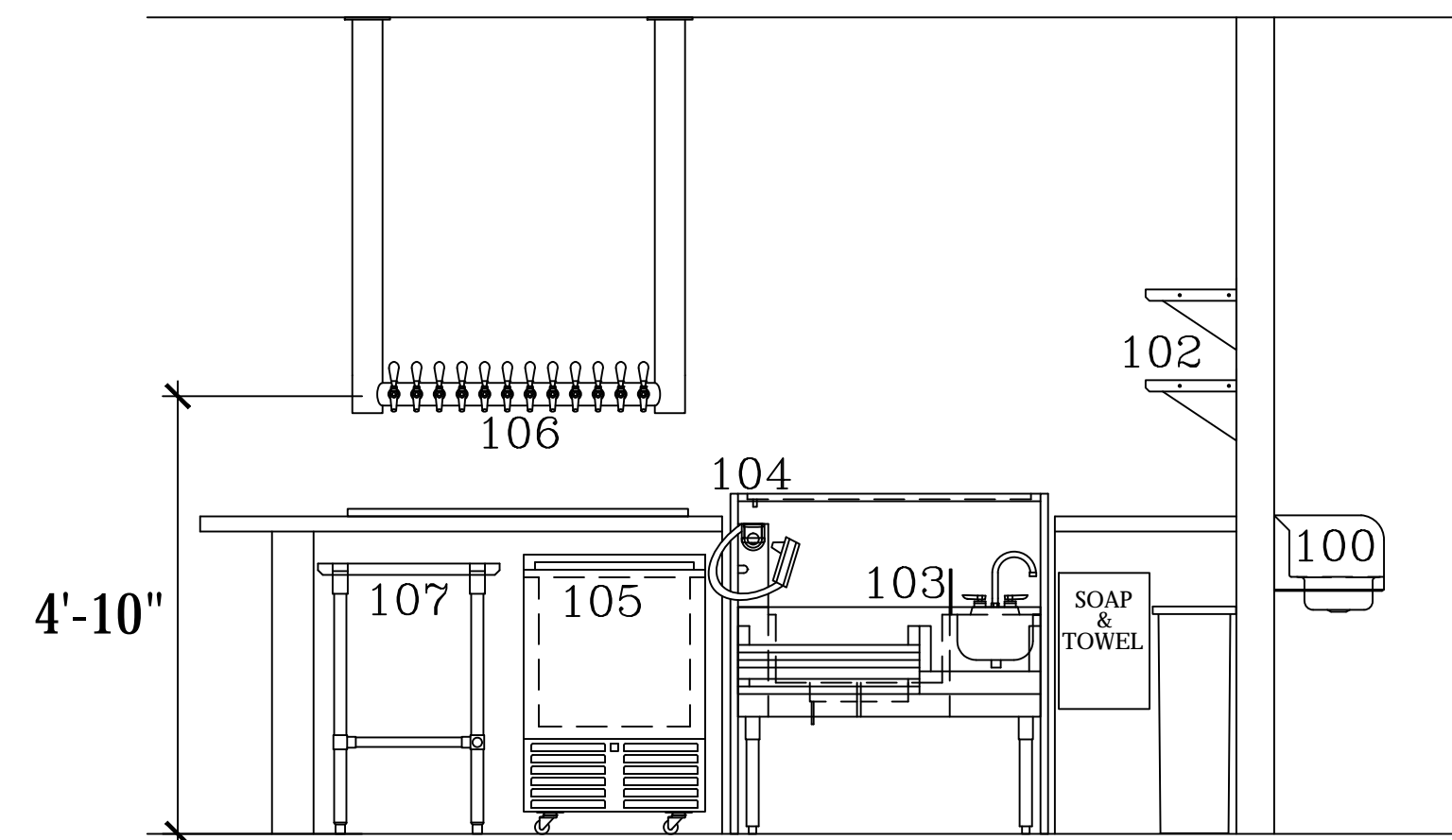
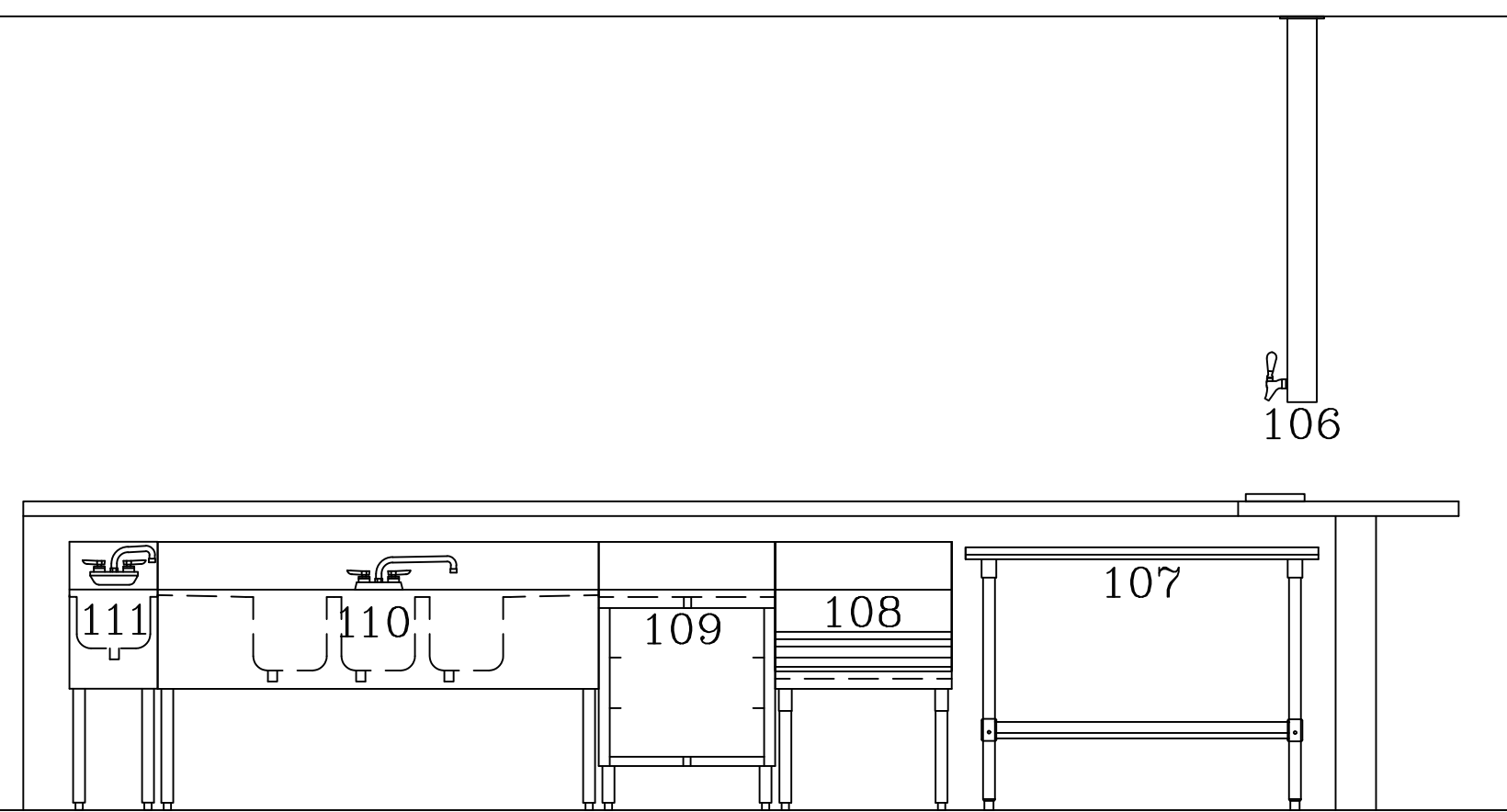


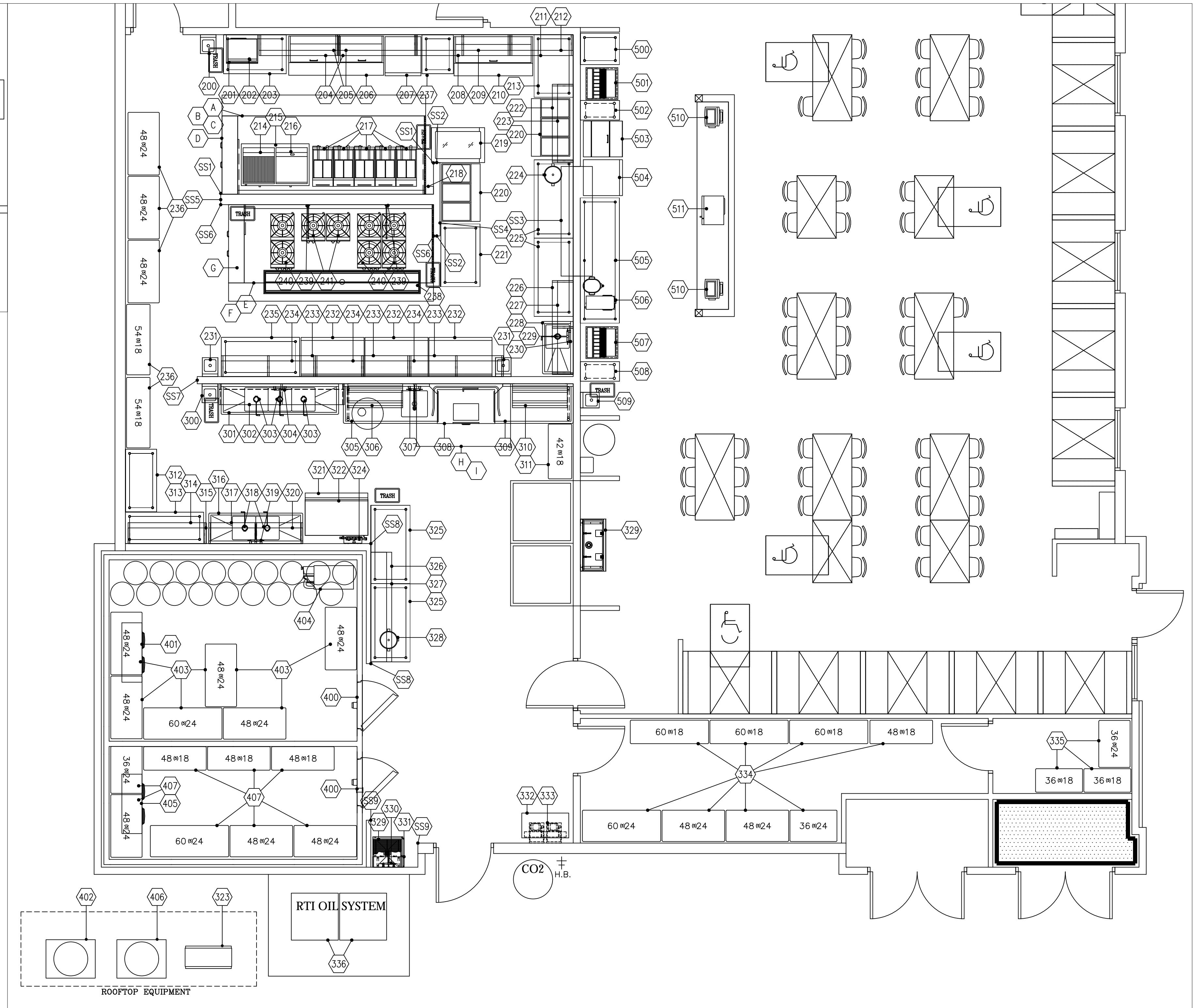
BAR EQUIPMENT FLOOR PLAN  
SCALE: 1/4"=1'-0"



E1 BAR AREA - WEST  
SCALE: 1/2"=1'-0"



E2 BAR AREA - SOUTH  
SCALE: 1/2"=1'-0"



KITCHEN EQUIPMENT FLOOR PLAN  
SCALE: 1/4"=1'-0"

