AGENT DISTRIBUTION NETWORK. IT SHALL BE LISTED WITH UNDERWRITERS LABORATORIES, INC. (UL)

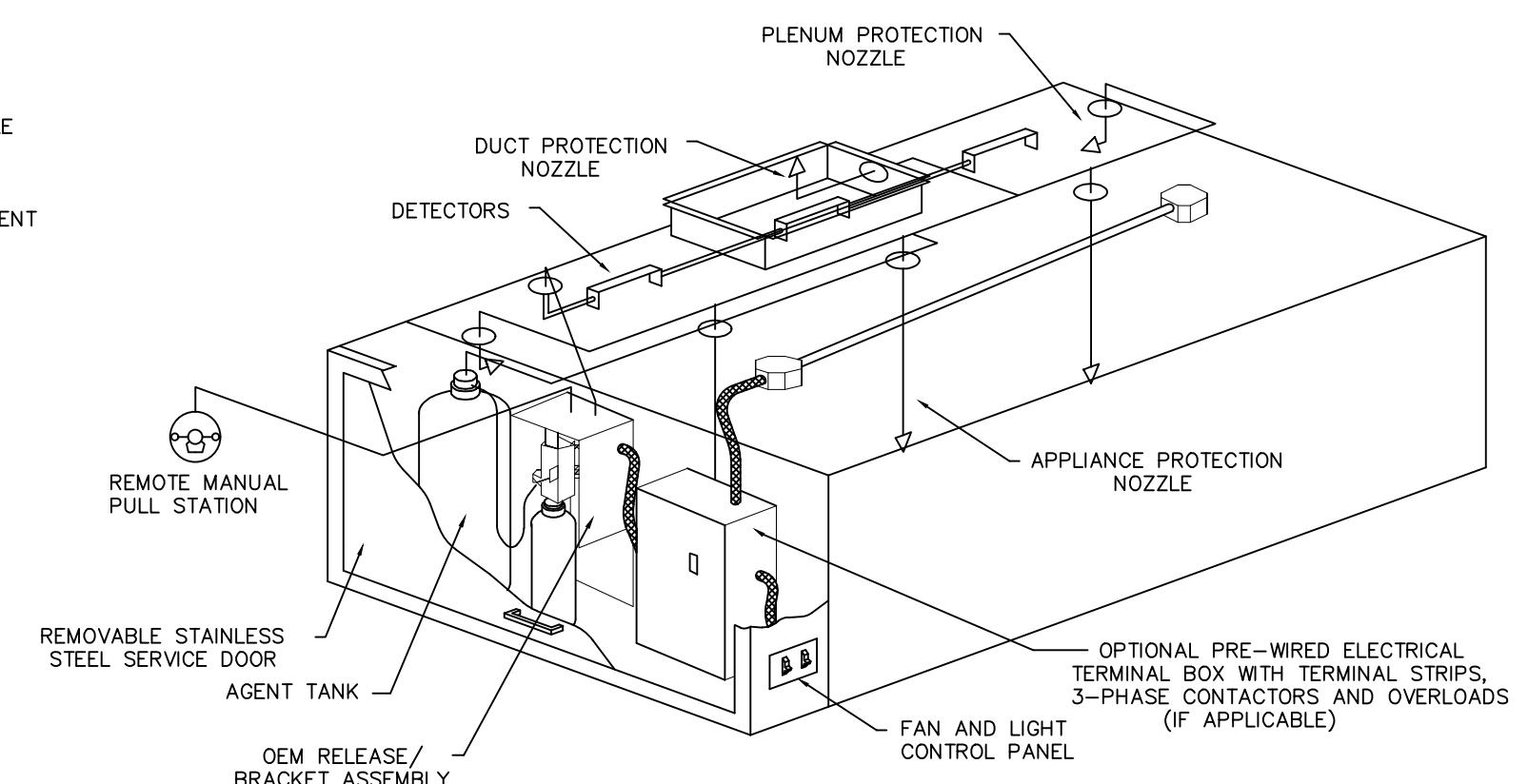
THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC DETECTION AND ACTUATION  
WITHIN ONE STATED EMISSION ACTIVATION. UNSTATED EMISSIONS SHALL BE MONITOR

WITH LOCAL OR REMOTE MANUAL ACTUATION. ACCESSORIES SHALL BE AVAILABLE FOR MECHANICAL OR ELECTRICAL GAS LINE SHUT-OFF APPLICATIONS.

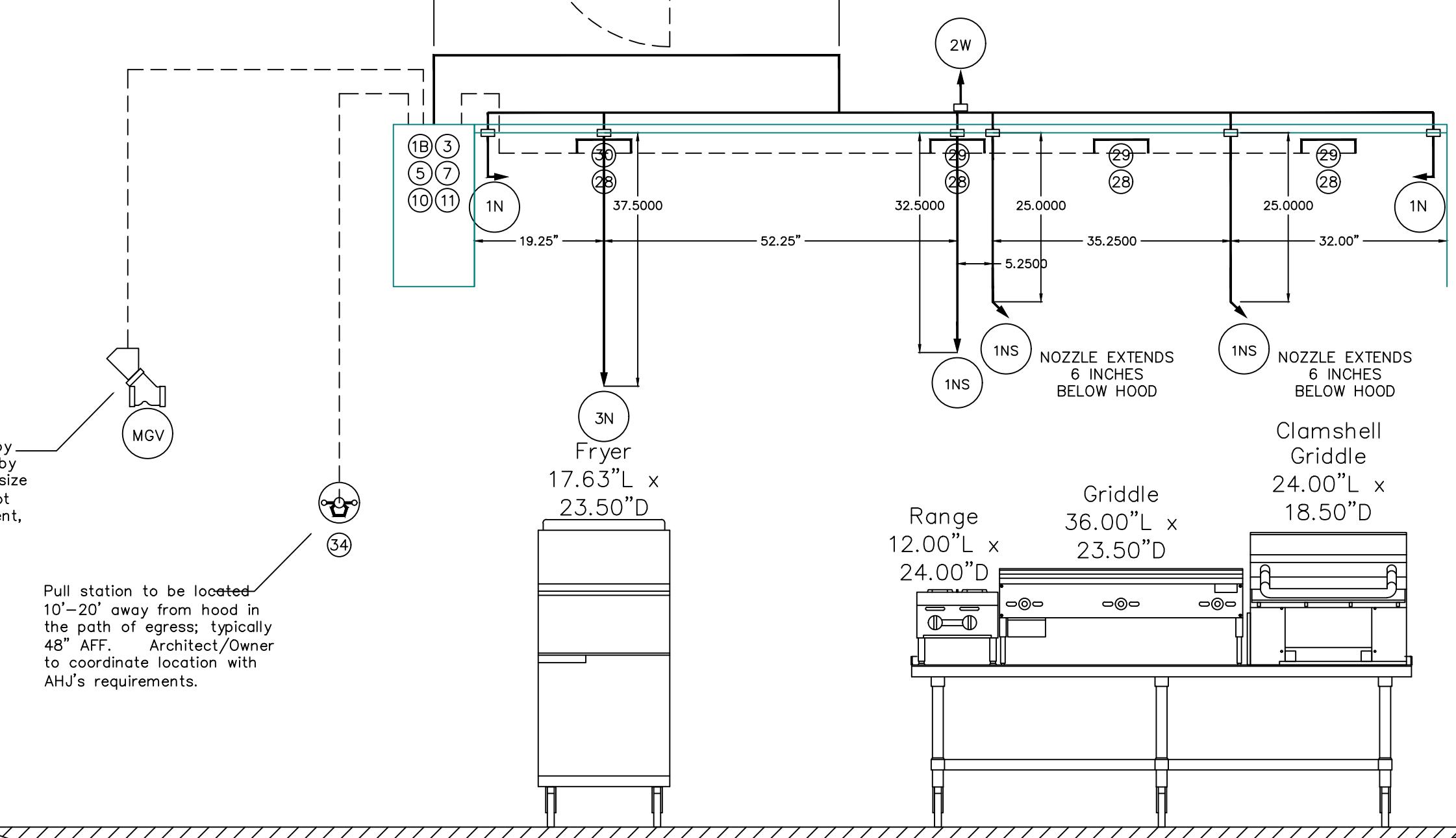
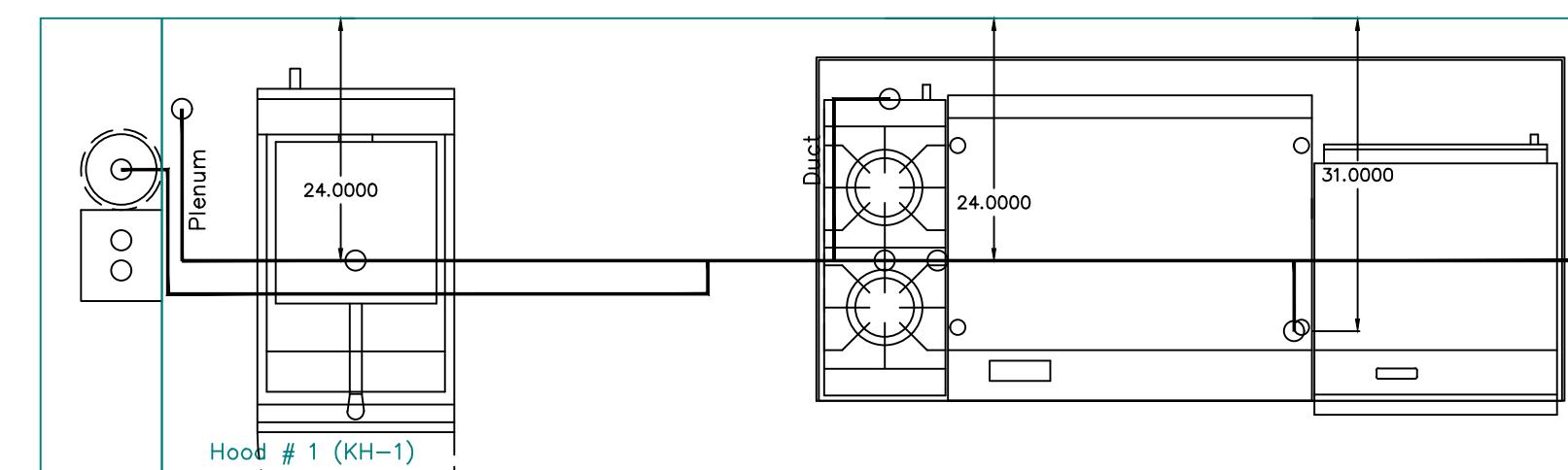
THE REGULATED RELEASE MECHANISM SHALL BE COMPATIBLE WITH A FUSIBLE LINK DETECTION SYSTEM. THE FUSIBLE LINK SHALL BE SELECTED AND INSTALLED ACCORDING TO THE OPERATING TEMPERATURE IN THE VENTILATING SYSTEM. THE FUSIBLE LINK SHALL BE SUPPORTED BY A DETECTOR BRACKET/ LINKAGE ASSEMBLY.