REV.	STATUS
A	-
B	-
C	-
D	4/22/24
E	1st CITY COMMENTS

ARCHITECT  
**LARSON & ASSOCIATES**  
3807 N. 24TH STREET #100  
PHOENIX, ARIZONA 85016  
(602) 955-9929

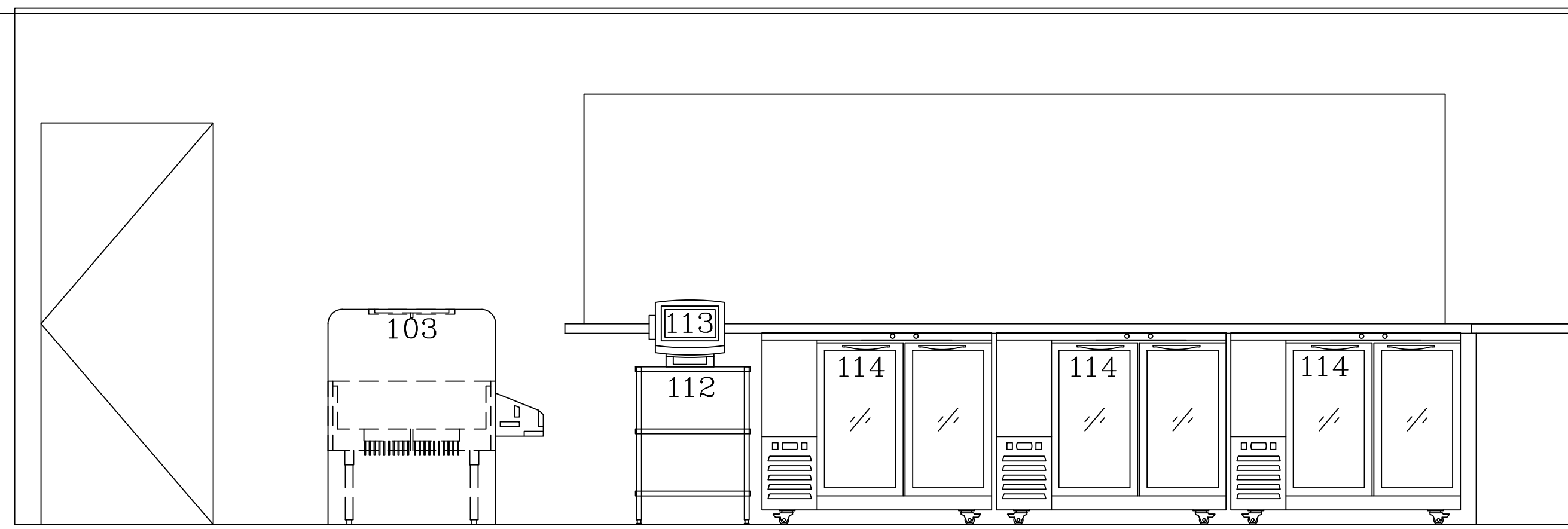
**AZ-RC**  
**ARIZONA**  
RESTAURANT CONSULTING  
7920 E. OAK STREET - SCOTTSDALE, ARIZONA 85257  
602.699.5131  
JUSTIN@AZRESTAURANTCONSULTING.COM

**ANGRY CRAB SHACK**  
GILBERT ARIZONA  
FOODSERVICE EQUIPMENT PLAN

Drawn by: **JBM**  
Checked by:  
Date: **2/27/2024**  
Sheet Number:

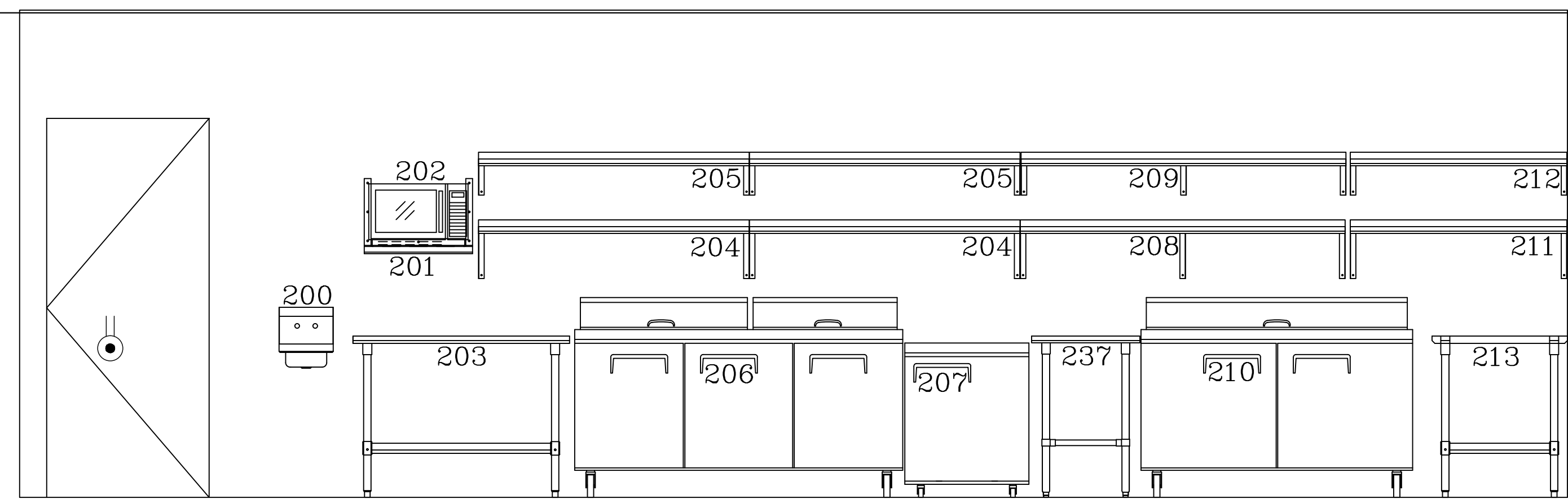
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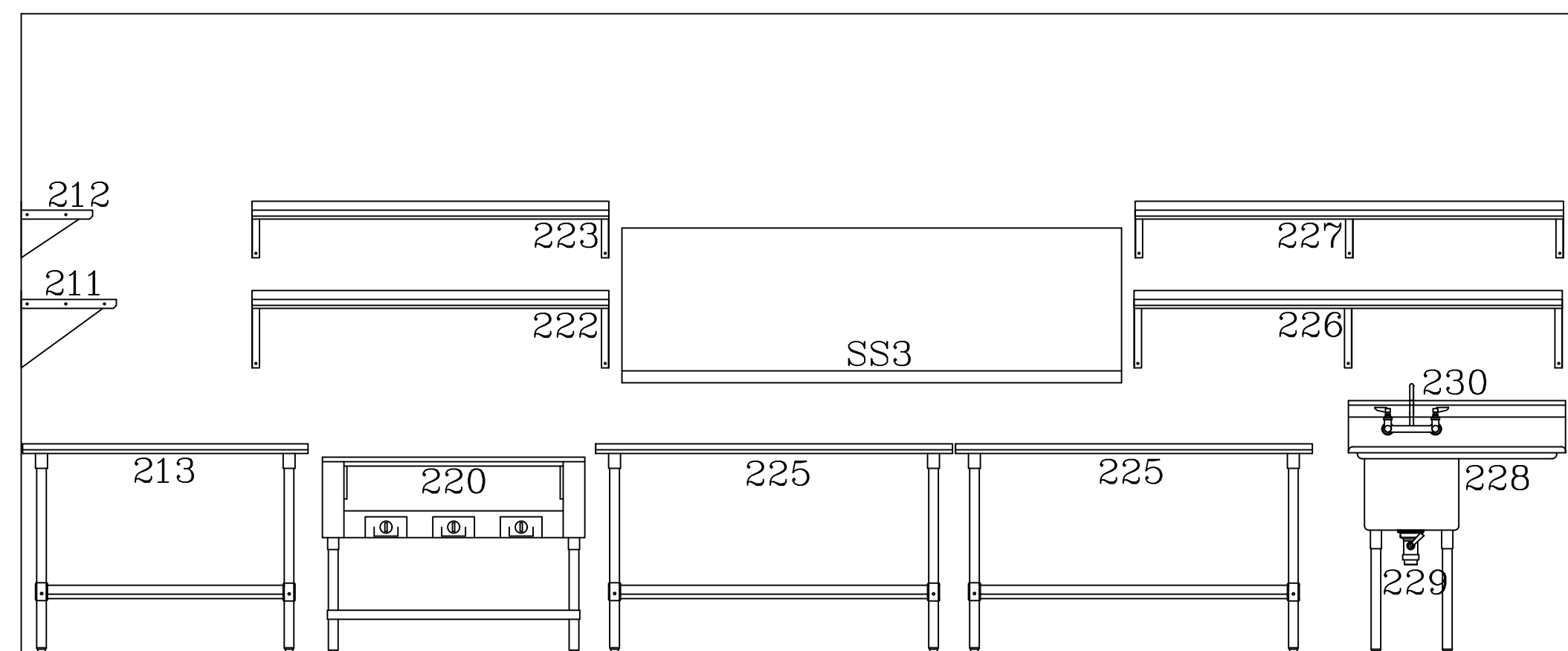
E3 BACK BAR - NORTH

SCALE: 1/2"=1'-0"



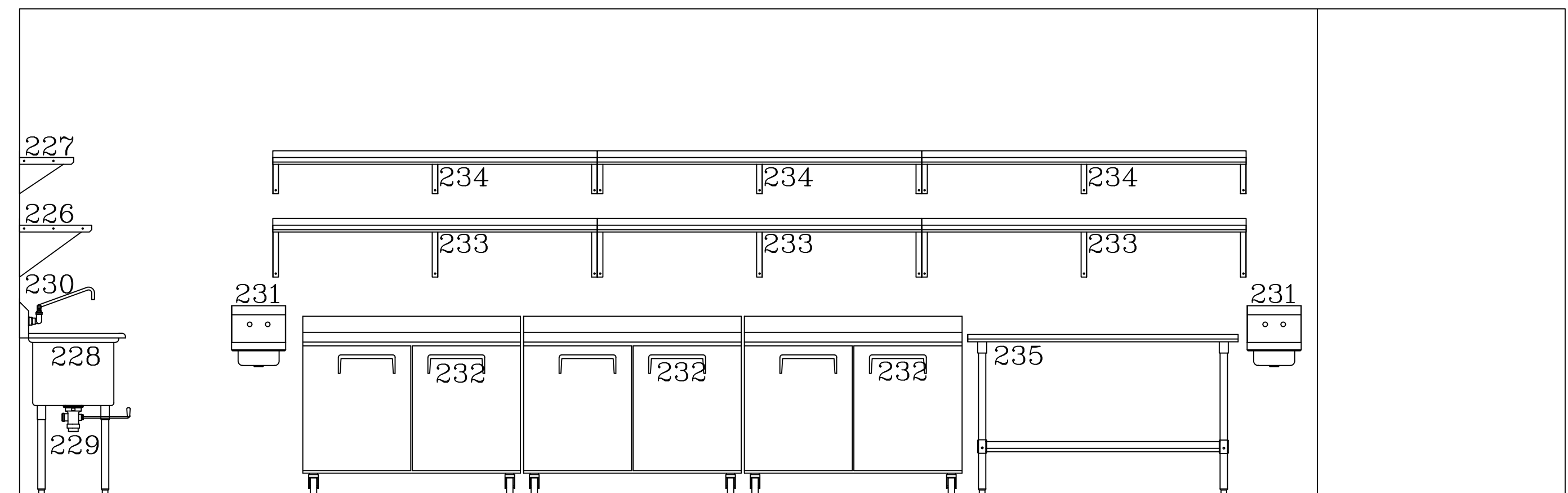
E4 KITCHEN AREA - NORTH

SCALE: 1/2"=1'-0"



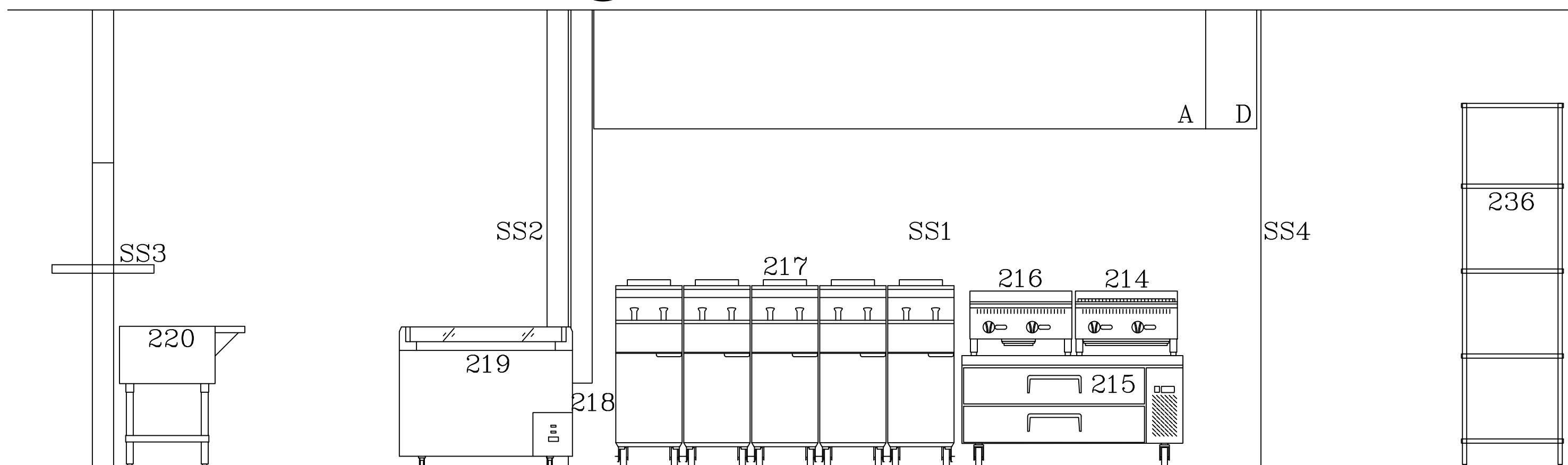
E5 KITCHEN AREA - EAST

SCALE: 1/2"=1'-0"



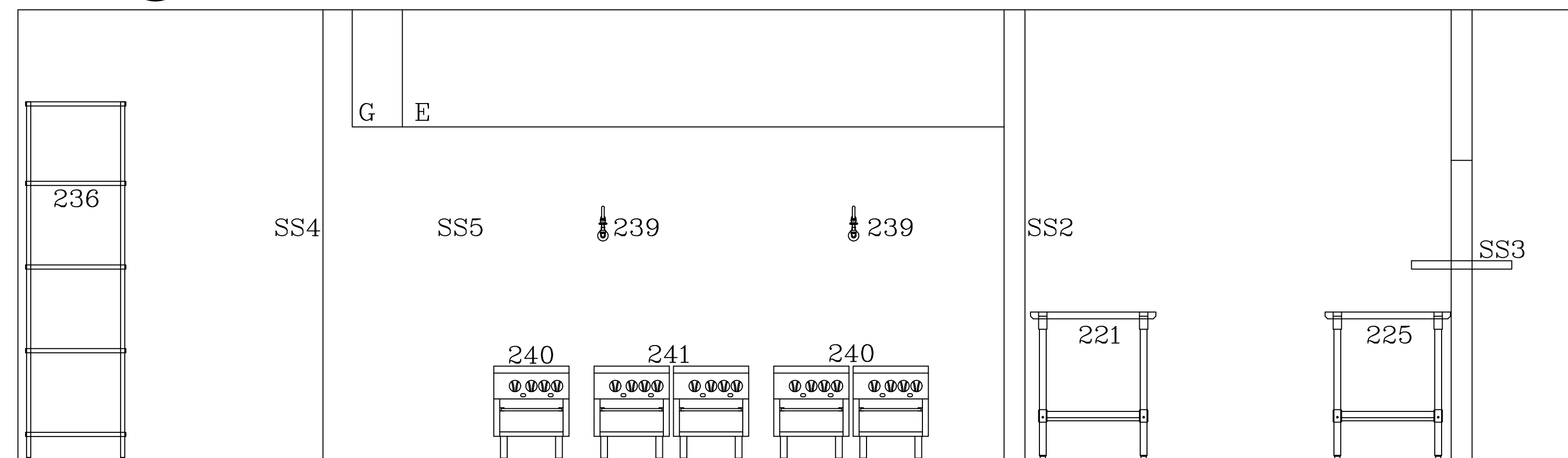
E6 KITCHEN AREA - SOUTH

SCALE: 1/2"=1'-0"



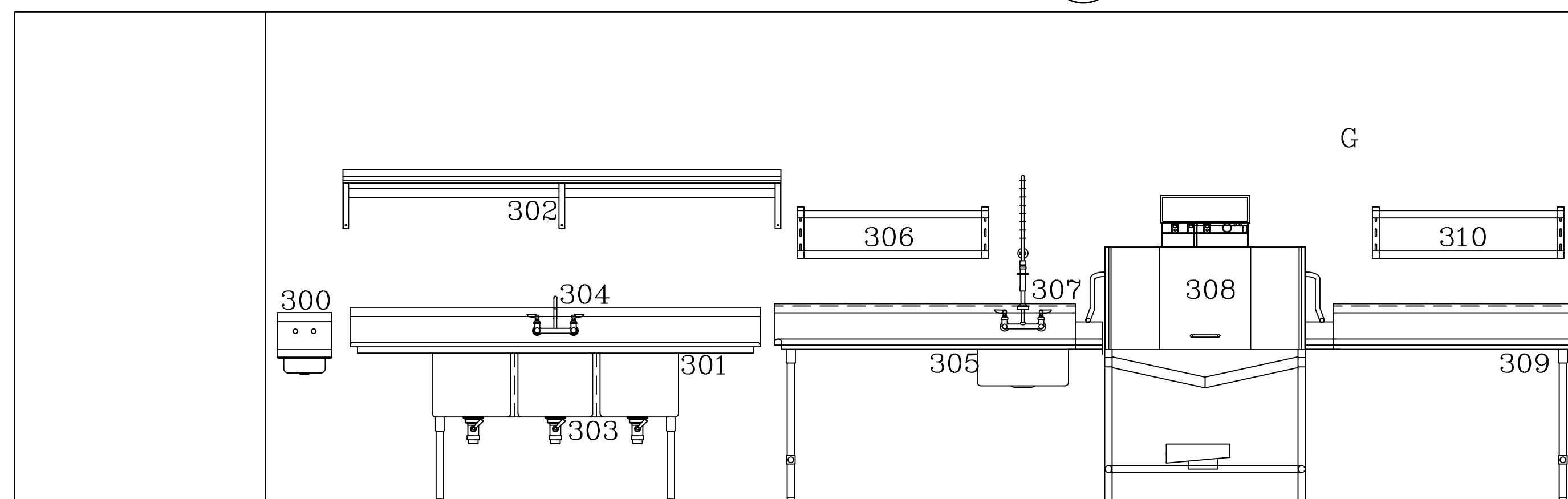
E7 COOKLINE - SOUTH

SCALE: 1/2"=1'-0"



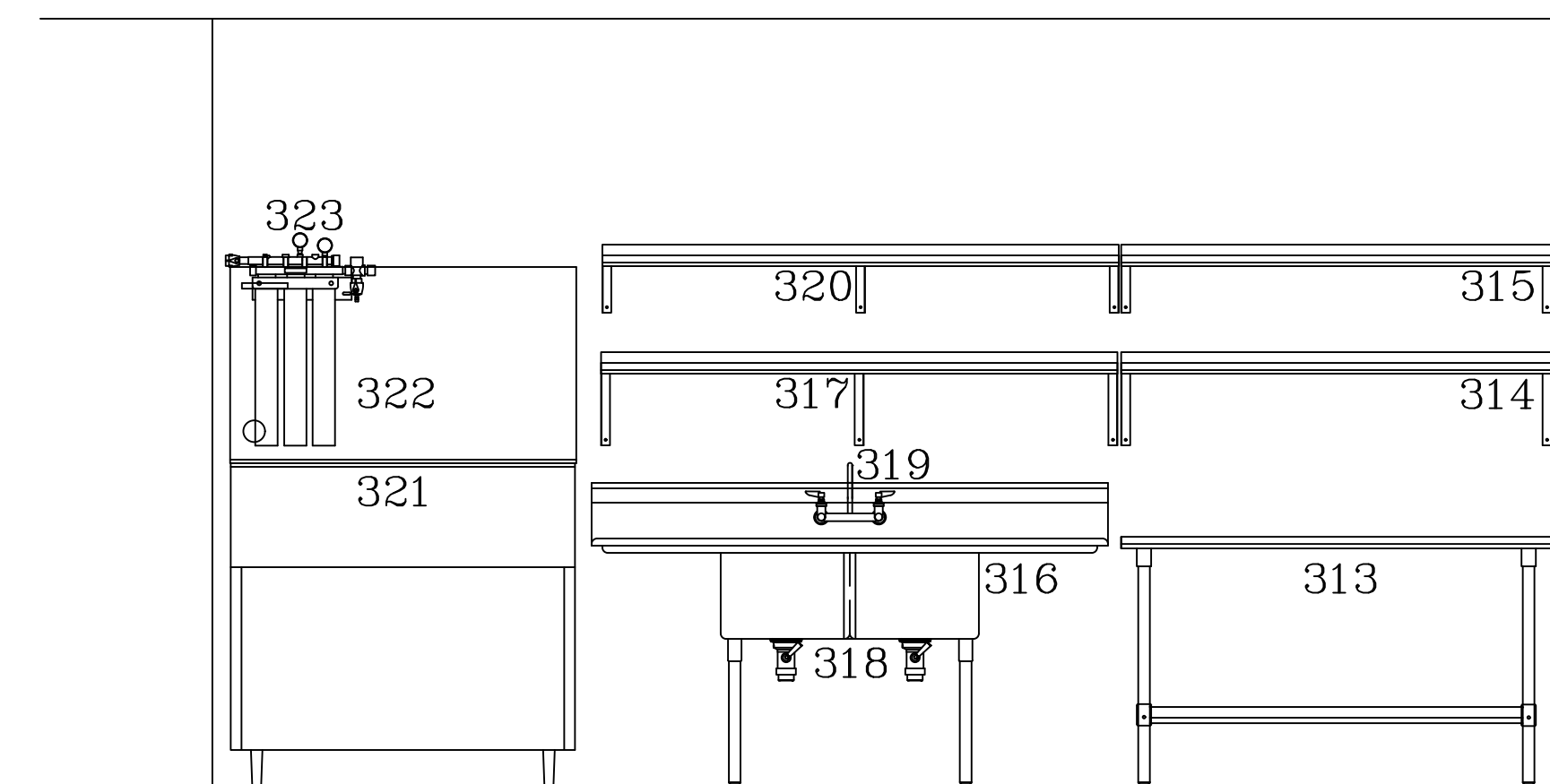
E8 COOKLINE - NORTH

SCALE: 1/2"=1'-0"



E9 DISH AREA - NORTH

SCALE: 1/2"=1'-0"



E10 PREP AREA - SOUTH

SCALE: 1/2"=1'-0"

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REV.	DATE	DESCRIPTION	STATUS
1	4/22/24	1st CITY COMMENTS	-
2			-
3			-
4			-

ARCHITECT	LARSON & ASSOCIATES 3807 N. 24TH STREET #100 PHOENIX, ARIZONA 85016 (602) 955-9929
PROJECT	ANGRY CRAB SHACK GILBERT ARIZONA
SCHEDULE	EQUIPMENT SCHEDULE