## LINKAGE ASSEMBLY.

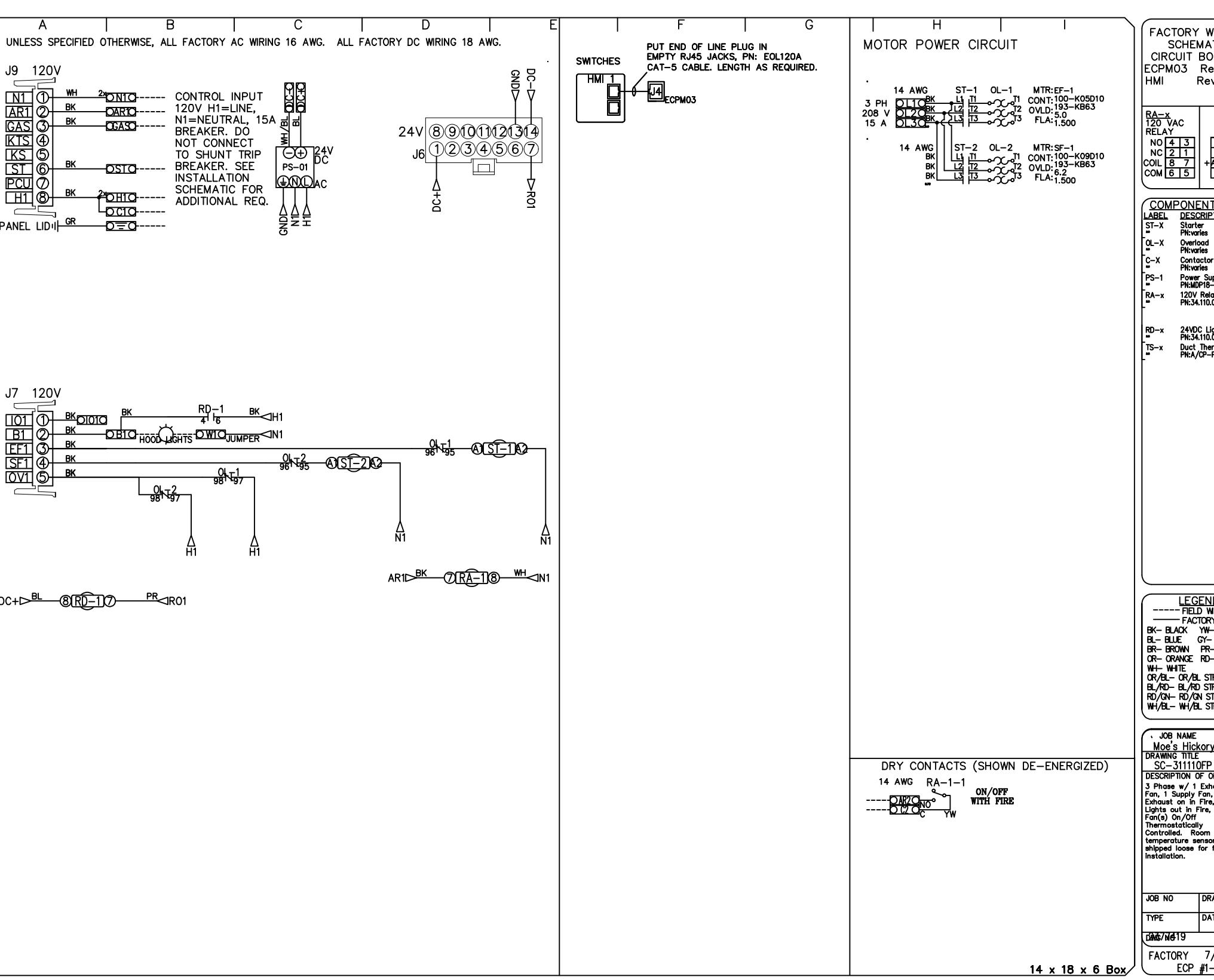
Fire System Information					
Fire System No.	Type	Size	Flow Points	Installation	
				System	Location on Hood
1	Ansul R102	3.0	10	Fire Cabinet Left	Left



## TYPICAL ANSUL R-102 SYSTEM LAYOUT



# FIELD WIRING



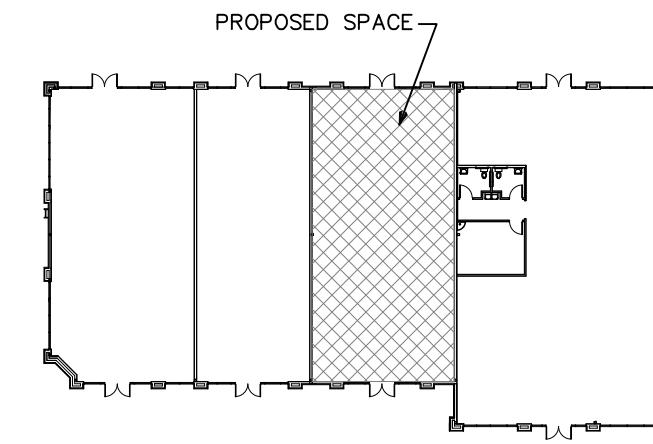
LEGEND - FIRE CABINET ANSUL SYSTEM

NOTES

- FIELD PIPE DROPS AS SHOWN
- SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- MAXIMUM 9 ELBOWS IN SUPPLY LINE.
- MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE.
- IF APPLICABLE, PRE-PIPED CHARBROILER DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.
- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.
- THIS FIRE SYSTEM COMPLIES WITH UL 300 REQUIREMENTS

Job Name: Moe's  
Drawn By:  
System Size: ANSUL-3.0 Total FP required: 10  
Hood # 1 12' 0.00" Long x 54" Wide x 34" High

1N	NOZZLE ASSEMBLY	(419335)
1/2N	NOZZLE ASSEMBLY	(419334)
3N	NOZZLE ASSEMBLY	(419338)
245	NOZZLE ASSEMBLY	(419340)
230	NOZZLE ASSEMBLY	(419339)
2120	NOZZLE ASSEMBLY	(419343)
290	NOZZLE ASSEMBLY	(419342)
260	NOZZLE ASSEMBLY	(419341)
28	DETECTOR BRACKET	
29	LOW TEMP FUSIBLE LINK	
30	HIGH TEMP FUSIBLE LINK	
MGV	MECHANICAL GAS VALVE	
EGV	ELECTRICAL GAS VALVE	
34	REMOTE MANUAL PULL STATION	
S	SWIVEL ADAPTOR	



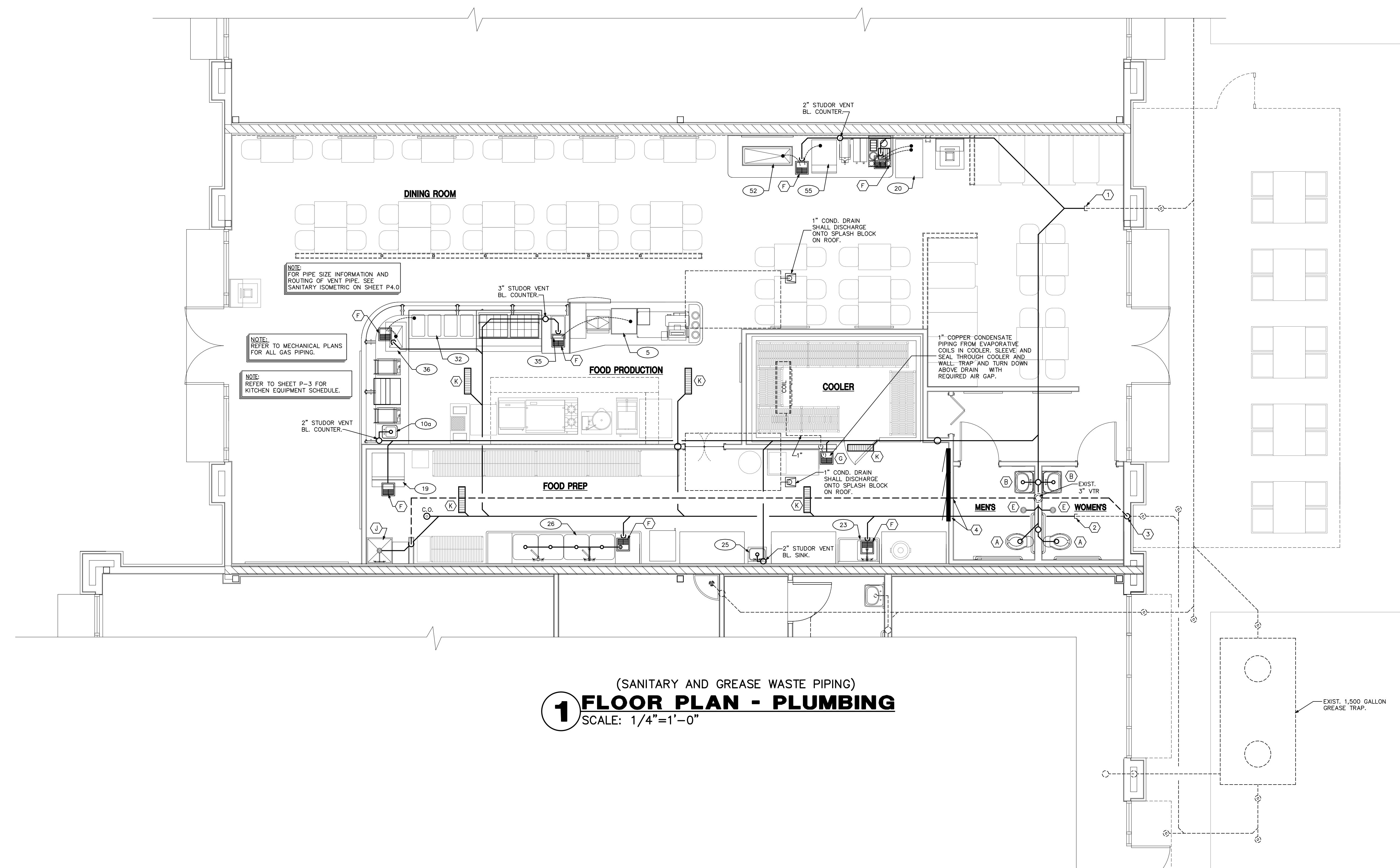
## KEY PLAN      NO SCALE

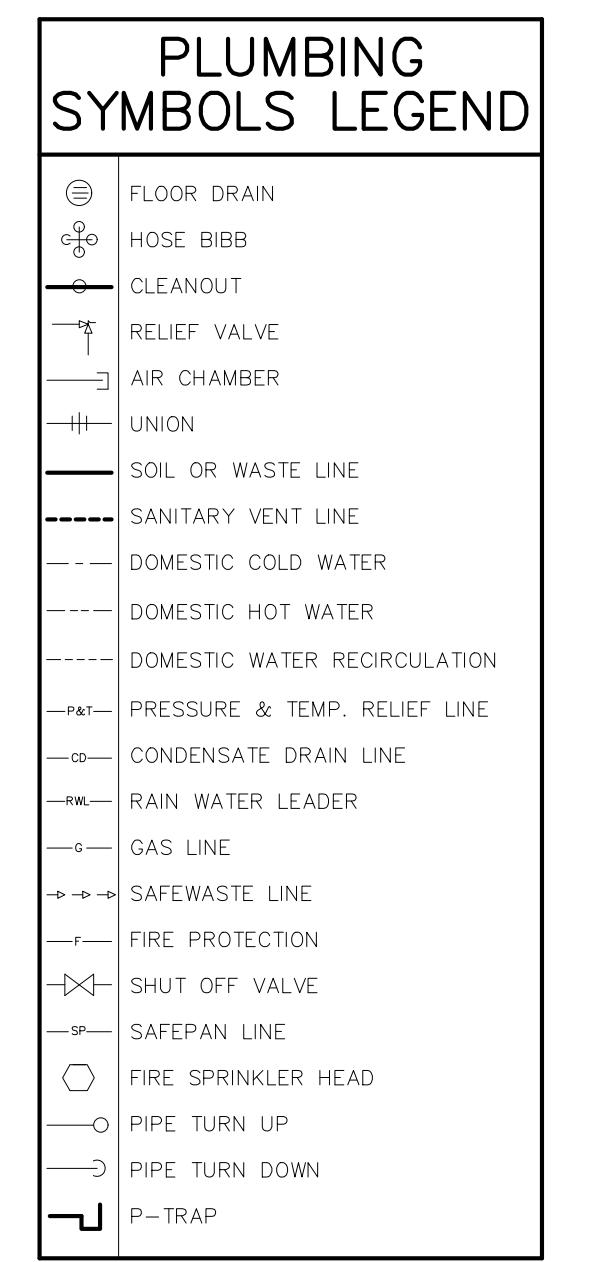
NOTE:  
ALL INDIRECT WASTE OR WASTE PIPING RECEIVING THE DISCHARGE FROM A 4-COMP. SINK, STEAMER OR SIMILAR PIECE OF EQUIPMENT WHICH PRODUCES WATER AT A TEMPERATURE HIGHER THAN 125°F SHALL BE DWV COPPER OR CAST IRON 10'-0" (MIN) DOWNSTREAM FROM THE FROM THE OUTLET PRODUCING SUCH DISCHARGE. COORDINATE WITH EQUIPMENT SUPPLIER.