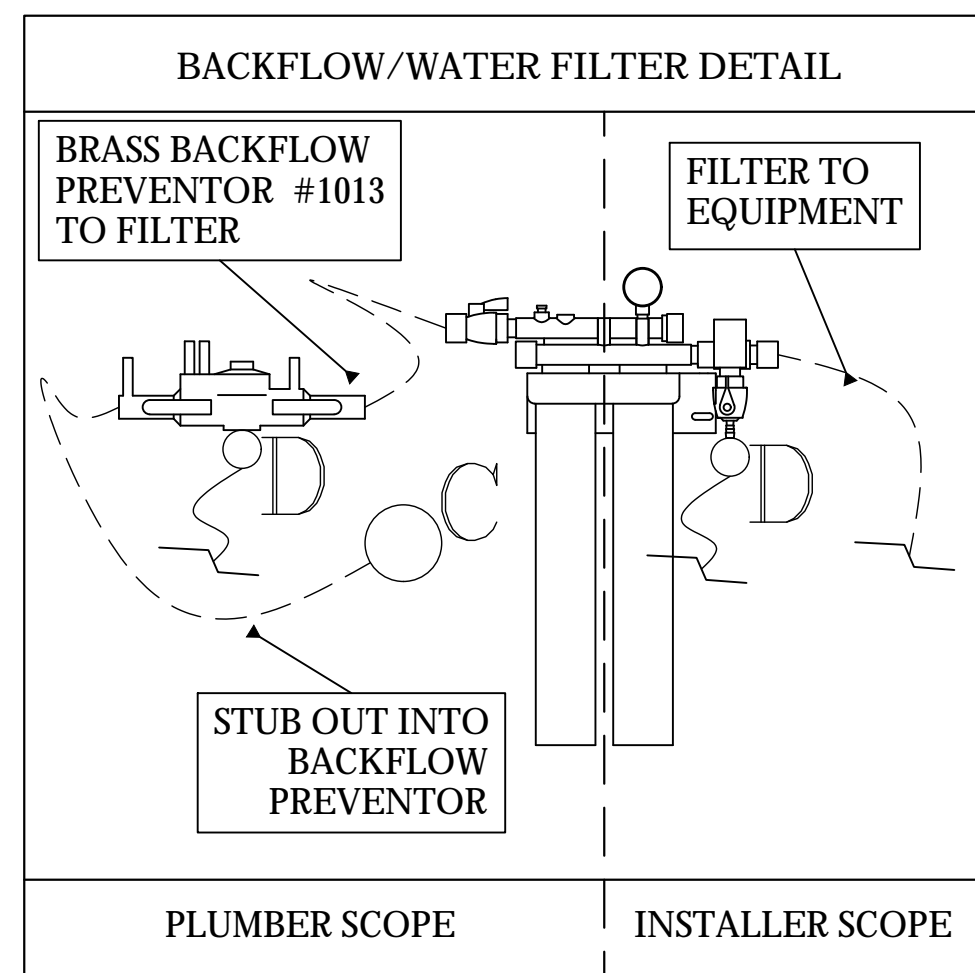
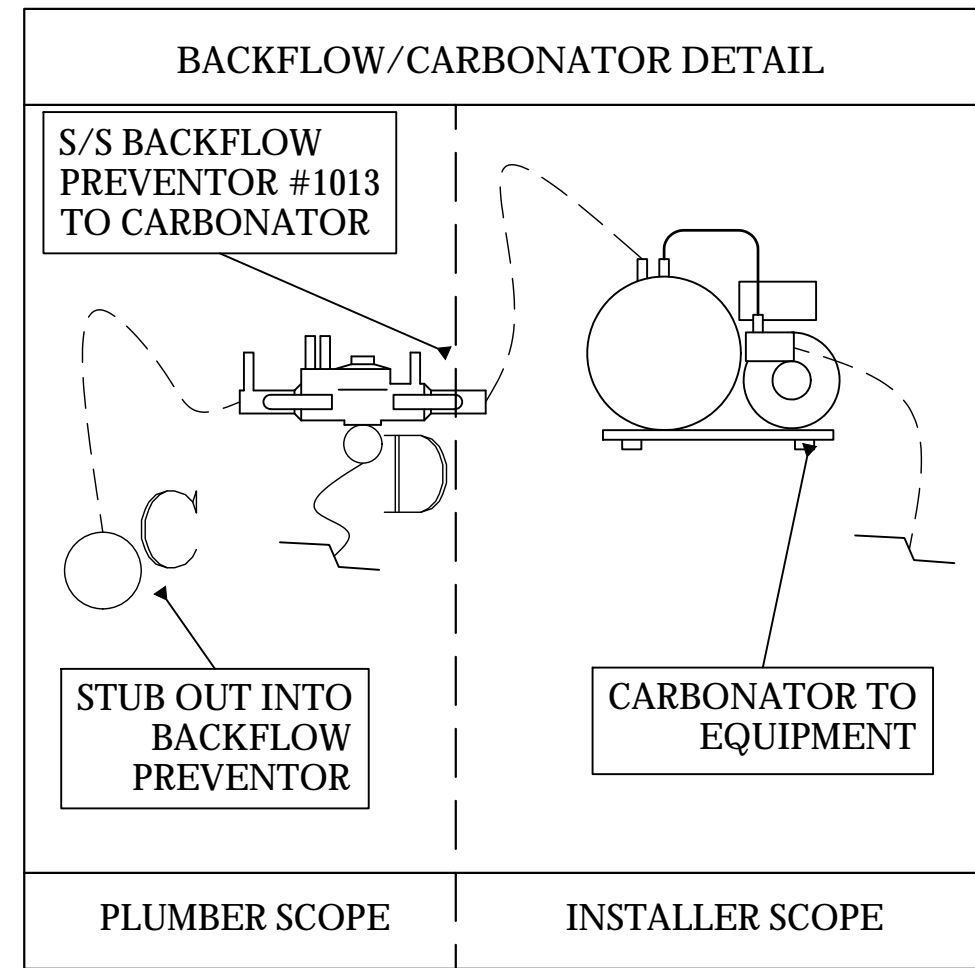
Drawn by:	JBM
Checked by:	
Date:	2/27/2024
Sheet Number:	

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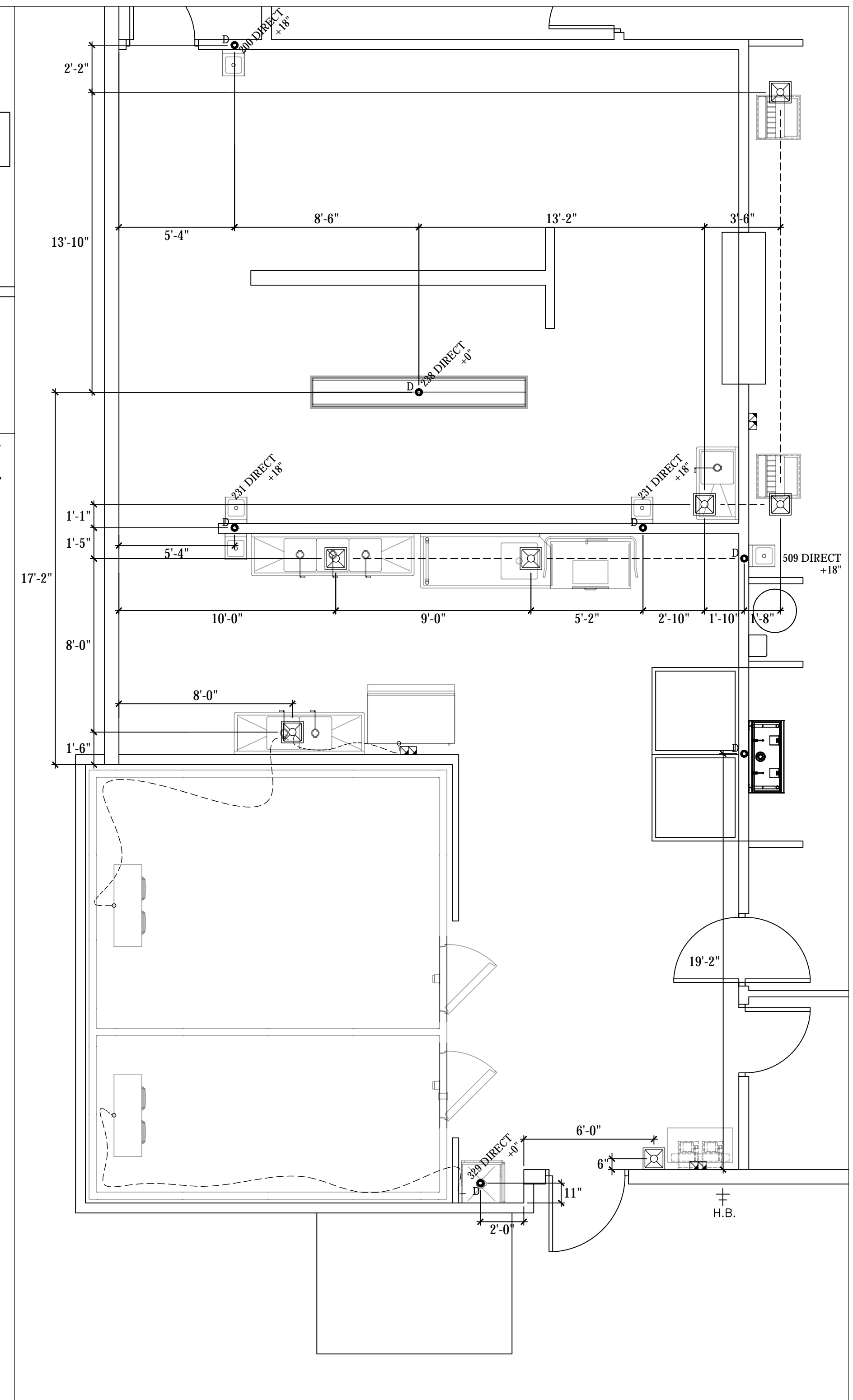
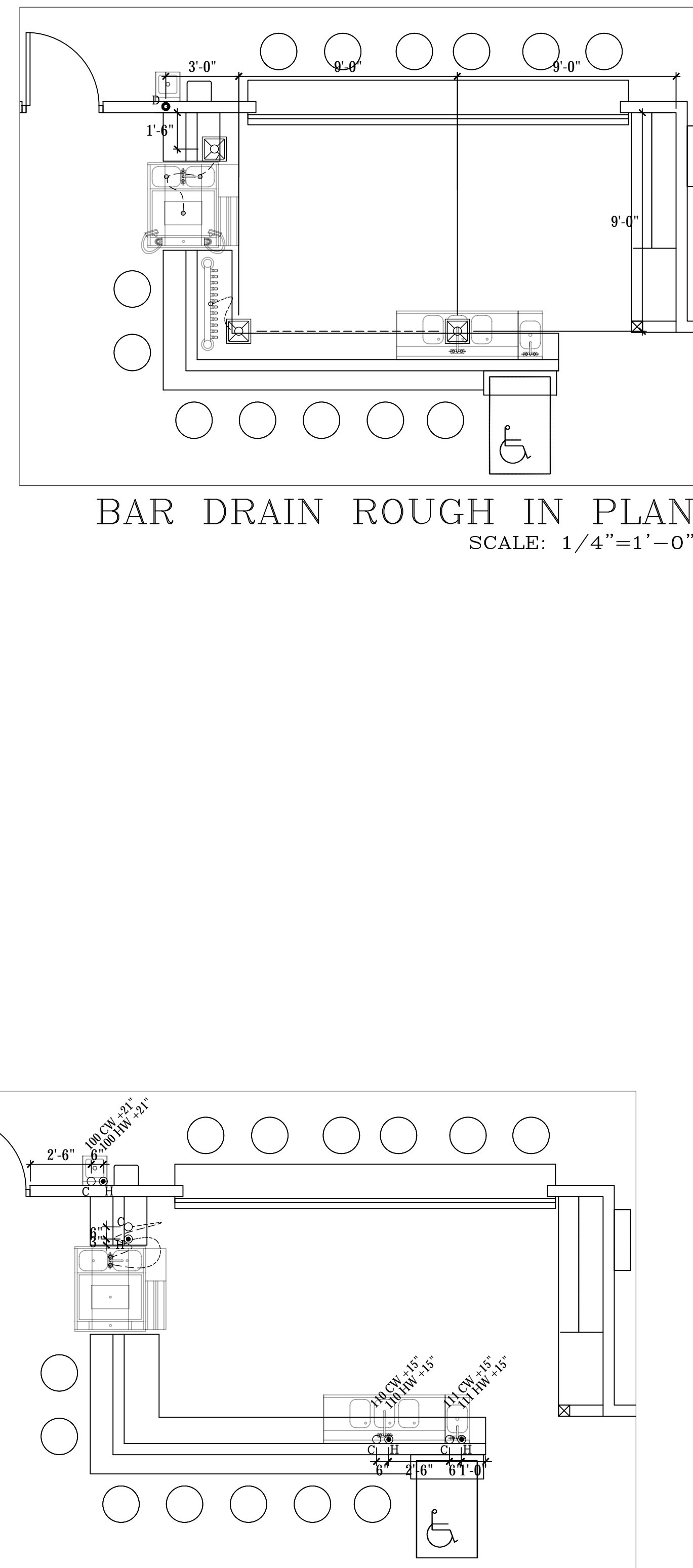
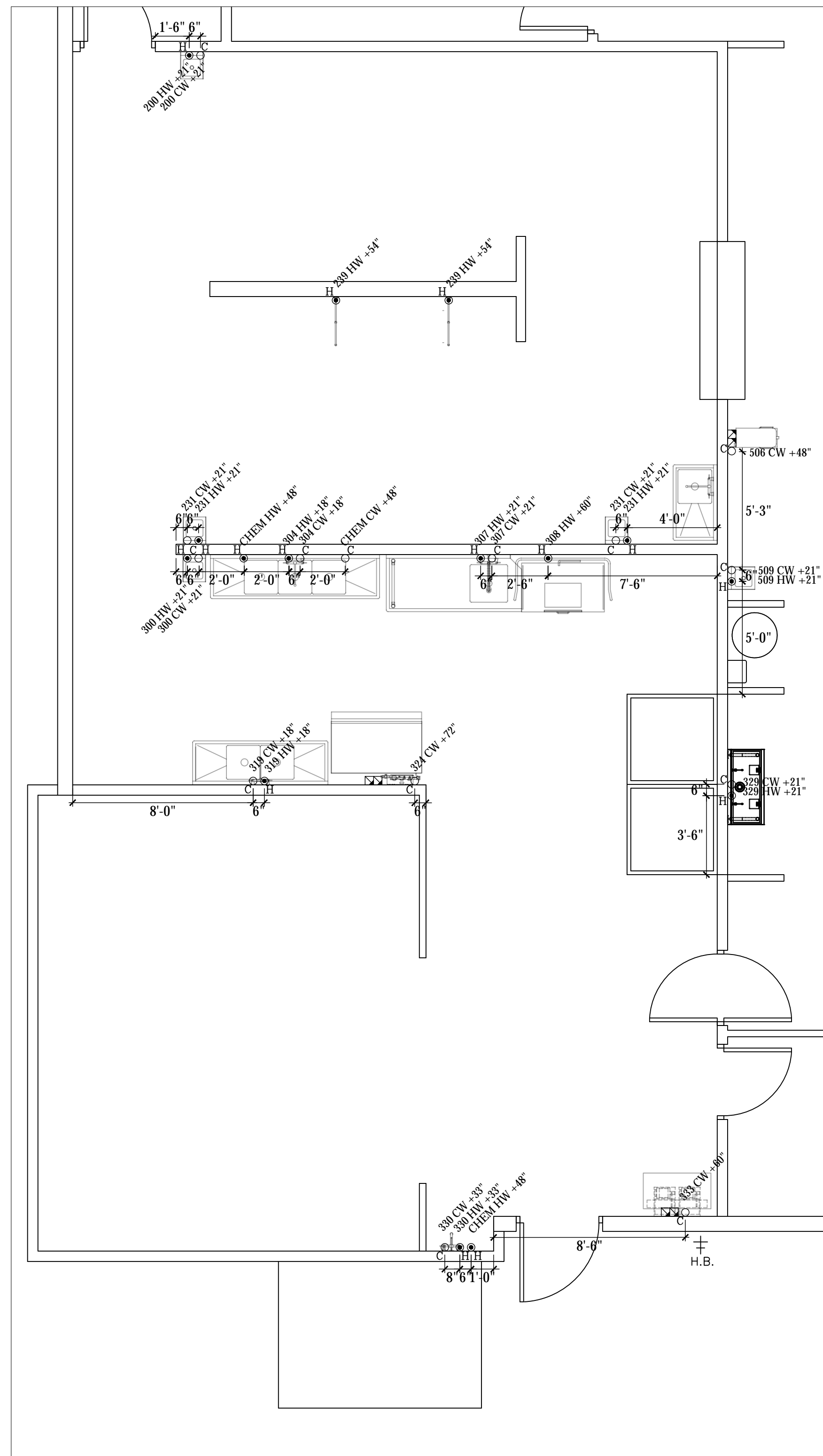






**LEGEND - PLUMBING CONNECTIONS**

- NOT ALL SYMBOLS MAY BE USED
- UNTREATED COLD WATER STUB OUT
  - REVERSE OSMOSIS COLD WATER STUB OUT
  - UNTREATED HOT WATER STUB OUT
  - HOT/COLD WATER CONNECTION POINT TO BE INSTALLED BY PLUMBING CONTRACTOR
  - G-GAS STUB OUT AT WALL
  - GAS CONNECTION POINT TO BE INSTALLED BY PLUMBING CONTRACTOR
  - DIRECT DRAIN STUB OUT
  - DRAIN CONNECTION POINT PVC OR COPPER (AS REQUIRED) TO FLOOR SINK TO BE INSTALLED BY PLUMBING CONTRACTOR
  - FLOOR SINK, NEW
  - FLOOR SINK, EXISTING
  - FLOOR DRAIN
  - BACKFLOW PREVENTER LOCATION
  - SODA CONDUIT STUB OUT (UNDERGROUND)
  - SODA LINES (OVERHEAD)
  - BEER CONDUIT STUB OUT (UNDERGROUND)



**PLUMBING SCOPE OF WORK - WATER**

- KEC TO PROVIDE:**
- ALL FAUCETS, AS REFLECTED ON EQUIPMENT SCHEDULE.
  - WATER CONNECTION FROM ICE MACHINE FILTER TO ICE MACHINE.
- PLUMBING CONTRACTOR TO PROVIDE:**
- INSTALLATION OF ALL FIXTURES PROVIDED BY KEC.
  - FINAL WATER CONNECTIONS FOR ALL EQUIPMENT REQUIRED.
  - CONNECTION FROM STUB OUT TO ANY WATER FILTER.
  - 1/2" SHUT OFF VALVE FROM STUB OUT TO ALL WATER FILTERS REFLECTED ON THIS PLAN.
  - NECESSARY BACK FLOW EQUIPMENT AT SODA EQUIPMENT, ICE MACHINE, OR ANY OTHER DIRECT WATER CONNECTION AS REQUIRED PER CODE.
  - PRESSURE REGULATOR FOR PROPER INSTALLATION OF DISH MACHINE AS REQUIRED BY MANUFACTURER.
- VENDOR TRADES:**
- FINAL CONNECTION FROM FILTER TO PROVIDED EQUIPMENT.

**PLUMBING SCOPE OF WORK - DRAINS**

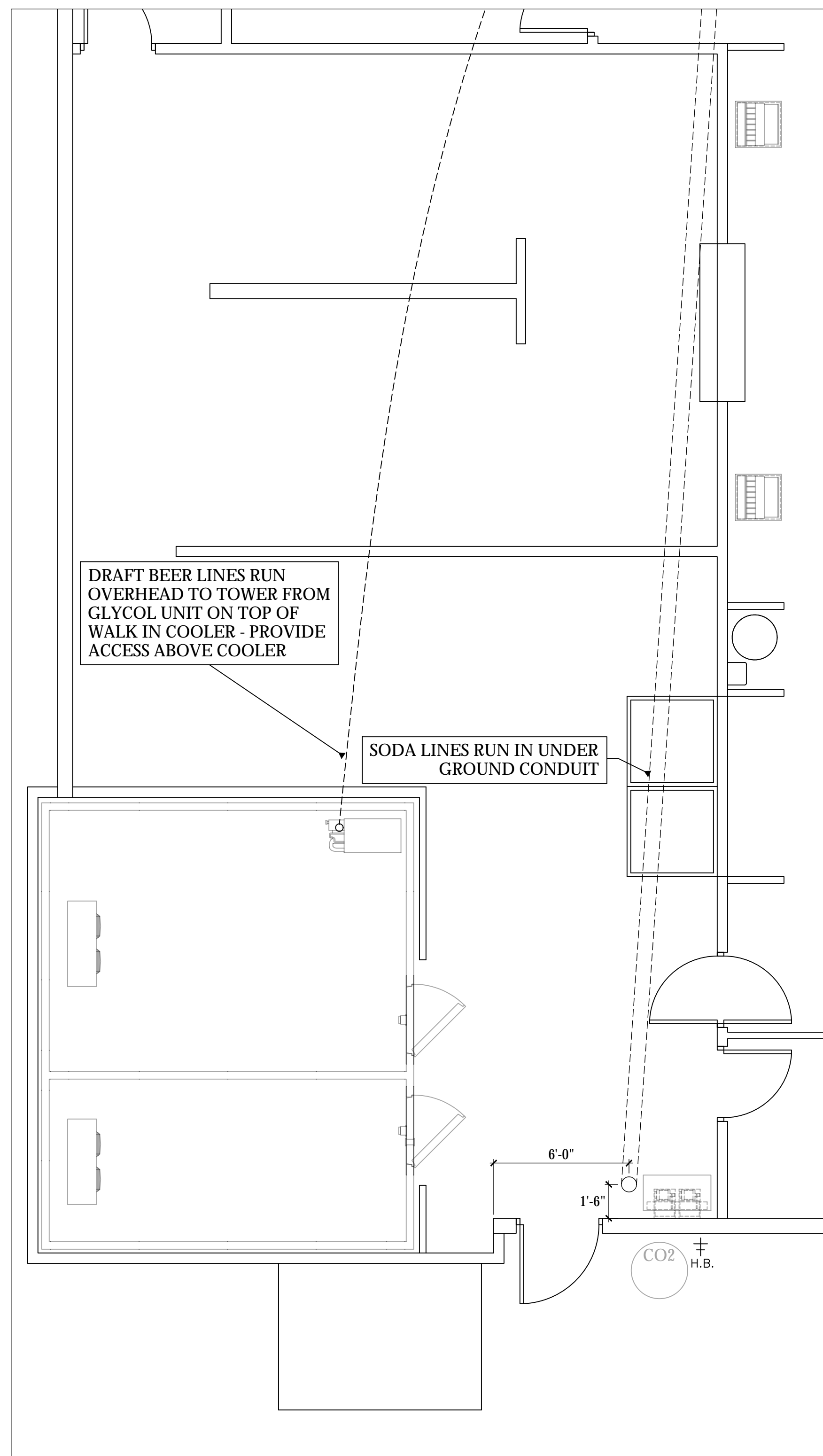
- KEC TO PROVIDE:**
- ALL TWIST WASTE VALVES & BASKET DRAINS, AS REFLECTED ON EQUIPMENT SCHEDULE.
  - INSTALLATION OF PVC DRAINS FOR ICE MACHINE AND ICE BIN WITH NECESSARY AIR VENT AS PER CODE.
  - PIPE CONDENSATE DRAIN FOR WALK IN COOLER WITH 3/4" COPPER TUBING, WITH NECESSARY "P" TRAPS AS PER CODE.
  - PIPE CONDENSATE DRAIN FOR WALK IN FREEZER WITH 3/4" COPPER TUBING, WITH NECESSARY "P" TRAPS AS PER CODE, PROVIDE INSULATION AND HEAT TAPE IN ALL FREEZER AREAS.
- PLUMBING CONTRACTOR TO PROVIDE:**
- RIGID DRAIN LINES FOR ALL DIRECT & INDIRECT WASTE. COPPER REQUIRED FOR HOT WATER DRAIN APPLICATIONS/PVC FOR COLD. SEE PLUMBING SCHEDULE NOTES.
  - MINIMUM 1 1/2" AIR GAP ABOVE FLOOR SINK FOR ALL INDIRECT WASTE PER CODE.
  - ANCHOR ALL INDIRECT PIPING MINIMUM 6" ABOVE FLOOR WITH UNI-STRUT AND STRAPS FOR CLEAN FINISH.

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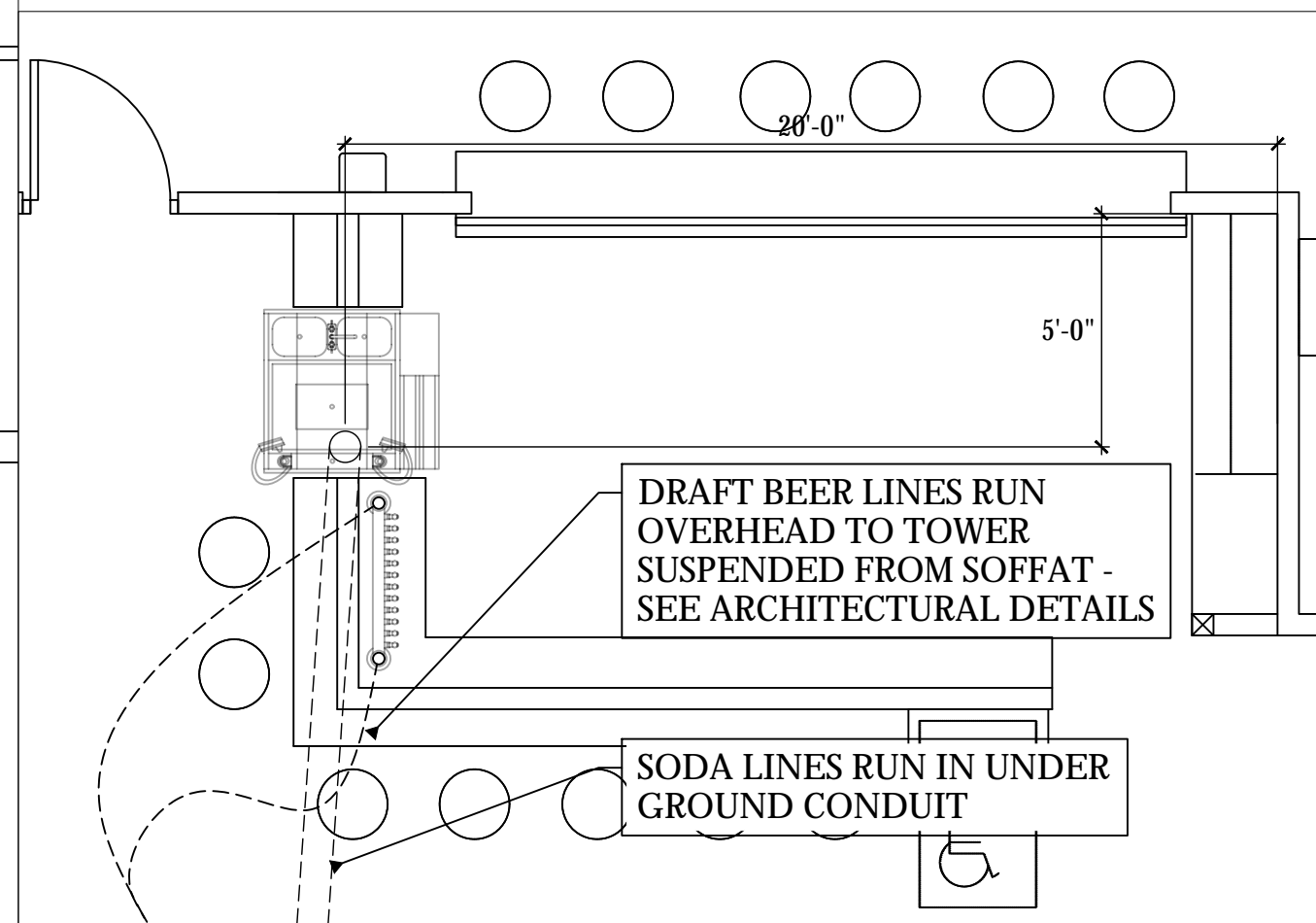
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REV.	A	B	C	4/22/24
ARCHITECT	<b>LARSON &amp; ASSOCIATES</b> 3807 N. 24TH STREET #100 PHOENIX, ARIZONA 85016 (602) 955-9929			
ANGRY CRAB SHACK	<b>AZ-RC</b> <b>ARIZONA</b> RESTAURANT CONSULTING 7920 E. OAK STREET - SCOTTSDALE, ARIZONA 85257 JUSTIN@AZRESTAURANTCONSULTING.COM			
GILBERT ARIZONA	PLUMBING ROUGH IN PLAN			
Drawn by:	JBM			
Checked by:				
Date:	2/27/2024			
Sheet Number:	FS-2.0			