NOTE THIS IS AN EXISTING FACILITY WHICH HAS EXISTING SANITARY AND WATER DISTRIBUTION SYSTEMS. ALTERATIONS TO EXISTING WORK BEING OF SUCH NATURE THAT ALL FACETS OF THE WORK ARE IMPOSSIBLE TO DETAIL AND SPECIFY. IT IS THEREFORE THE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE THE EXISTING BUILDING AND FAMILIARIZE HIMSELF WITH THE CONDITIONS AND RELATE THESE CONDITIONS TO THE SCOPE OF THE PROPOSED NEW WORK. ALL BIDS ARE EXPECTED TO ENCOMPASS THE TOTAL WORK SCOPE NEEDED TO PLACE THE COMPLETED SYSTEM IN WORKING CONDITION.

## SPECIFIC PLUMBING NOTES

- ① CONNECT TO EXISTING SANITARY PIPING BELOW FLOOR IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
- ② CONNECT TO EXISTING GREASE WASTE PIPING BELOW FLOOR IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
- ③ NEW 3" VENT SHALL CONNECT TO EXISTING GREASE PIPING BELOW FLOOR IN THIS AREA. CONTRACTOR SHALL VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION.
- ④ CONTRACTOR SHALL COORDINATE SANITARY AND VENT PIPING WITH ELECTRICAL CONDUIT FORM PANELS IN THIS AREA PRIOR TO CONSTRUCTION.

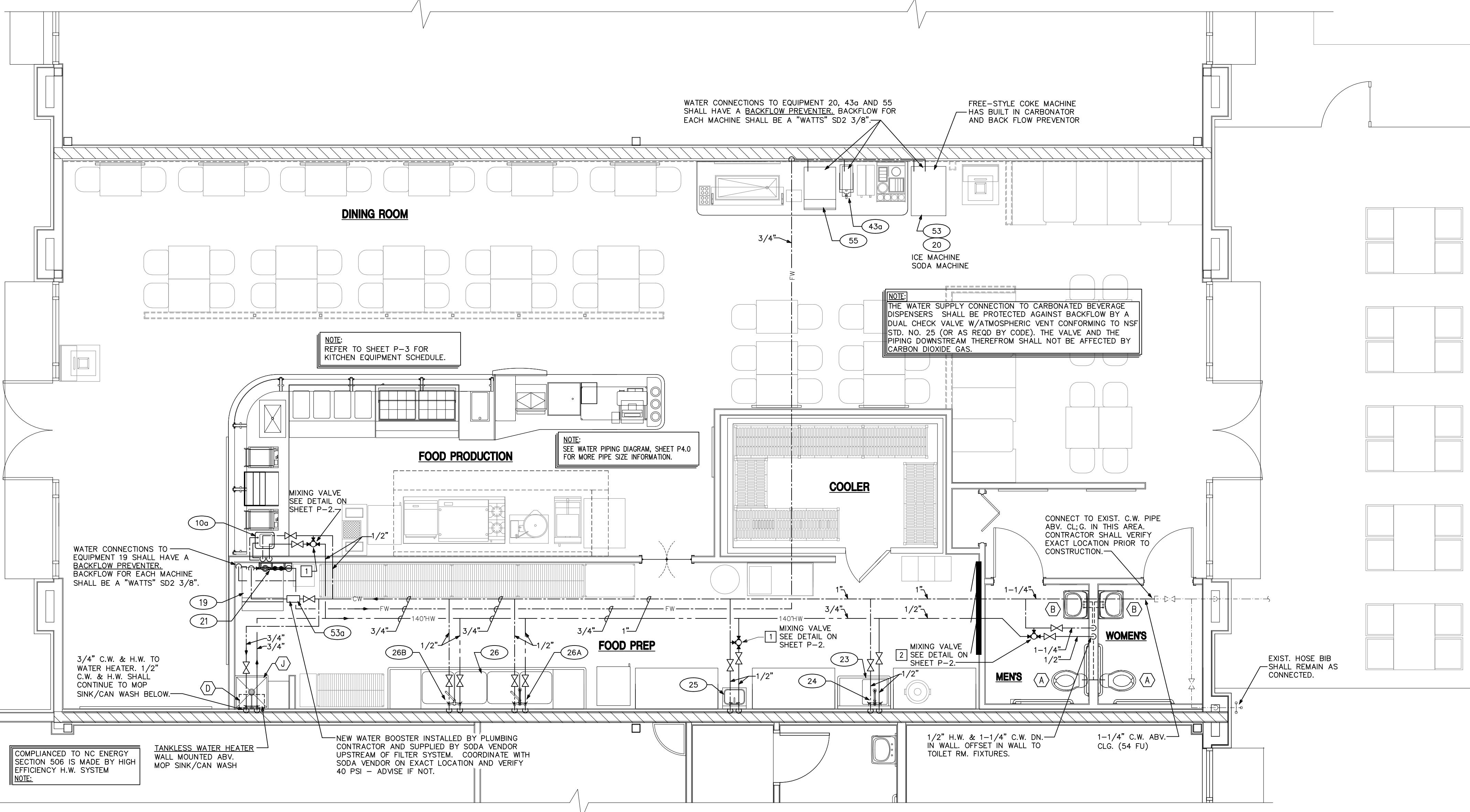




Storage Tank Water Heater Sizing Calculator					
Developed by the Plan Review Unit of the Environmental Health Services Section NC Division of Environmental Health					
Facility Name:	Moe's Southwest Grill				
Address:	Hickory, NC				
EQUIPMENT					
Enter the description, number and size of compartments for each sink below		Number of compartments	(inches)	GPM CALCULATED	
Largest Sink #1		4 Comp. Sk.	24	24	14
Sink #2					105
Sink #3					0
Bar sink					0
Sinks are calculated at 75% capacity					
Enter type of prep sink and number of sink compartments for each sink below		Type of prep sink (vegetable, meat, seafood)	Number of compartments	Gallons Per Hour (GPH)	
Prep sink #1		Meat Prep	1	5	
Prep sink #2				0	
Prep sink #3				0	
Prep sinks are calculated at 5 gallons per compartment					
				Total 5	
Enter the type of equipment below		Quantity		Gallons Per Hour (GPH)	
Hand sinks		3		15	
Can wash		1		10	
Mop sink				0	
Hose reel				0	
Clothes washer				0	
Enter a description and estimated gallon per hour (GPH) usage for other equipment below					
Other Equipment		3		3	
Other Equipment					
Other Equipment					
Other Equipment					
Hand sinks and mop sinks are calculated at 5 GPH each, can washes at 10 GPH each, Hose reels are calculated at 5 GPH, clothes washers at 15 GPH, other equipment at the usage entered					
				Total 28	
Enter the make, model and final rinsing usage in gallons per hour (GPH) for dishmachines		Make	Model	Final Rinse Usage (GPH)	Gallons Per Hour (GPH)
Dishmachine #1				0	
Dishmachine #2				0	
Enter the quantity of pre-rinse units					
Pre-rinse		2		Gallons Per Hour (GPH)	
Dishmachines are calculated at 70% of the final rinse usage specified by the manufacturer.					
				Total 90	
Recovery Rate Needed (GPH): 228					
Water Heater Input (BTU or kW) Needed:					
Gas Water Heater		Electric Water Heater			
200,000 BTU at 80°F rise		45 kW at 80°F rise			
225,000 BTU at 90°F rise		50 kW at 90°F rise			
250,000 BTU at 100°F rise		56 kW at 100°F rise			

PLUMBING ABBREVIATION LEGEND					
DN.	DOWN	C.C.	CENTER TO CENTER	F.U.	FIXTURE UNITS
EXT.	EXTERIOR	N.T.S.	NOT TO SCALE	H.B.	HOSE BIBBS
F.D.	FLOOR DRAIN	M.F.D.	MIN. FLOOR D.	C.O.	COLD
F.F.	FINISH FLOOR	S.O.V.	SHUT OFF VALVE	E.W.H.	ELECTRIC WATER HEATER
A.F.F.	ABOVE FINISH FLOOR	V.C.	WATER CLOSET	JAN.SK.	JANITOR SINK
V.F.	VENTURE FLOOR	T.Y.P.	LABORATORY	P. & T	PRESSURE & TEMPERATURE
T.Y.P.	TYPICAL	R.D.	SINK	R.W.	RAIN WATER LEADER
R.D.	ROOF DRAIN	R.D.	D.W.		
R.D.	ROOF DRAIN	R.D.	ED.L.F.		
O.C.	ON CENTER	UR.	EC.DR.		
			DRINKING FOUNTAIN		
			URINARY		

NOTE: THIS IS AN EXISTING FACILITY WHICH HAS EXISTING SANITARY AND WATER DISTRIBUTION SYSTEMS. ALTERATIONS TO EXISTING WORK BEING OF SUBSTANTIAL NATURE. CONTRACTOR SHALL PROVIDE A DETAILED DESIGN AND SPECIFY. IT IS THEREFORE THE RESPONSIBILITY OF THE CONTRACTOR TO CAREFULLY EXAMINE THE EXISTING BUILDING AND FACILITY AND DETERMINE THE EXISTING SYSTEMS AND CONDITIONS TO THE SCOPE OF THE PROPOSED NEW WORK. ALL BIDS ARE EXPECTED TO ENCOMPASS THE TOTAL WORK SCOPE NEEDED TO PLACE THE COMPLETED SYSTEM IN WORKING CONDITION.