**LEGEND - PLUMBING CONNECTIONS**

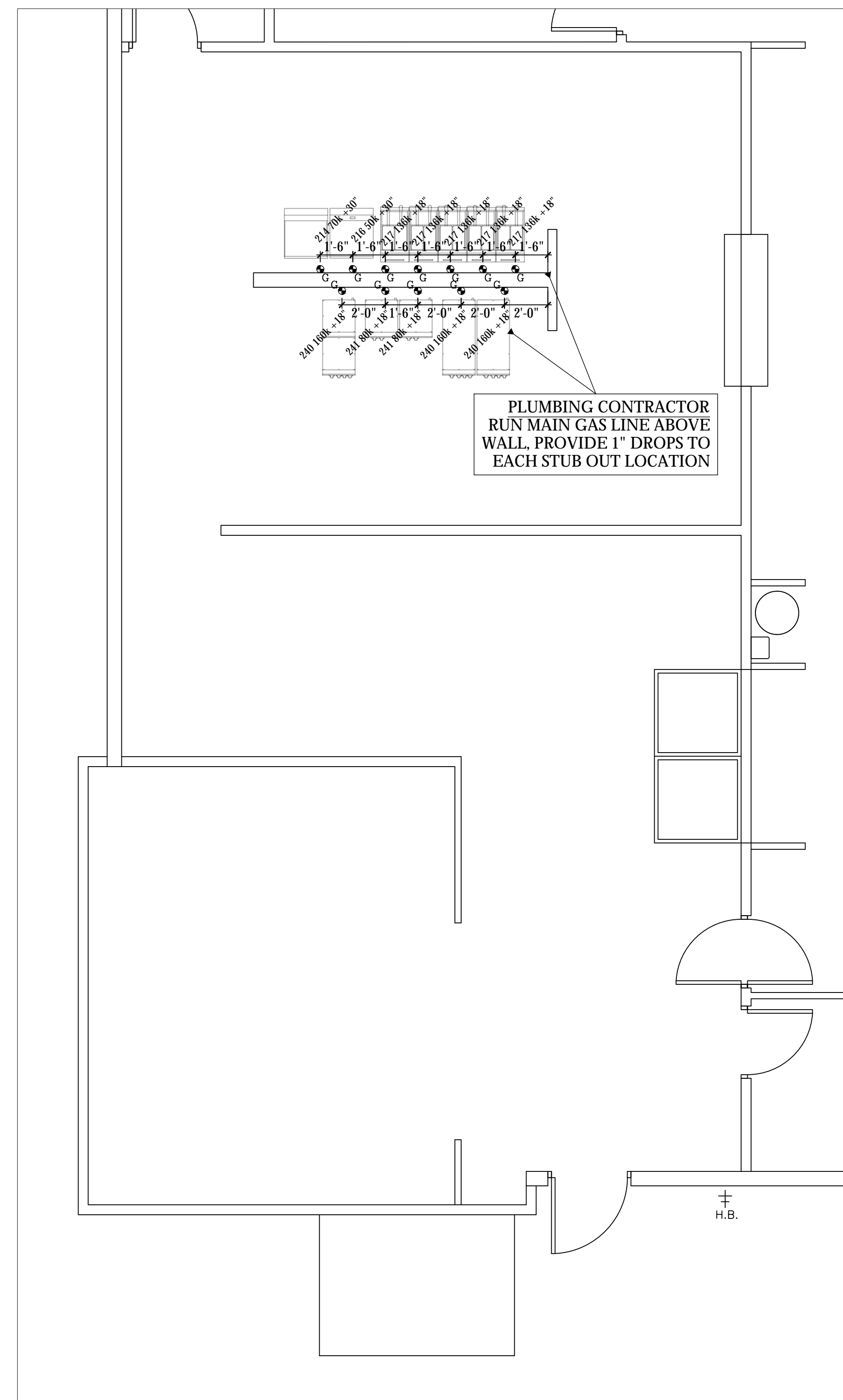
- NOT ALL SYMBOLS MAY BE USED
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  - REVERSE OSMOSIS COLD WATER STUB OUT
  - UNTREATED HOT WATER STUB OUT
  - HOT/COLD WATER CONNECTION POINT TO BE INSTALLED BY PLUMBING CONTRACTOR
  - G-GAS STUB OUT AT WALL
  - GAS CONNECTION POINT TO BE INSTALLED BY PLUMBING CONTRACTOR
  - DIRECT DRAIN STUB OUT
  - DRAIN CONNECTION POINT PVC OR COPPER (AS REQUIRED) TO FLOOR SINK TO BE INSTALLED BY PLUMBING CONTRACTOR
  - FLOOR SINK, NEW
  - FLOOR SINK, EXISTING
  - FLOOR DRAIN
  - BACKFLOW PREVENTER LOCATION
  - SODA CONDUIT STUB OUT (UNDERGROUND)
  - SODA LINES (OVERHEAD)
  - BEER CONDUIT STUB OUT (UNDERGROUND)



KITCHEN SODA/BEER ROUGH IN PLAN SCALE: 1/4"=1'-0"

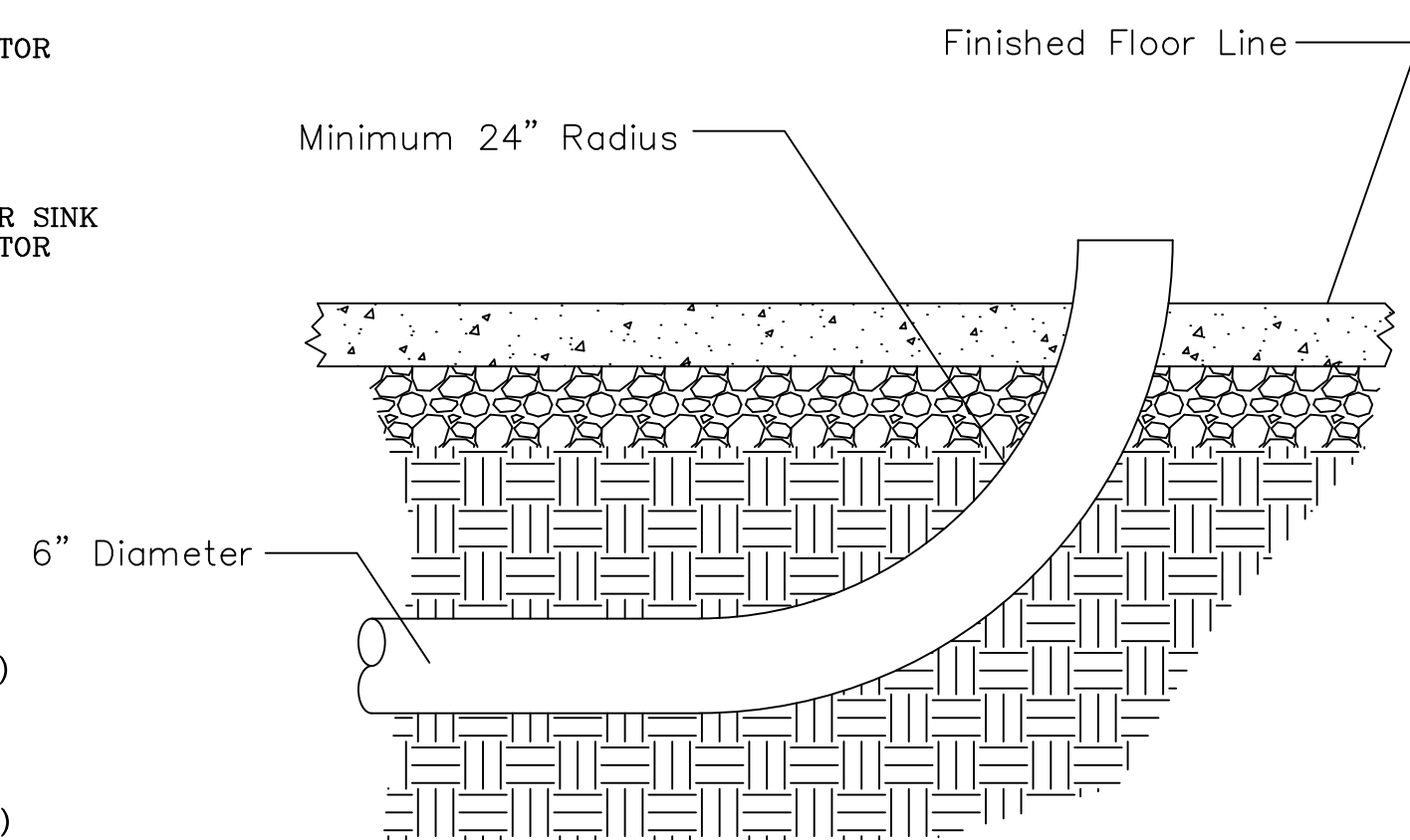


BAR SODA/BEER ROUGH IN PLAN SCALE: 1/4"=1'-0"



KITCHEN GAS ROUGH IN PLAN SCALE: 1/4"=1'-0"