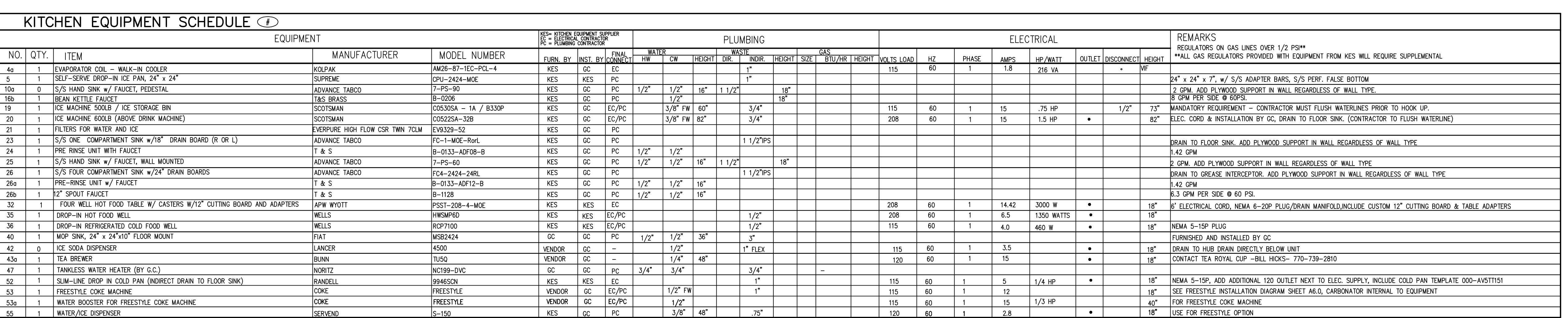
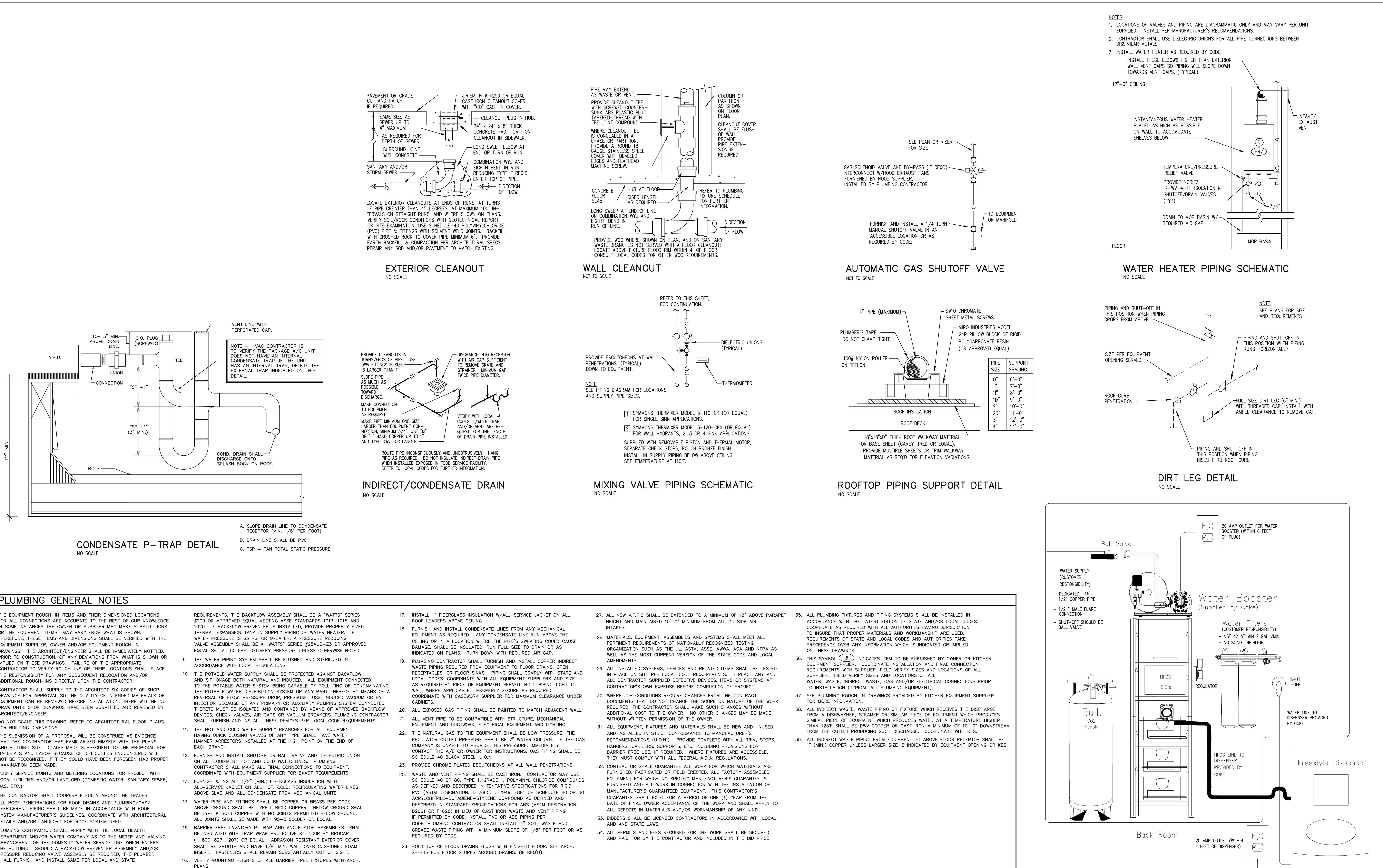


(WATER PIPING)  
1 FLOOR PLAN - PLUMBING  
SCALE: 1/4"=1'-0"

Fixture Schedule Notes					
1. CONTRACTOR SHALL PROVIDE AND INSTALL A WALL CARRIER FOR EACH FIXTURE WHICH IS WALL HUNG, UNLESS OTHERWISE NOTED. PROVIDE APPROPRIATE CARRIER PER FIXTURE TYPE AND REQUIREMENTS.					
2. CONTRACTOR SHALL PROVIDE AND INSTALL WATTS, ZURN, P.P.P. INC. (OR EQUAL) TRAP PRIMERS TO SERVE ALL FLOOR DRAINS REQUIRING PROTECTION PER CODE.					
3. CONTRACTOR SHALL PROVIDE AND INSTALL SHOCK ARRESTORS FOR BRANCH PIPING SERVING FIXTURES WITH QUICK CLOSING VALVES. SHOCK ARRESTORS SHALL BE BY P.P.P., ZURN OR EQUAL, SIZED PER P.D. REQUIREMENTS.					
4. ACCEPTABLE ALTERNATE MANUFACTURERS FOR ITEMS INCLUDING BUT NOT LIMITED TO: WATER CLOSETS: AMERICAN STANDARD, KOHLER, ELER, CRANE, MANSFIELD, LAVATORIES: SAME AS WATER CLOSETS.					
5. WHEN INSTALLING ALTO SHEET VINYL, IT IS CRITICAL THAT THE CLEANOUTS, FLOOR SINKS, AND TRENCH DRAINS BE A SURFACE MEMBRANE CLAMPING TYPE. USE CERTIFIED ALTO INSTALLER AND FOLLOW ALL ALTO DETAILS.					

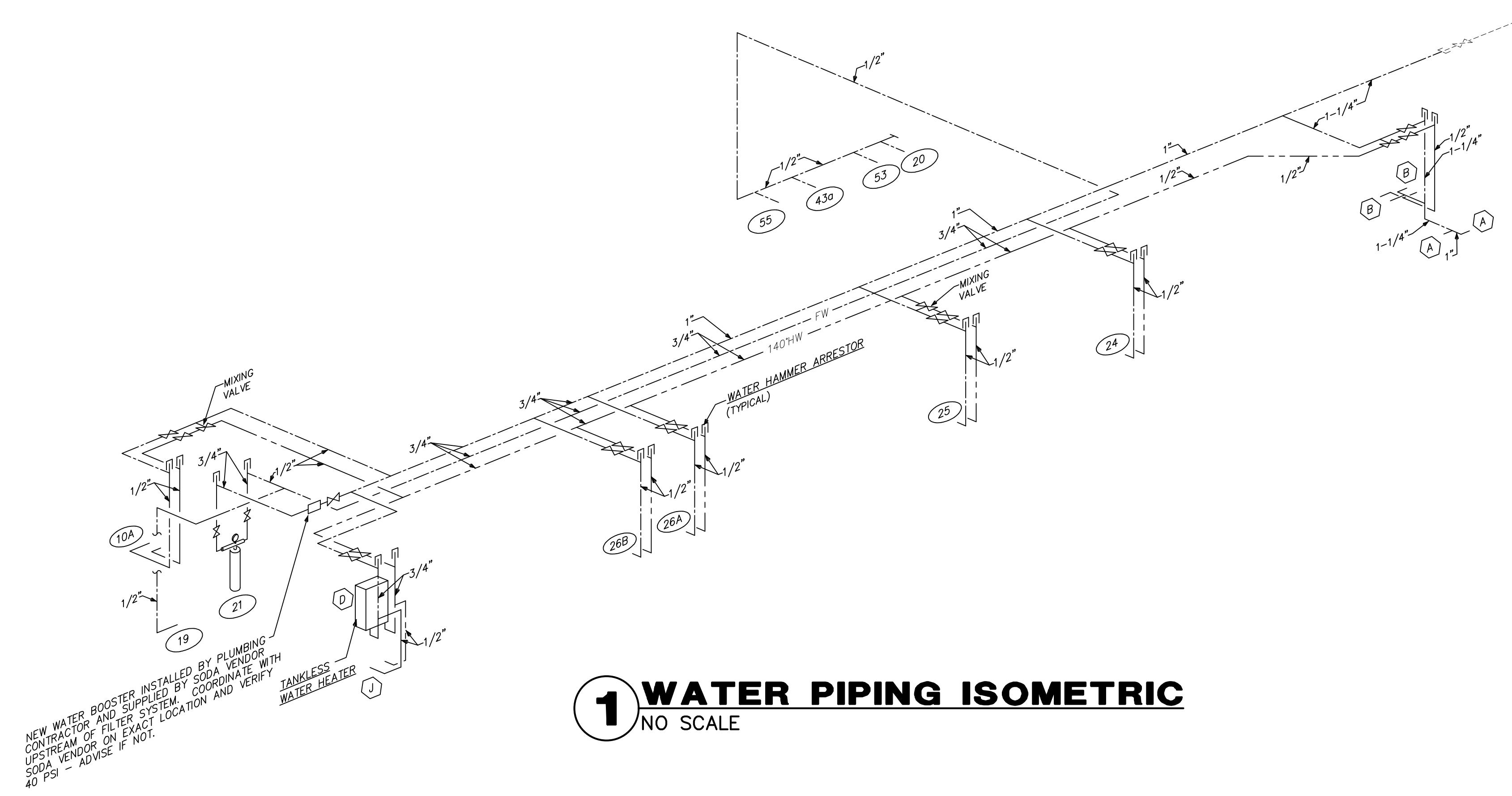
Plumbing Fixture Schedule						
Mark	Fixture	Manufacturer	Catalog No.	Color	Waste Size	Remarks
A	WATER CLOSET ADA COMPLIANT	KOHLER	K-4302 HIGHREST	WHITE	4"	1"
B	ADA LAVATORY	KOHLER	K-2032 GREENWICH	WHITE	1-1/2"	1/2"
C	WATER HEATER	NORITZ INSTANTANEOUS	NC-380	--	3/4"	3/4"
D	FLOOR DRAIN	ZURN	ZB415-0-V-P-Y	--	3", 4"	--
E	FLOOR SINK	ZURN	ZB 1910	--	3", 4"	--
F	FUNNEL FLOOR SINK	ZURN	ZB 1910	--	3", 4"	--
G	WALL CLEANOUT	ZURN	ZB 1446	--	LINE SIZE	--
H	MOP BASIN/CAN WASH	FLORESTONE	#50	--	3"	1/2"
I	TRENCH DRAIN	ZURN	ZB86-U3	--	3"	--