**Underground Conduit Specification**



**PLUMBING SCOPE OF WORK - SODA**

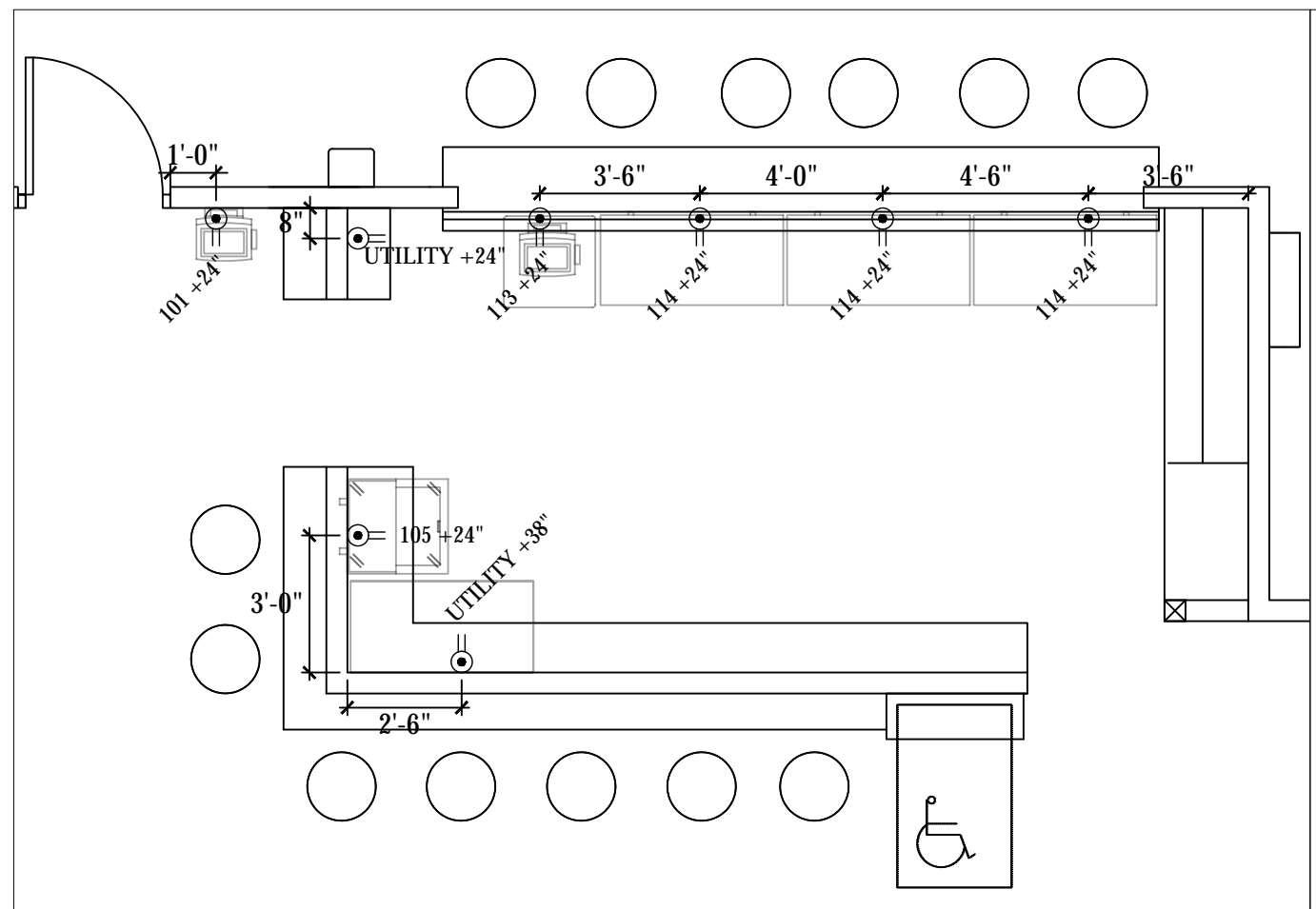
- KEC TO PROVIDE:**
- CO2 ALARMS AS NECESSARY PER CODE REQUIREMENTS.
- PLUMBING CONTRACTOR TO PROVIDE:**
- 6-8" PVC UNDERGROUND CONDUIT WITH MINIMUM 24" RADIUS SWEEP AS REFLECTED ON THE DETAIL ABOVE.
  - NECESSARY BACK FLOW EQUIPMENT AT SODA EQUIPMENT AS PER CODE.
- ELECTRICAL CONTRACTOR TO PROVIDE:**
- INSTALLATION OF CO2 ALARM FOR BULK CO2 APPLICATIONS AS PER CODE REQUIREMENTS.
- VENDOR TRADES:**
- ALL NECESSARY SODA EQUIPMENT FOR OPERATION OF SYSTEM.
  - INSTALLATION OF SODA LINES IN PROVIDED UNDERGROUND CONDUIT OR OVERHEAD ABOVE CEILING, AS REFLECTED ABOVE.
  - TRIM REMAINING CONDUIT TO NO MORE THAN 4" ABOVE FLOOR PRIOR TO FOAMING AND FINAL SEAL AT ALL OPENINGS UPON COMPLETION OF INSTALLATION.
  - PROPER UNDERBAR SECURING OF SODA GUNS AND CINCHING OF ALL LOOSE SODA LINES FOR CLEANEST POSSIBLE FINISH.

**PLUMBING SCOPE OF WORK - GAS NOTES**

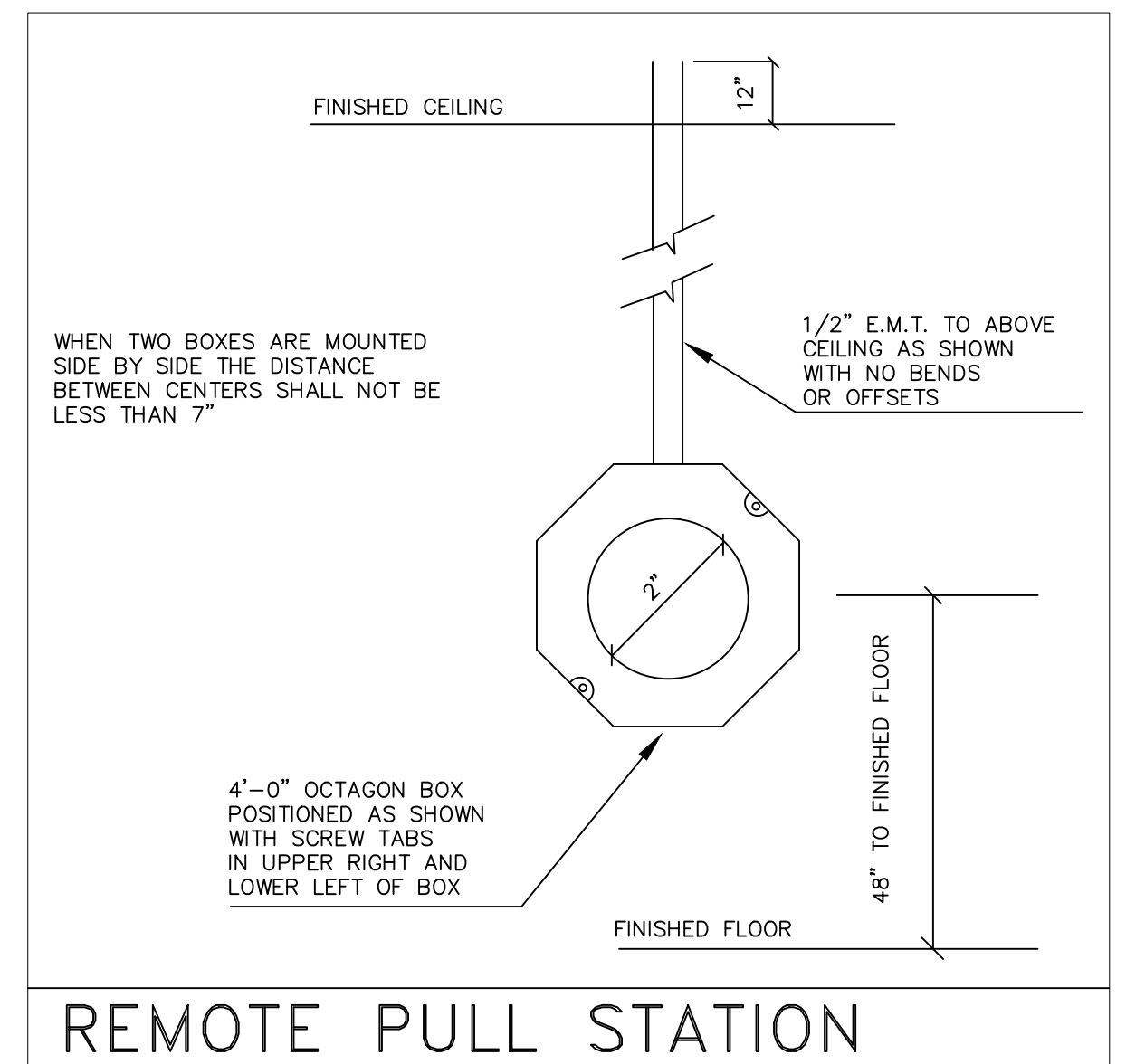
- KEC TO PROVIDE:**
- QUICK DISCONNECT GAS HOSE KITS, 3/4" X 48" FOR EACH PIECE OF GAS EQUIPMENT AS NOTED ON EQUIPMENT SCHEDULE.
  - SOLENOID VALVE FOR MAIN GAS LINE SHUT OFF (PART OF THE ANSUL SYSTEM).
- PLUMBING CONTRACTOR TO PROVIDE:**
- INSTALLATION OF ALL QUICK DISCONNECT GAS HOSES & SAFETY CABLES AS SHOW IN THE DETAIL ABOVE.
  - INSTALLATION OF SOLENOID VALVE FOR MAIN GAS LINE IN LOCATION DETAILED BY PLUMBING ENGINEER ON GAS LINE SCHEMATIC.
  - APPROPRIATE GAS PSI/W.C. TO ALL NECESSARY EQUIPMENT, PER SPEC SHEETS PROVIDED
- ELECTRICAL CONTRACTOR TO PROVIDE:**
- WIRING FROM SOLENOID VALVE TO ELECTRICAL CONTROLS OF HOOD SYSTEM.

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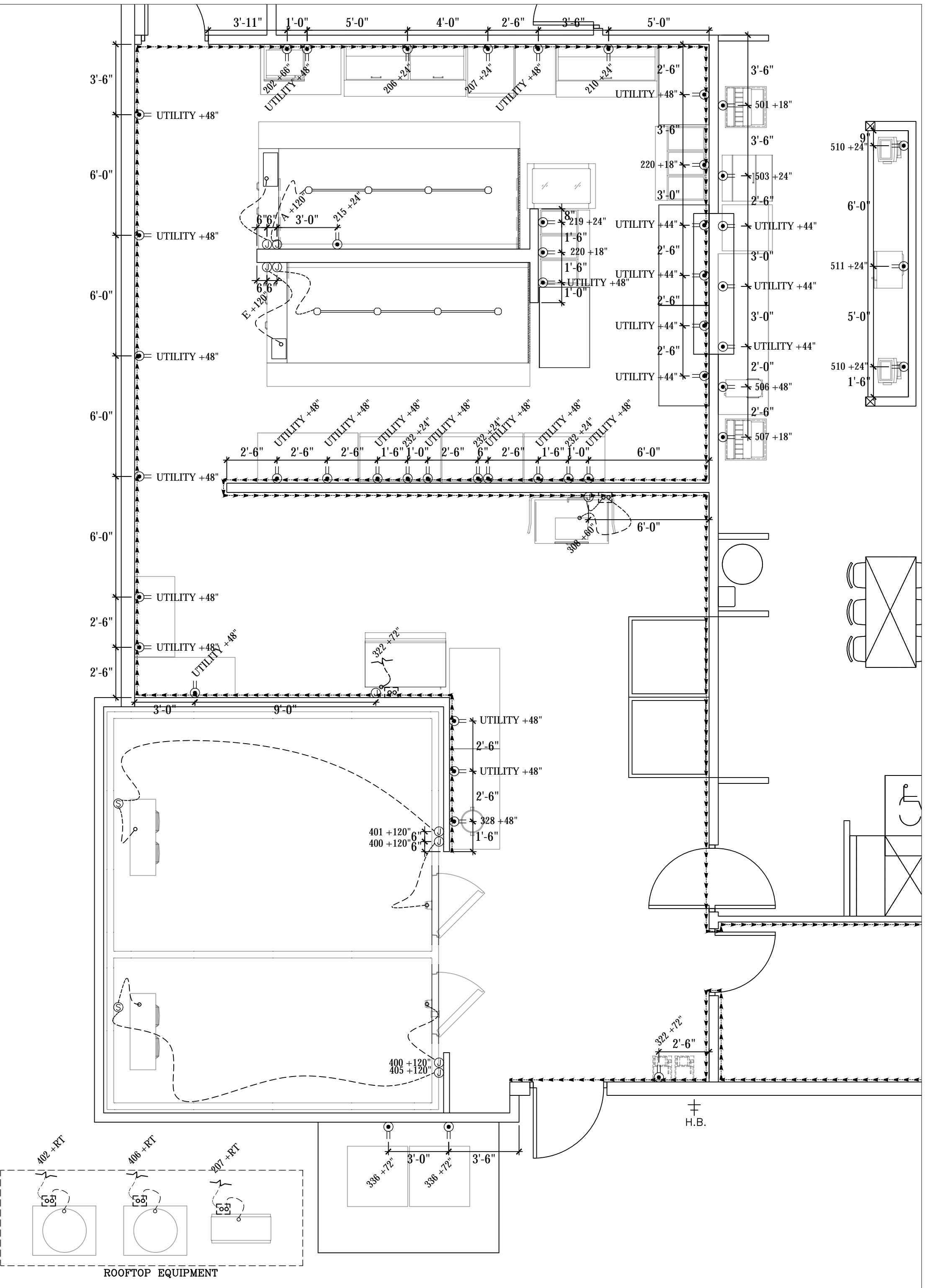
STATUS	-	-	-	-	1st CITY COMMENTS
REV.	A	B	C	D	4/22/24
ARCHITECT	LARSON & ASSOCIATES 3807 N. 24TH STREET #100 PHOENIX, ARIZONA 85016 (602) 955-9929				
ANGRY CRAB SHACK	RESTAURANT CONSULTING 7920 E. OAK STREET - SCOTTSDALE, ARIZONA 85257 JUSTIN@AZRESTAURANTCONSULTING.COM				
GILBERT ARIZONA	PLUMBING ROUGH IN PLAN				
Drawn by:	JBM				
Checked by:					
Date:	2/27/2024				
Sheet Number:	FS-2.1				



BAR ELECTRICAL ROUGH IN PLAN  
SCALE: 1/4"=1'-0"