Fixture Schedule Notes					
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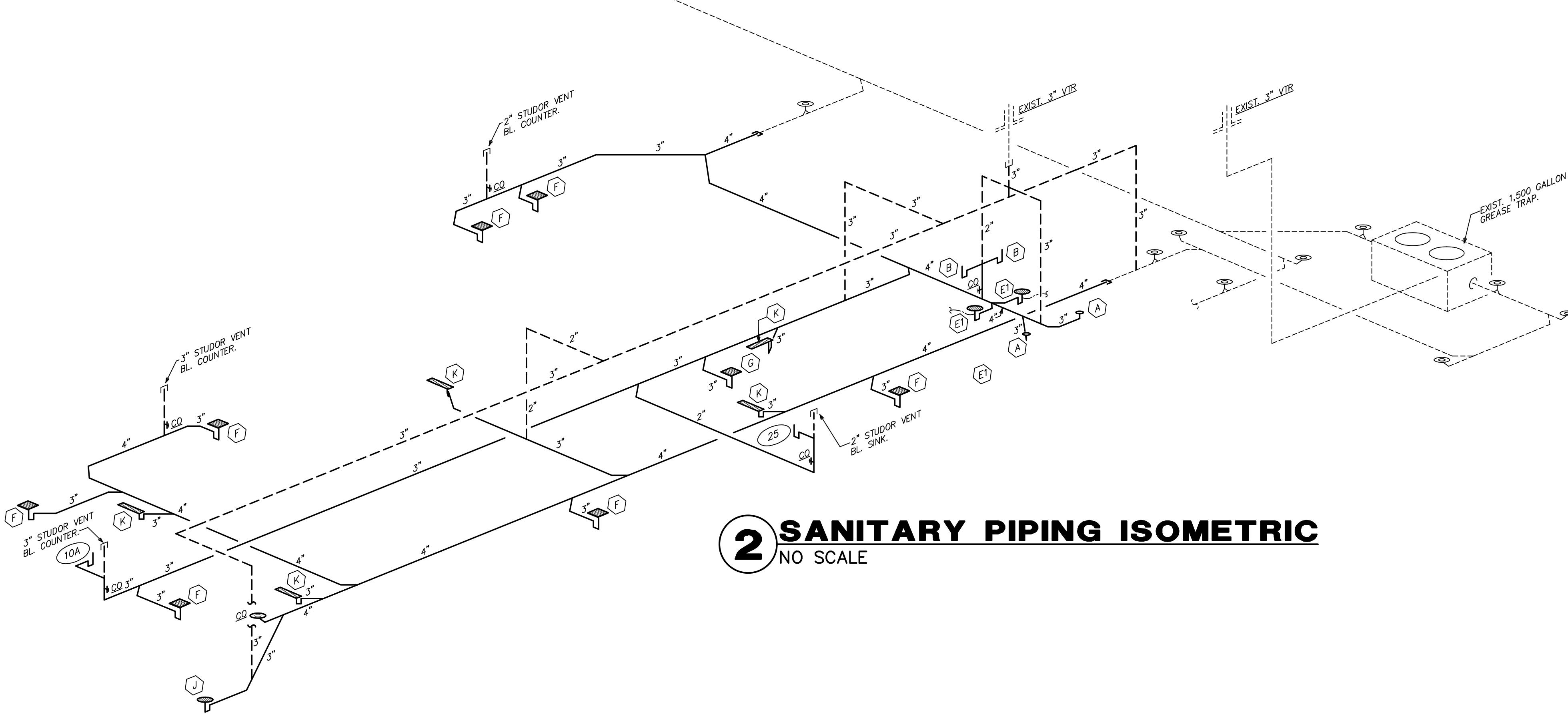


FR

P-3



# 1 WATER PIPING ISOMETRIC



# **2 SANITARY PIPING ISOMETRIC**

**ELECTRICAL NOTES:**

1. GENERAL: ALL WORK SHALL CONFORM TO THE LATEST APPROVED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL JURISDICTIONAL CODES.

THE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE DRAWINGS AND ANY APPLICABLE SPECIFICATIONS. IF A PROBLEM IS ENCOUNTERED IN COMPLYING WITH THIS REQUIREMENT, THE CONTRACTOR OR HIS REPRESENTATIVE OR HIS REPRESENTATIVE AS SOON AS POSSIBLE AFTER DISCOVERY OF THE PROBLEM, AND SHALL NOT PROCEED WITH THE WORK UNTIL THE CONTRACTOR OR HIS OWNER HAS DIRECTED THE CORRECTIVE ACTION TO BE TAKEN.

THE CONTRACTOR SHALL COORDINATE THE PROPOSED LOCATIONS OF ALL ELECTRICAL MATERIALS AND EQUIPMENT WITH THE ELECTRICAL ENGINEER AND OTHER TRADES INVOLVED BEFORE STARTING INSTALLATION OF THESE ITEMS.

COORDINATE THE INSTALLATION OF REQUIRED SUPPORTING DEVICES, CONDUIT, ARMOR SLEEVES TO ENSURE PROPER CAST-IN-PLACE CONCRETE AND OTHER STRUCTURAL CONSTRUCTION.

UNLESS OTHERWISE SPECIFIED ON THE PLANS, ALL SPECIES ARE NOT INTENDED TO BE PROPRIETARY. SUBSTITUTIONS WILL BE ACCEPTED FOR EQUAL RATED AND LISTED UNITS.

2. CONDUITS: EXCEPT WHERE THE DRAWINGS SPECIFY OTHERWISE, CONDUITS SHALL BE SCHEDULED ON THE DRAWINGS BY "TYPE" BY OTHER, OR BY A SIMILAR NOTATION, IT IS THE INTENT THAT THE CONTRACTOR PURCHASE THE EQUIPMENT AND MATERIALS AS NECESSARY TO PROVIDE ALL SYSTEMS IN COMPLETE AND OPERATING CONDITION.

3. EXCAVATION AS NECESSARY FOR THE INSTALLATION OF ELECTRICAL MATERIALS SHALL NOT DAMAGE EXISTING UNDERGROUND UTILITIES OR STRUCTURES BEFORE EXCAVATION AND EXERCISE CARE TO AVOID DAMAGE TO THESE ITEMS DURING EXCAVATION. BACKFILL WITH EARTH FILL, OR LAY CONCRETE STONES AND FOREIGN DEBRIS DEPOSITED IN 6" LAYERS AND REINFORCE WITH 1/2" #45 PLASTIC TAPE SPLICES IN LAYERS THAN THAT OF THE SURROUNDING UNDISTURBED MATERIAL.

4. MATERIALS: THE MATERIALS AND EQUIPMENT FURNISHED SHALL BE AS INDICATED ON THE DRAWINGS; SUBSTITUTIONS SHALL NOT BE MADE EXCEPT WHERE EXPRESSLY APPROVED BY THE ELECTRICAL ENGINEER. ONCE THE CONTRACTOR HAS STARTED INSTALLATION OF THE ITEMS, THE ELECTRICAL MATERIALS AND EQUIPMENT FURNISHED SHALL BE LISTED ON THE DRAWINGS AS THE LAST CONSTRUCTION BY OTHER RECOGNIZED TESTING ORGANIZATION, AND SHALL BE ACCEPTABLE TO THE LOCAL BUILDING AUTHORITY.

5. GROUNDING: GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250, NEC.

6. SHARED NEUTRAL: CONDUCTORS SHALL NOT BE ALLOWED UNLESS INSTALLED IN ACCORDANCE WITH NEC-210.4

7. CONDUITS: PROVIDE CONDUITS WHERE CALLED FOR ON PANEL SCHEDULE. ELECTRICAL METALIC TUBING (EMT) SHALL BE INSTALLED ONLY IN DRY LOCATIONS, IN CONCRETE ABOVE GRADE, AND WHERE NOT SUBJECT TO PHYSICAL DAMAGE. CONDUITS CALLED UNDERGROUND SHALL BE POLYVINYL CHLORIDE (PVC) AND SHALL NOT BE SMALLER THAN 3/4" TRADE SIZE, WHERE PVC CONDUIT IS INSTALLED UNDERGROUND, ELBOWS, TURNING, AND CONDUIT EMERGING ABOVE GRADE, SHALL NOT BE SMALLER THAN 24" BELOW FINISHED GRADE. PVC CONDUIT INSTALLED IN CONCRETE OR EARTH SHALL BE NEMA TCC TYPE EPC-40-PVC (SCHEDULE 40) EXCEPT THAT WHERE UNDER AREAS SUBJECT TO HEAVY VEHICLE TRAFFIC, CONDUIT SHALL BE NEMA TCC TYPE EPC-80-PVC (SCHEDULE 80).

ALL ARMOR CLAD CABLE (AC CABLE) WIRING SHALL MEET OR EXCEED ALL NEC, OSHA AND HUD STANDARDS.

8. CONDUCTORS: CONDUCTORS SHALL BE AS SCHEDULED ON PANEL SCHEDULE. CONDUCTORS SHALL NOT BE SMALLER THAN #14 AWG (CU), OR #12 AWG (AL) CONTROL CIRCUIT CONDUCTORS SHALL NOT BE SMALLER THAN #18 AWG (CU).

CONDUCTORS SHALL BE SPLICED IN ACCORDANCE WITH THE DRAWINGS, EXCEPT IN WIREWAY OR JUNCTION BOXES. MARK CONDUCTORS IN PANELS, FULL BOXES, WIREWAYS AND TERMINAL STRIP TERMINALS FOR IDENTIFICATION OF CIRCUITS.

CONDUCTORS SHALL BE SPLICED IN ACCORDANCE WITH THE DRAWINGS, EXCEPT THAT CONDUCTORS #10 AND SMALLER MAY BE JOINED BY WIRE NUT TYPE CONNECTORS. CONDUCTORS SHALL BE TERMINATED WITH COMPRESSION, FLAME OR PRESSURE TERMINAL LUGS OR BY PRESS TERMINAL. INSULATION SPLICES USED ON CONDUCTORS #10 AWG AND SMALLER, SHALL BE THE SELF-INSULATED SPLICES AS SHOWN IN THE DRAWINGS. FOR #10 AWG AND #34 AWG #88 PLASTIC TAPE SPLICES IN WET LOCATIONS SHALL BE INSULATED WITH ELECTRICAL TAPE AND ENCAPSULATED WITH SCOTCHCAST OR EQUAL POTING COMPOUND.

9. PROVIDE AND INSTALL JUNCTION AND PLUG BOXES WHERE INDICATED ON THE DRAWINGS. REMOVE TERMINALS, TAP OFF OR REDIRECT MULTIPLE CONDUIT RUNS, OF SIZE INDICATED OR AS REQUIRED BY NEC. WHERE FEEDER SPLICES ARE TO BE MADE, INSTALL BOXES AS SHOWN ON THE DRAWINGS. USE 1/2" #45 PLASTIC TAPE SPLICES.

10. LIGHTING FIXTURES: LIGHTING FIXTURES SHALL BE AS INDICATED ON THE DRAWINGS, AND SHALL BE INSTALLED COMPLETE WITH LAMPS. FIXTURES WITH ADJUSTMENTS AFFECTING LIGHT DISTRIBUTION SHALL BE SET TO PROVIDE THE REQUIRED LIGHT PATTERNS PRIOR TO THE FINAL DEMONSTRATION TEST.

11. TESTS: AFTER EACH SYSTEM HAS BEEN COMPLETED, A FUNCTIONAL TEST SHALL BE PERFORMED TO CONFIRM THAT THE SYSTEM OPERATES IN ACCORDANCE WITH THE REQUIREMENTS OF THE DRAWINGS. THE TEST SHALL BE PERFORMED BY THE CONTRACTOR IN THE PRESENCE OF THE OWNER OR HIS REPRESENTATIVE.

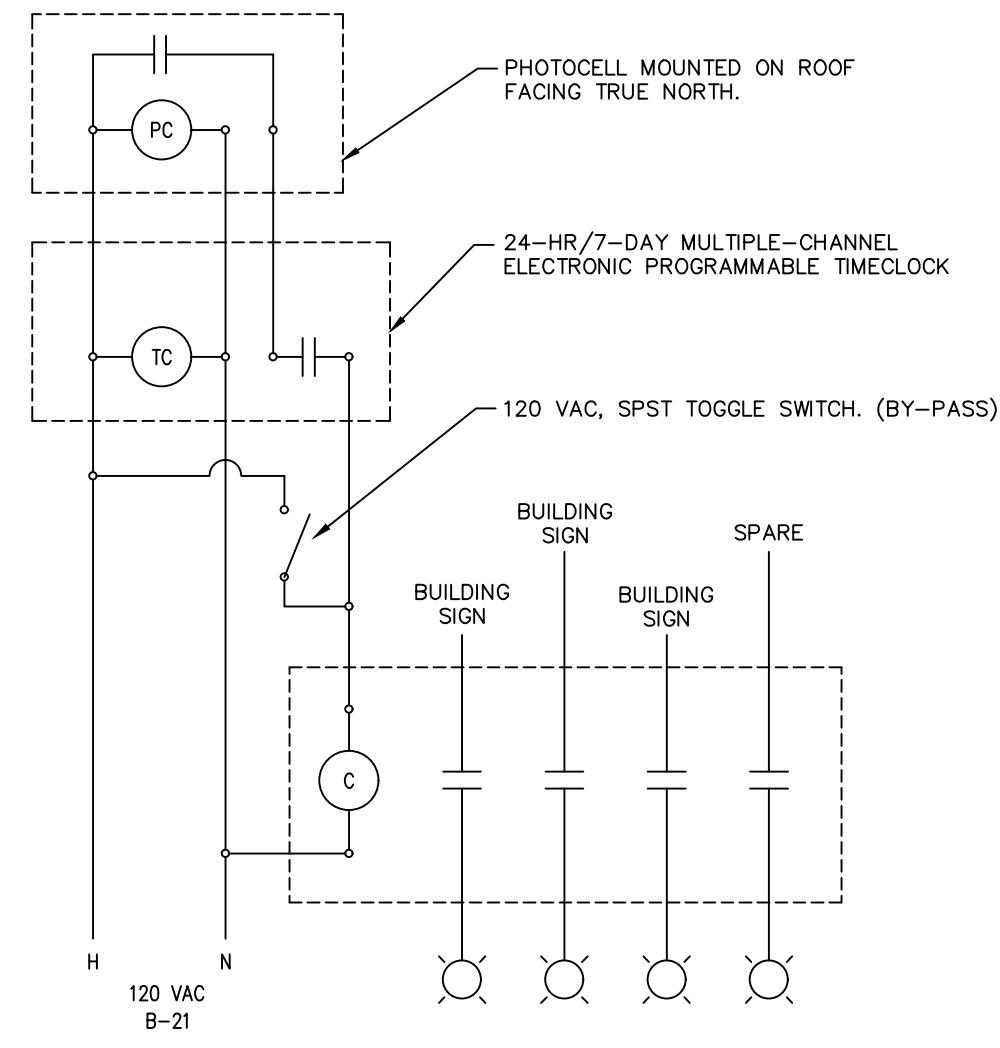
12. TERMINALS: ALL ELECTRICAL EQUIPMENT FURNISHED ON THIS PROJECT IS TO HAVE TERMINALS RATED FOR 75°C OPERATION.

LIGHTING SCHEDULE											
LUMINAIRE DESIGNATION	PART NUMBER OR DESCRIPTION	COLOR	SYMBOL	DESCRIPTION	REMARKS	VOLTAGE	LAMPING	COLOR TEMP.	CRI	WATTS	SYMBOLS
A	NORA LIGHTING #NHIC-6LMRAT/NLED-6130KWW/KB8	WHITE		RECESSED LED DOWN-LIGHT, 6" APERTURE	WHITE BAFFLE TRIM W/ GLASS LENS	120	INTEGRAL	3000K	11		
B	JUNO LIGHTING #T832BL/RL303KDUO/BK	BLACK		TRACK MOUNTED PENDANT	SPECULAR LOUVERS AND BLACK FINISH	120	(2) LR30	2700K	86	80	
C	NORA LIGHTING #NRS0-452RF	FIRE RED		PENDANT	TRACK MOUNTED PENDANT, GLASS FIRE RED SHADE, BOTTOM MTG 5-6"	120	(1) 7WA19 LED	2900K	86	7	
D	LSI #ASC22-LED-HO-NW-UE	WHITE		RECESSED 2x2 LAY-IN ACRYLIC LENS	FOR KITCHEN & BEHIND THE LINE AREAS	120	37W LED	3050K	86	37	
DE	LSI #ASC22-LED-HO-NW-UE-EM	WHITE		RECESSED 2x2 LAY-IN ACRYLIC LENS	FOR KITCHEN & BEHIND THE LINE AREAS	120	37W LED	3500 K	86	37	
EM	BEST LIGHTING #R16-HO-B	BLACK		SURFACE DUAL HEAD LOW PROFILE EM	LOW VOLTAGE AND BLACK FINISH	120	FURNISHED	3500 K	86	10	
EX	BEST LIGHTING #CXTEU2RW	BLACK WIRED LETTERS		SURFACE DUAL HEAD COMBO EM FIXTURE	DUAL SIDE WHITE FINISH W/ RED LETTERING	120	FURNISHED	3500 K	86		
EX2	NORA LIGHTING #NE932	BLACK		SURFACE MOUNTED REMOTE HEAD		120	FURNISHED	3500 K	86		
F	NATIONAL #NEL10-TRK6/BLK	BLACK		TRACK MOUNTED INCANDESCENT PENDANT	CONNECT TO NORA SINGLE CIRCUIT TRACK, BLACK FINISH	120	(1) 7WA19 LED	3500 K	86	8	
F2	NORA LIGHTING #NTH-132B	BLACK		TRACK MOUNTED INCANDESCENT PENDANT	CONNECT TO NORA SINGLE CIRCUIT TRACK, BLACK FINISH FOR CEILINGS >2'	120	LED PAR30	2700K	86	40	
FAN	QUOROM CAPRI 77525-15	BLACK		50" BLADES, NO LIGHT KIT		120					
H	NORA LIGHTING #NTE-8900 BLACK (LED)	BLACK		TRACK HIGH EFFICIENCY LINEAR FL WALL WASH WITH LED LAMP	EDISON SOCKET WITH LED LAMP	120	LED PAR30	2700K	82	25	
H-W	NORA LIGHTING #NTH-132W	WHITE		LED PAR 30 FOR LINE SNAKE	EDISON SOCKET WITH LED LAMP	120	LED PAR30	2700 K	82	18	
J	HI-LITE MANUFACTURING CO. INC. #H781225B77-OP/CBC03/MEP	CLEAR ALZAK		WALL CLOTH/WET-LISTED LASER CUT SCONCE	CLOSED TOP & BOTTOM	120	(2) 10W INC 2900K	3500 K	82	18	
L	HI-LITE MANUFACTURING COMPANY #H-18110-91AL-A-9120WLED93M-M	BLACK		GOOSENECK LED	WIDE DISTRIBUTION	120	20W	3000 K		10	
2T, 4T, 8T	NORA LIGHTING #NT-302B, NT304B, NT-310B, NT-316B	BLACK		TRACK W/ DEAD END CAP	BLACK FINISH W/ SUPPLEMENTAL CONNECTORS AS REQUIRED	120	NA	3500 K	82		

ELECTRICAL SYMBOLS LEGEND		NOTE - NOT ALL SYMBOLS ARE SHOWN IN THIS PROJECT	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
D	DUPLEX RECEPTACLE, MTD. +18" AFF	□	TRANSFORMER - SIZE AS NOTED
○	240 VOLT RECEPTACLE (H. AS REQ.)	■	PANEL - SIZE AS NOTED
△	QUADRUPLEX RECEPTACLE, MTD. +18"	□	MONUMENTARY CONTACT PUSH BUTTON
●	SWITCH, MTD. +42"	□	F-FACE M-MOTOR P-PUMP
\$	SINGLE POLE SWITCH, MTD. +47"	□	EMERGENCY LIGHTING
△	THREE-WAY SWITCH, MTD. +47"	□	RECESSED MOUNTED LIGHTING FIXTURE
△	MANUAL STARTER SWITCH	□	B-NEC, OSHA AND HUD STANDARDS
○	DIMMER SWITCH, MTD. +47"	□	EX-HEAD OCCUPANCY SENSOR
△	SWITCH W/ ILLUM. WHEN ON +47"	□	HIGH-BAY HID LIGHTING FIXTURE
○	SWITCH W/ OCCU. SENSOR WHEN ON +47"	□	B DESIGNATES FIXTURE TYPE
○	SWITCH W/ OCCU. SENSOR WHEN ON +42"	□	B DESIGNATES FIXTURE TYPE
○	JUNCTION BOX, FLUSH IF POSSIBLE	□	F DESIGNATES FIXTURE TYPE
▼	TELEPHONE / DATA OUTLET +18"	□	F DESIGNATES FIXTURE TYPE
▽	DED. COMPUTER TERM. OUTLET +18"	□	F DESIGNATES FIXTURE TYPE
□	DISCONNECT SWITCH W/ STARTER	□	F DESIGNATES FIXTURE TYPE
□	FUR. MTD. FLUSH DUPLEX RECEPTACLE	□	F DESIGNATES FIXTURE TYPE
□	DISCONNECT SWITCH	□	F DESIGNATES FIXTURE TYPE
□	FUR. MTD. FLUSH QUAD. RECEPTACLE	□	F DESIGNATES FIXTURE TYPE
□	FUR. MTD. FLUSH PHONE/DATA OUTLET	□	F DESIGNATES FIXTURE TYPE
□	FUR. MTD. FLUSH COMPUTER OUTLET	□	F DESIGNATES FIXTURE TYPE
□	ISOLATED GROUND	□	F DESIGNATES FIXTURE TYPE
□	WEATHER-PROOF	□	F DESIGNATES FIXTURE TYPE
□	B BELOW COUNTER	□	F DESIGNATES FIXTURE TYPE
□	TIME CLOCK - 24 HOUR	□	F DESIGNATES FIXTURE TYPE
□	GROUND FAULT INTERRUPTER	□	F DESIGNATES FIXTURE TYPE
□	ABOVE FINISHED FLOOR	□	F DESIGNATES FIXTURE TYPE
□	EWC ELECTRIC WATER COOLER	□	F DESIGNATES FIXTURE TYPE
□	ASW ABOVE SHOW WINDOW	□	F DESIGNATES FIXTURE TYPE
□	BSW BELOW SHOW WINDOW	□	F DESIGNATES FIXTURE TYPE
□	FIRE ALARM MAN. PULL STATION +47"	□	F DESIGNATES FIXTURE TYPE
□	HORN W/ STROBE LIGHT, MTD. +80"	□	F DESIGNATES FIXTURE TYPE
□	# BESIDE DEVICE IS CANDELLA RATING	□	F DESIGNATES FIXTURE TYPE
□	# BESIDE DEVICE IS CANDELLA RATING	□	F DESIGNATES FIXTURE TYPE

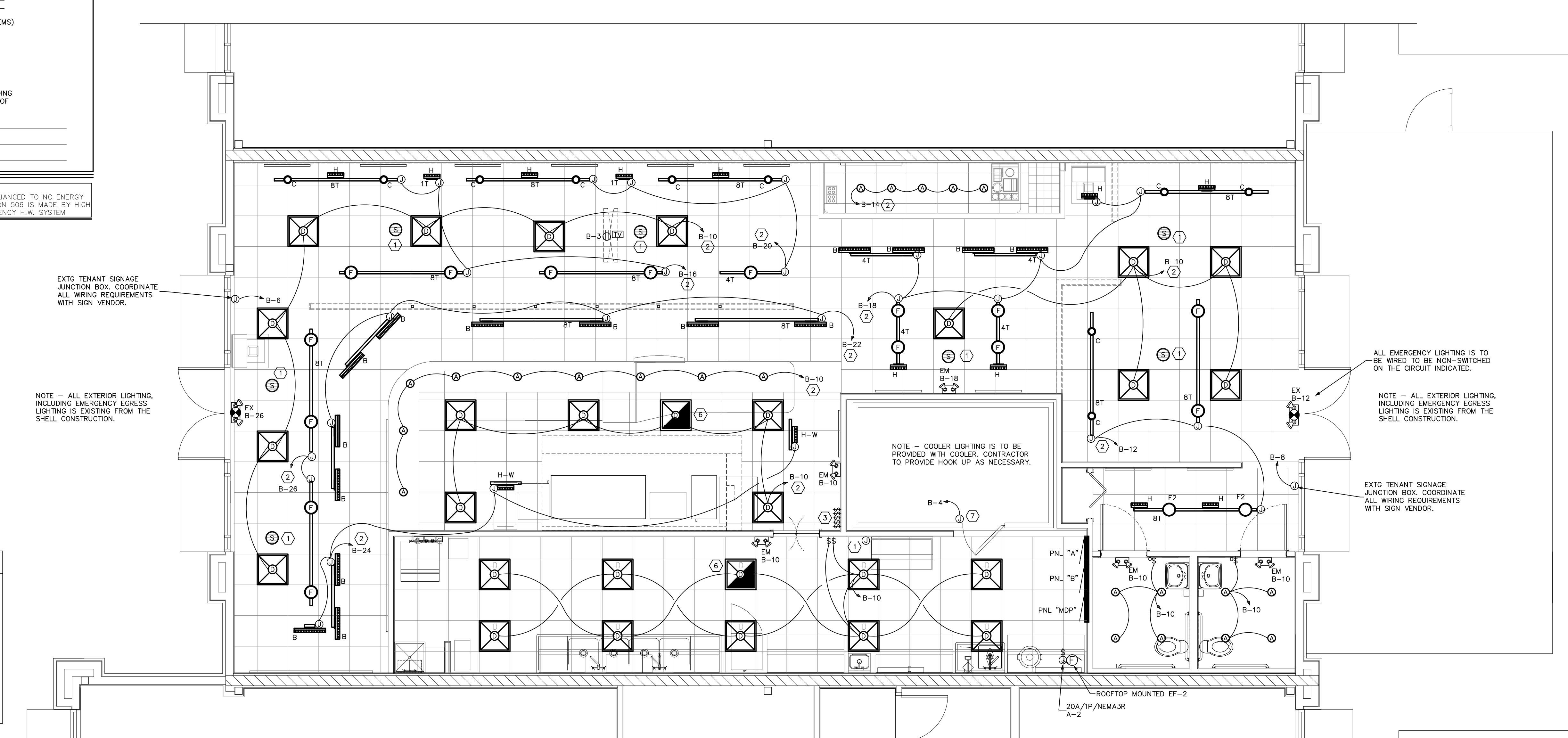
NATIONAL ENERGY & LIGHT, INC.  
ACCOUNT Manager:  
JIM SCHMIDT  
JSCMID1@NELCOMPANY.COM  
603.864.8635 OFFICE  
603-759-5561 CELL

PROJECT Manager:  
BOB MOULIASON  
BOBM@NELCOMPANY.COM  
603.589.9999 OFFICE

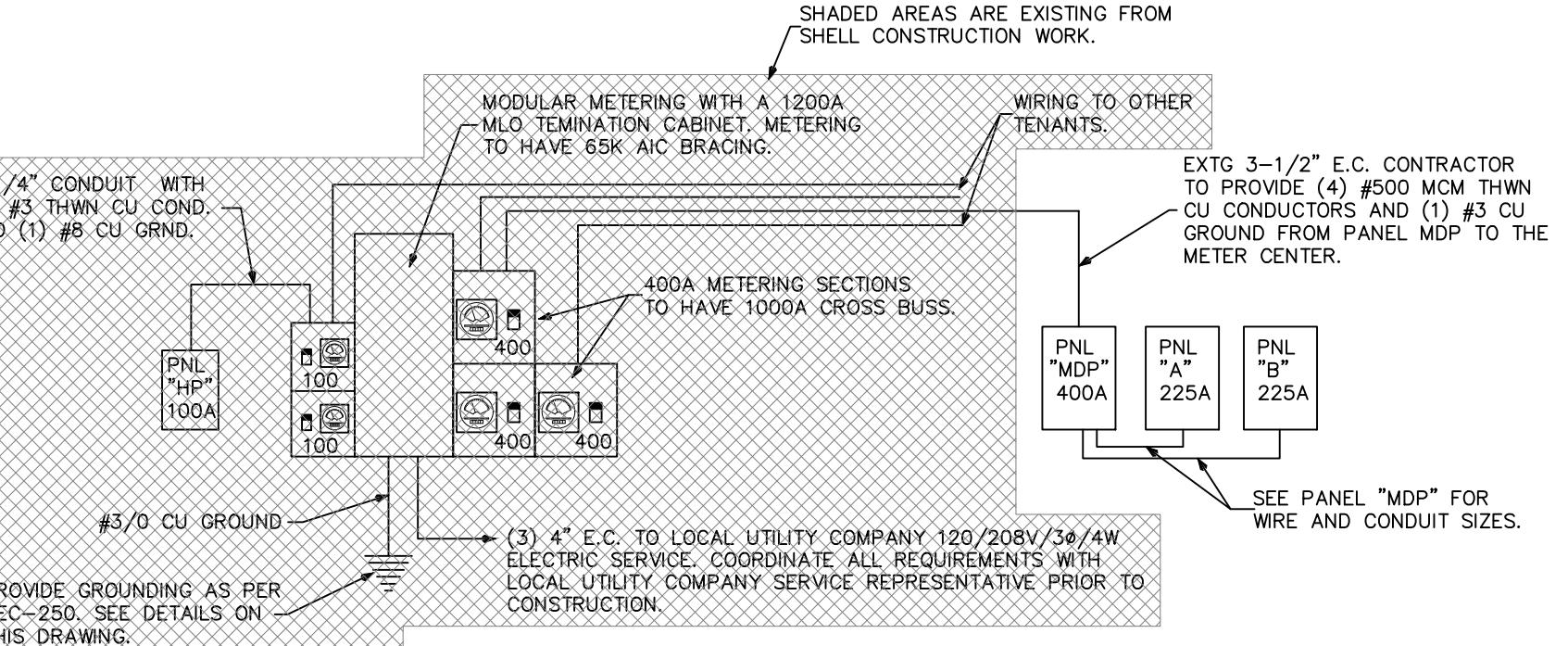
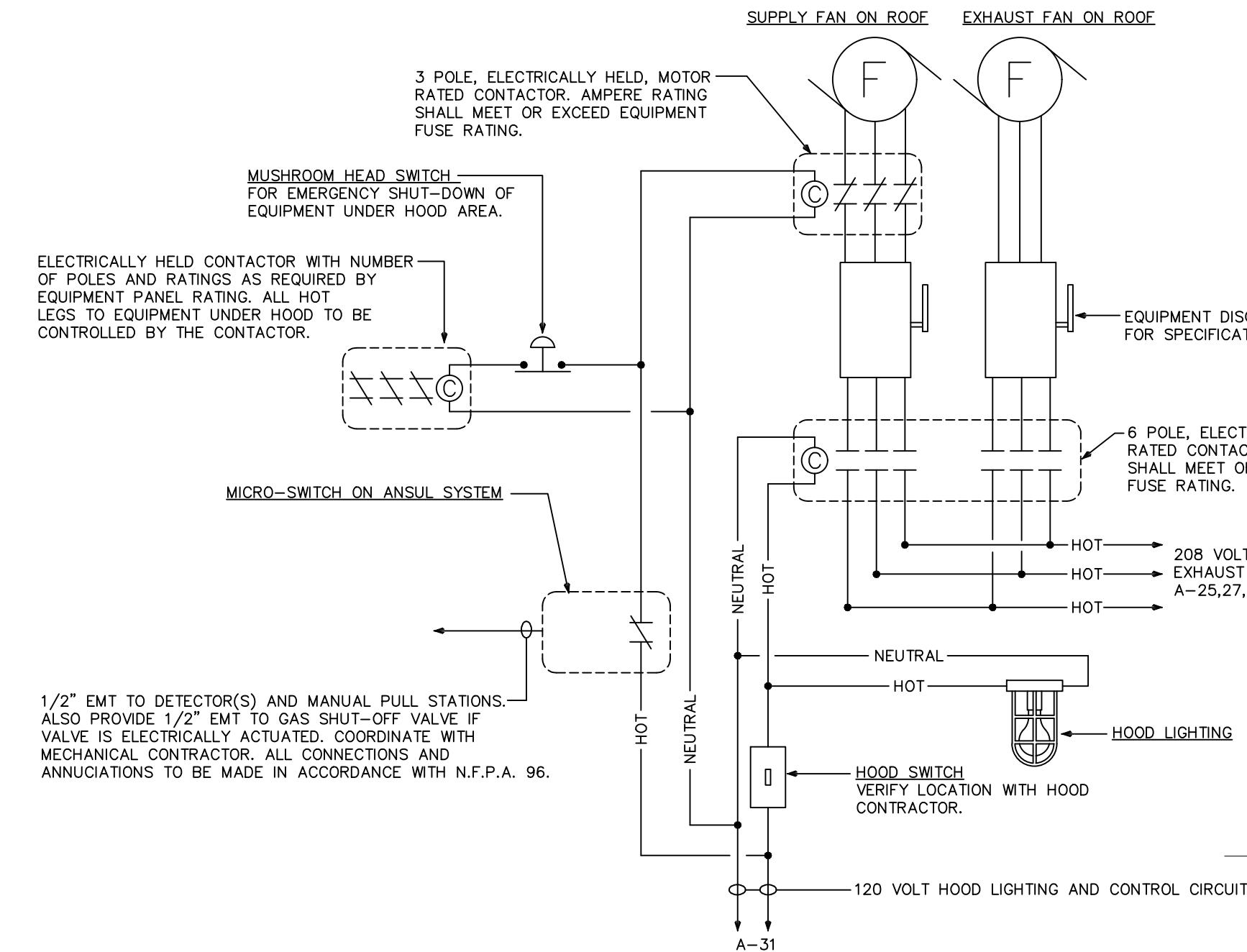


## 5 LIGHTING CONTROL DIAGRAM

ELECTRICAL SYSTEM AND EQUIPMENT	
METHOD OF COMPLIANCE	
<input checked="" type="checkbox"/> PREScriptive	<input type="checkbox"/> PERFORMANCE
<input type="checkbox"/> ENERGY	<input type="checkbox"/> COST
<input type="checkbox"/> BUDGET	<input type="checkbox"/>
PROVIDE A STANDARD RISER DIAGRAM WHICH INDICATES DESIGNATED POINTS FOR CHECK METERING. PROVIDE A STANDARD PANEL SCHEDULE DESCRIPTION WHICH IDENTIFIES DIFFERENT ENDUSE LOADS.	
LIGHTING SCHEDULE	
NUMBER OF LAMPS REQUIRED IN FIXTURE	SEE SCHEDULE ON DRAWINGS
NUMBER OF LAMPS IN FIXTURE	SEE SCHEDULE ON DRAWINGS
BALLAST TYPE USED IN FIXTURE	SEE SCHEDULE ON DRAWINGS
NUMBER OF LAMPS IN FIXTURE	SEE SCHEDULE ON DRAWINGS
TOTAL WATTAGE PER FIXTURE	SEE SCHEDULE ON DRAWINGS
TOTAL INTERIOR WATTAGE SPECIFIED VS ALLOWED	2405 VS 3287
TOTAL EXTERIOR WATTAGE SPECIFIED VS ALLOWED	N/A
EQUIPMENT FURNISHED WITH MOTORS (NOT USED FOR MECHANICAL SYSTEMS)	
MOTOR H.P. & RPM	N/A
NUMBER OF PHASES	N/A
WIRING SYSTEM	N/A
EFFICIENCY	N/A
MOTOR TYPE	N/A
NUMBER OF POLES	N/A
DESIGNER STATEMENT:	
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENTS OF THE NORTH CAROLINA ENERGY CODE 2012, CHAPTER 5.	
SIGNED:	TODD W. CAREY, P.E.
NAME:	TODD W. CAREY, P.E.
TITLE:	NORTH CAROLINA PROFESSIONAL ENGINEER #9079



PANEL SCHEDULE A																						
BKR.	WIRE AND CONDUIT					LOAD DESCRIPTION			NEUT.	LINE A	LINE B	LINE C	LOAD DESCRIPTION			WIRE AND CONDUIT					BKR.	##
	COND.	NEUTRAL	GND	C.	KEYS								COND.	GND	NEUTRAL	C.	KEYS					
0/1	#12	#12	#12	1/2	CHAL	GAS INSTA-HOT WATER HTR			200	200	-----	-----								2		
0/1	#12	#12	#12	1/2	CHAL	CHIP WARMER			840	1650	-----	-----								4		
0/1	#12	#12	#12	1/2	CHAL	DROP IN COLD PAN			0	840	840	-----										
0/1	#12	#12	#12	1/2	CHAL	TEA BREWER			600	1650	600	600								6		
0/1	#12	#12	#12	1/2	CHAL	WATER/ICE DISPENSER			215	215	215	215								8		
0/2	#12	---	#12	1/2	CHAL	ICE MAKER			1800	1800	-----	-----								10		
0/2	#12	---	#12	1/2	CHAL	COKE DISPENSER			336	336	336	336								12		
0/1	#12	#12	#12	1/2	CHAL	CLAMSHELL GRIDDLE *			0	900	900	900								14		
0/3	#8	---	#10	3/4	CHAL	BEAN STEAM KETTLE *			0	1560	1560	1560								16		
0/3	#12	---	#12	1/2	CHAL	EXHAUST HOOD FANS			750	750	750	750								18		
0/3	#12	---	#12	1/2	CHAL	EXHAUST HOOD CONTROLS			1800	1800	1800	1800								20		
						SPACE			1000	1000	1000	1000								22		
						SPACE			240	240	240	240								24		
						SPACE			900	900	900	900								26		
						SPACE			3960	3960	3960	3960								28		
						SPACE			1800	1800	1800	1800								30		
						SPACE			0	3960	3960	3960								32		
						SPACE			0	1584	1584	1584								34		
						SPACE			0	660	660	660								36		
						SPACE			0	1584	1584	1584								38		
						SPACE			0	460	460	460								40		
						SPACE			0	200	200	200								42		
						SPACE			0	936	936	936										
						SPACE			0	0	0	0										
						SPACE			0	1500	1500	1500										
						SPACE			0	1500	1500	1500										
						SPACE			0	620	620	620										
						SPACE			0	620	620	620										
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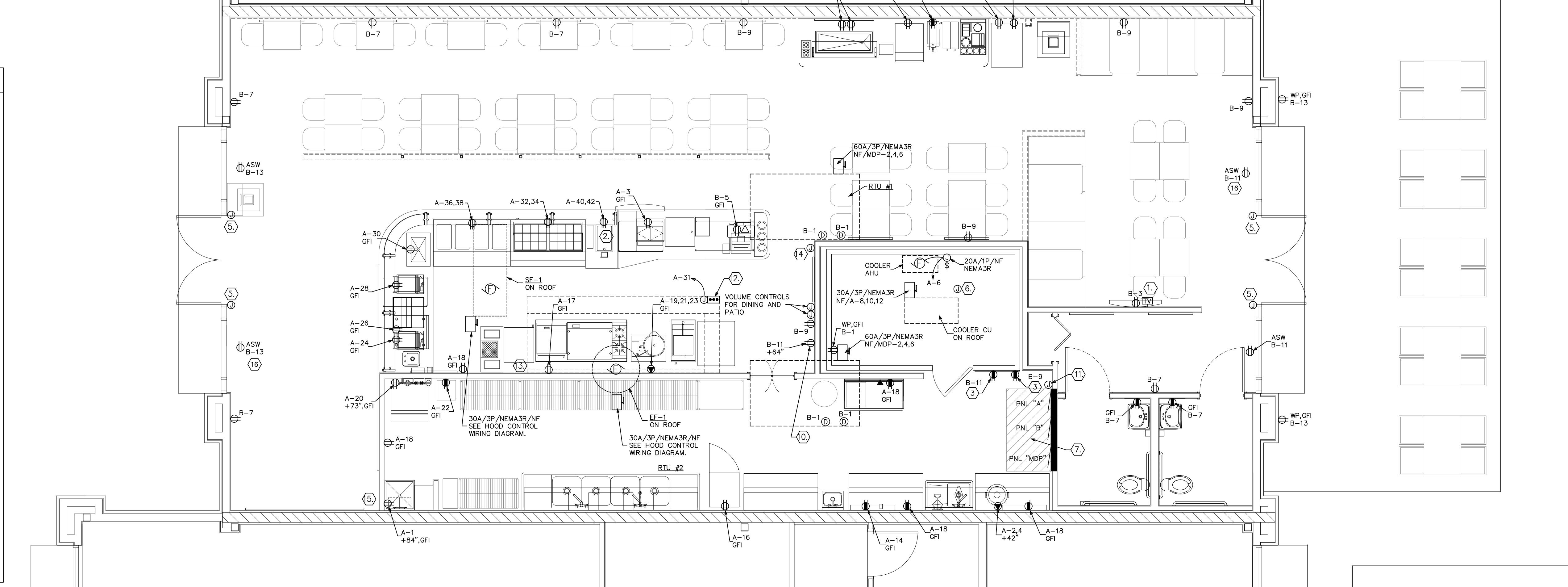


# **3 ELECTRICAL RISER DIAGRAM**

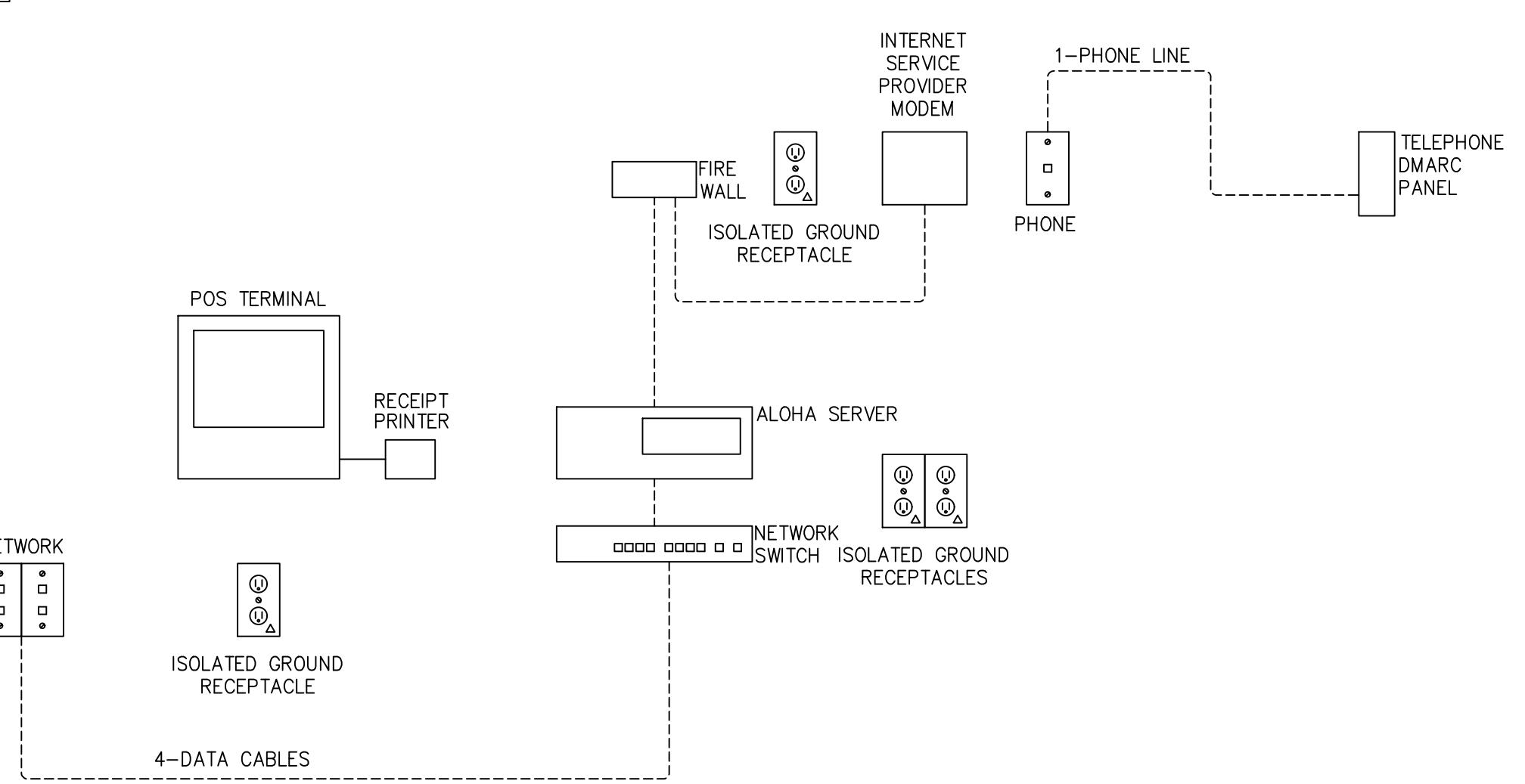
# **2 HOOD CONTROL WIRING DETAIL**

 POWER PLAN KEY NOTES

- ① ABOVE CEILING MOUNTED OUTLET WITH CABLE T.V. CONNECTION. FIELD COORDINATE ELECTRICAL REQUIREMENTS.
- ② PROVIDE NEMA L5-30R RECEPTACLE.
- ③ ALARM SYSTEM CONTROL PANEL FINAL CONNECTON BY ALARM CONTRACTOR. STACK ALARM PANEL ABOVE TELEPHONE PANEL. COORDINATE OUTLET MOUNTING HEIGHT.
- ④ PROVIDE 3'X4'X3/4" PLYWOOD BACKBOARD FOR TELEPHONE SYSTEM. CONNECT #6 AWG COPPER GROUND WIRE FROM TELEPHONE SYSTEM TO GROUND BUS AT WIREWAY.
- ⑤ ROUTE 1/2" CONDUIT WITH PULL WIRE TO ACCESSIBLE SPACE. COORDINATE ALARM J-BOX LOCATIONS WITH SECURITY CONTRACTOR.
- ⑥ PROVIDE J-BOX AND CONDUIT THROUGH SEALED OPENING FOR CONTROL WIRING TO CONDENSORS ON ROOF.
- ⑦ PROVIDE WORKING CLEARANCE IN FRONT OF PANELS PER N.E.C.
- ⑧ NOT USED
- ⑨ ELECTRICAL CONTRACTOR SHALL INSTALL DISCONNECT SWITCH FOR SIGNAGE CIRCUIT(S) AS REQUIRED BY N.E.C. 600. REFER TO PLANS FOR NUMBER OF CIRCUITS REQUIRED. ROUTE CIRCUIT THRU LIGHTING CONTACTOR. SEE LIGHTING PLAN FOR LOCATOINS.
- ⑩ THE SOUND SYSTEM REQUIRES A 110 VOLT SEPARATE, DEDICATED CIRCUIT AND A SINGLE GANG J-BOX AT 64" A.F.F. WITH 3/4" CONDUIT STUBBED OUT ABOVE CEILING. SPEAKERS TO BE LOCATED AND INSTALLED BY MUZAK. G.C. TO PROVIDE PITCH PORT THRU THE ROOF IF REQUIRED BY MUZAK.
- ⑪ J-BOX FOR LIGHTING CONTACTOR.
- ⑫ PROVIDE FAN AND LIGHT SWITCHES IN FACE OF HOOD. MAKE ALL CONNECTIONS AS REQUIRED.
- ⑬ PROVIDE J-BOX FOR CONNECTION TO ANSUL FIRE SUPPRESSION SYSTEM. MAKE FINAL CONNECTIONI AS REQUIRED.
- ⑭ J-BOX FOR ANSUL SYSTEM PULL STATION. MAKE CONNECTIONS AS REQUIRED.
- ⑮ RECEPT FOR CONNECTION TO WATER HEATER MOUNTED HIGH ON WALL. COORDINATE EXACT MOUNTING HEIGHT WITH PLUMBING CONTRACTOR.
- ⑯ PROVIDE DIRECT CONNECTION FOR ILLUMINATED WINDOW DISC. MOUNT ABOVE CEILING. VERIFY REQUIREMENTS.



# **FLOOR PLAN - POWER**



# 4 DATA/TELEPHONE WIRING DIAGRAM