REMOTE PULL STATION



KITCHEN ELECTRICAL ROUGH IN PLAN  
SCALE: 1/4"=1'-0"

LEGEND - ELECTRICAL CONNECTIONS

- NOT ALL SYMBOLS MAY BE USED
- ⊕ DUPLEX RECEPT., 15-AMP, 120-VOLT, GROUND TYPE, VERTICAL MOUNT
  - ⊙ DUPLEX RECEPT., 20-AMP, 120-VOLT, GROUND TYPE, VERTICAL MOUNT
  - ⊗ DUPLEX RECEPT. W/ GFI, 20-AMP, 120-VOLT, GROUND TYPE, VERTICAL MOUNT
  - ⊖ SIMPLEX RECEPT., 20-AMP, 120-VOLT, GROUND TYPE, VERTICAL MOUNT
  - ▲ SPECIAL PURPOSE OUTLET, 208/240-VOLT NEMA CONFIG. AS INDICATED, ON EQUIP. SCHEDULE AS INDICATED, GROUND TYPE, VERTICAL MOUNT
  - ⊕ JUNCTION BOX FOR DIRECT CONNECTION
  - ⊗ STUB OUT FOR UNDERGROUND CONDUIT
  - ⋯ FIELD WIRING, EXPOSED RIGID WATERTIGHT CONDUIT
  - ⋯ REMOTE CONDENSER ELECTRICAL CONNECTION OUTGOING FROM KITCHEN TO ROOFTOP
  - ⊖ MANUAL DISCONNECT SWITCH, WATERTIGHT
  - ⊙ BASIC SWITCH, WATERTIGHT








- ELECTRICAL SCOPE OF WORK
- ELECTRICAL CONTRACTOR NOTES:
- 1) ALL DIMENSIONS ARE TO CENTER OF OUTLET BOX.
  - 2) RUN CONDENSER POWER FROM BACK OF ICE MACHINE TO ROOFTOP WITH REFRIGERATION LINES.
  - 3) MOUNT WATERPROOF JBOX TO ICE MACHINE CONDENSER - PROVIDE SHUT OFF SWITCH WITHIN 6 FEET PER CODE - INCOMING POWER FROM ICE MACHINE TO ROOFTOP LOCATION.
  - 4) PROVIDE DIRECT SHUNT TRIP BREAKER FOR WALK IN FREEZER DOOR HEAT STRIP (BY KEC/WALK IN MANUFACTURER) AND DRAIN LINE HEATER (BY KEC) - WIRE TIME CLOCK IF SHIPPED LOOSE.
  - 5) PROVIDE DISCONNECT SWITCH FOR EACH WALK IN CONDENSER WITHIN 6 FEET PER CODE.
  - 6) WIRE EXHAUST FANS, MAKE UP AIR UNITS AND ALL DESIGNATED OUTLETS UNDER HOOD SYSTEMS INTO ELECTRICAL CONTROL PANEL (KEC PROVIDED).
- GENERAL NOTES:
- PROVIDE GFI OUTLETS IN ALL AREAS OF THE KITCHEN.
  - DIRECT CONNECTIONS REQUIRED ARE TO BE WATERTIGHT CONDUIT

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REV.	ARCHITECT	STATUS	1	1	1	1	1	1	1
			2	2	2	2	2	2	2
<p>LARSON &amp; ASSOCIATES 3807 N. 24TH STREET #100 PHOENIX, ARIZONA 85016 (602) 955-9929</p>		<p>ANGRY CRAB SHACK GILBERT ARIZONA</p>		<p>ELECTRICAL ROUGH IN PLAN</p>		<p>4/22/24</p>		<p>1st CITY COMMENTS</p>	
<p>AZ*RC ARIZONA RESTAURANT CONSULTING 7920 E. OAK STREET - SCOTTSDALE, ARIZONA 85257 602.699.5131 JUSTIN@AZRESTAURANTCONSULTING.COM</p>		<p>Drawn by: JBM</p>		<p>Checked by:</p>		<p>Date: 2/27/2024</p>		<p>Sheet Number:</p>	
<p>FS-3.0</p>									

**LEGEND - MECHANICAL CONNECTIONS**

NOT ALL SYMBOLS MAY BE USED

-  FIRE SUPPRESSION PULL SWITCH, OCTAGON BOX TO BE SET INSIDE WALL WITH CONCEALED CONDUIT.
-  REMOTE CONDENSER LINE SET OUTGOING/INCOMING FROM KITCHEN TO ROOFTOP.
-  FLU EXHAUST CONNECTION POINT FOR WATER HEATER, INSTALLED BY PLUMBER
-  FIRE SUPPRESSION SYSTEM TANKS & CONTROLS
-  MAKE UP AIR DUCT RISER
-  GREASE DUCT RISER
-  AC DUCT RISER

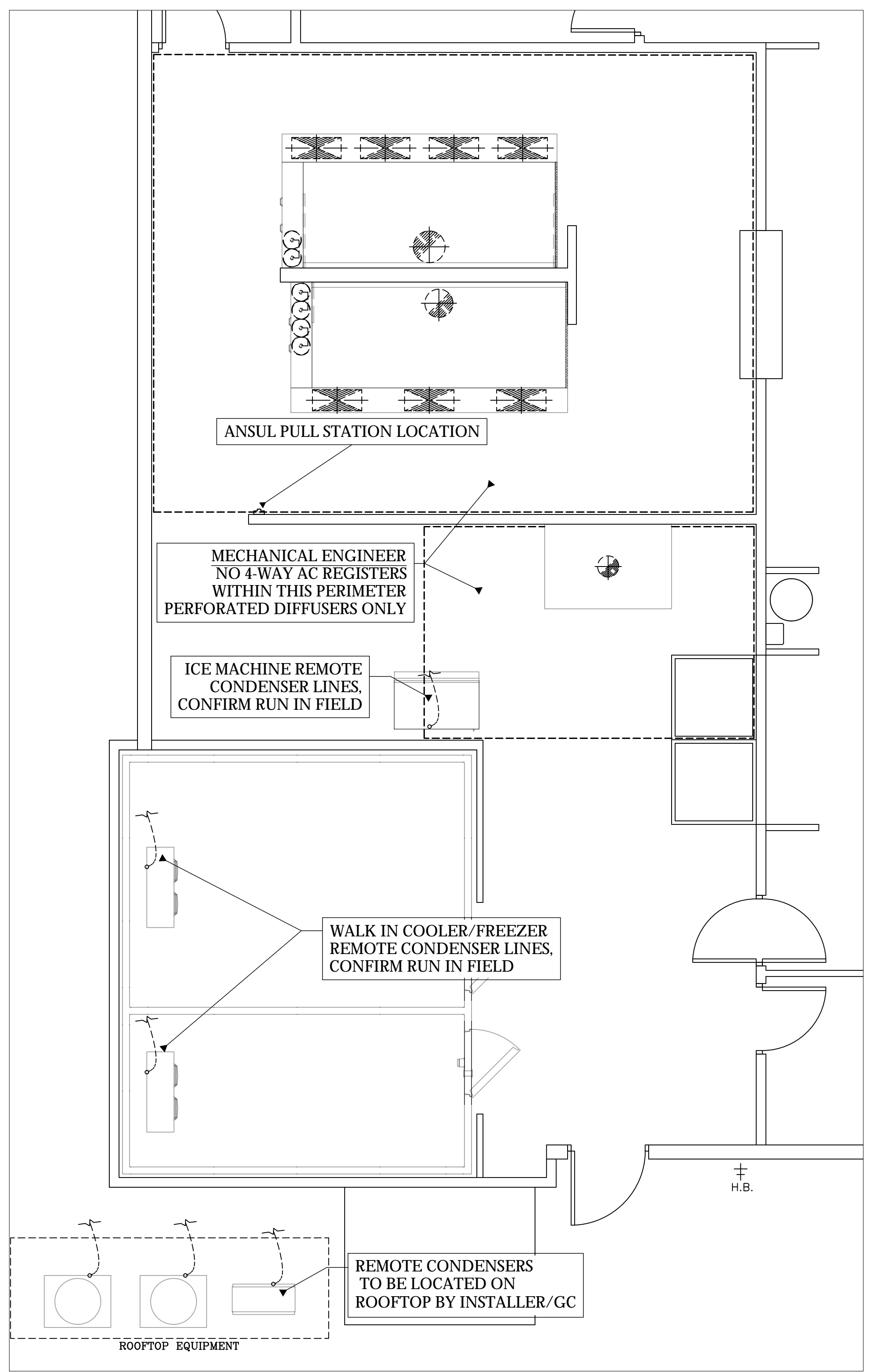
**MECHANICAL SCOPE OF WORK**

**KEC TO PROVIDE:**


- RECEIVING OF EQUIPMENT DELIVERY ONSITE,
- HOOD BOXES,
- 20 GA. S/S WALL FLASHING UP TO 120" HIGH (CONFIRM WITH GC CODE REQUIREMENT ON HEIGHT) FROM 4" ABOVE FLOOR, END OF HOOD TO END OF HOOD AND ANY SIDE WALL(S) AROUND PERIMETER OF HOOD,
- EXHAUST FAN(S) & ROOF CURB(S),
- EVAP COOLER/MAKE UP AIR UNIT & ROOF CURB(S),
- ELECTRICAL CONTROL PANEL W/ RELAYS & CONTACTORS,
- ANSUL SYSTEM PIPING, TANKS, PERMIT, INSTALLATION & FINAL TEST,
- HANGING OF HOOD BOXES & INSTALLATION OF S/S WALL FLASHING,
- FACTORY PERFORMANCE CHECK OF SYSTEM AFTER HVAC START UP,
- LOCATIONS FOR ROOF PENETRATIONS FOR REMOTE CONDENSERS WITH PVC CHASE,
- PRESSURE TREATED 4"X4" WOOD FOR SETTING OF REMOTE CONDENSERS WHEN NECESSARY,
- RECEIVING OF ROOFTOP EQUIPMENT ONSITE, ONSITE STORAGE IF NECESSARY,
- CRANE TO ROOFTOP, CUTTING OF ROOF DECK & PLACEMENT OF CURBS, PATCHING OF ROOF,
- GREASE DUCT/FIREWRAP & INSTALLATION, MUA/AC DUCT & INSTALLATION,

**GC/MECHANICAL CONTRACTOR TO PROVIDE:**

- MOUNTING OF ELECTRICAL CONTROLS (IF NECESSARY), FINAL ELECTRICAL & PLUMBING CONNECTIONS, START UP AND BALANCE OF HOOD WITH AC, CUTTING AND SEAL ROOF PENETRATIONS FOR REMOTE CONDENSER LINE CHASE - PROVIDE GALVANIZED "GOOSE NECK" IF PREFERRED OVER KEC PROVIDED PVC,
- CONDENSER/FAN CURBS SHOULD THEY BE REQUIRED OVER 4"X4" WOOD BY KEC.



**KITCHEN MECHANICAL ROUGH IN PLAN**  
SCALE: 1/4"=1'-0"

	STATUS					
	REV.	ARCHITECT	STATUS	REV.	DATE	COMMENTS
<b>LARSON &amp; ASSOCIATES</b> 3807 N. 24TH STREET #100 PHOENIX, ARIZONA 85016 (602) 955-9929			-	-	-	1st CITY COMMENTS
			-	-	4/22/24	-
<b>ANGRY CRAB SHACK</b> GILBERT ARIZONA	Drawn by: <b>JBM</b>		Checked by:		Date: <b>2/27/2024</b>	
MECHANICAL ROUGH IN PLAN			Sheet Number:		<b>FS-4.0</b>	

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**HOOD INFORMATION - JOB#6617175**

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)					TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG			
										WIDTH	LENG	HEIGHT	DIA	CFM			VEL	SP	END TO END	ROW
1	Fry/Broiler	6030 ND-2-PSP-F	CAPTIVEAIRE	11' 11"	600 DEG	I	HEAVY	275	3277			4"	18"	3277	1854	-1.146"	2622	430 SS WHERE EXPOSED	ALONE	ALONE
2	Stockpot	6030 ND-2-PSP-F	CAPTIVEAIRE	12' 0"	600 DEG	I	HEAVY	200	2400			4"	16"	2400	1719	-0.797"	2160	430 SS WHERE EXPOSED	ALONE	ALONE
3	Dish	4830 VHB-G	CAPTIVEAIRE	6' 0"	700 DEG	II	N/A	150	900			4"	12"	900	1146	-0.105"	0	430 SS 100%	ALONE	ALONE

FOR QUESTIONS, CONTACT THE  
 Arizona Office  
 REGION 93  
 PHONE: (480) 926-6810  
 EMAIL: reg93@captiveaire.com

**HOOD INFORMATION**

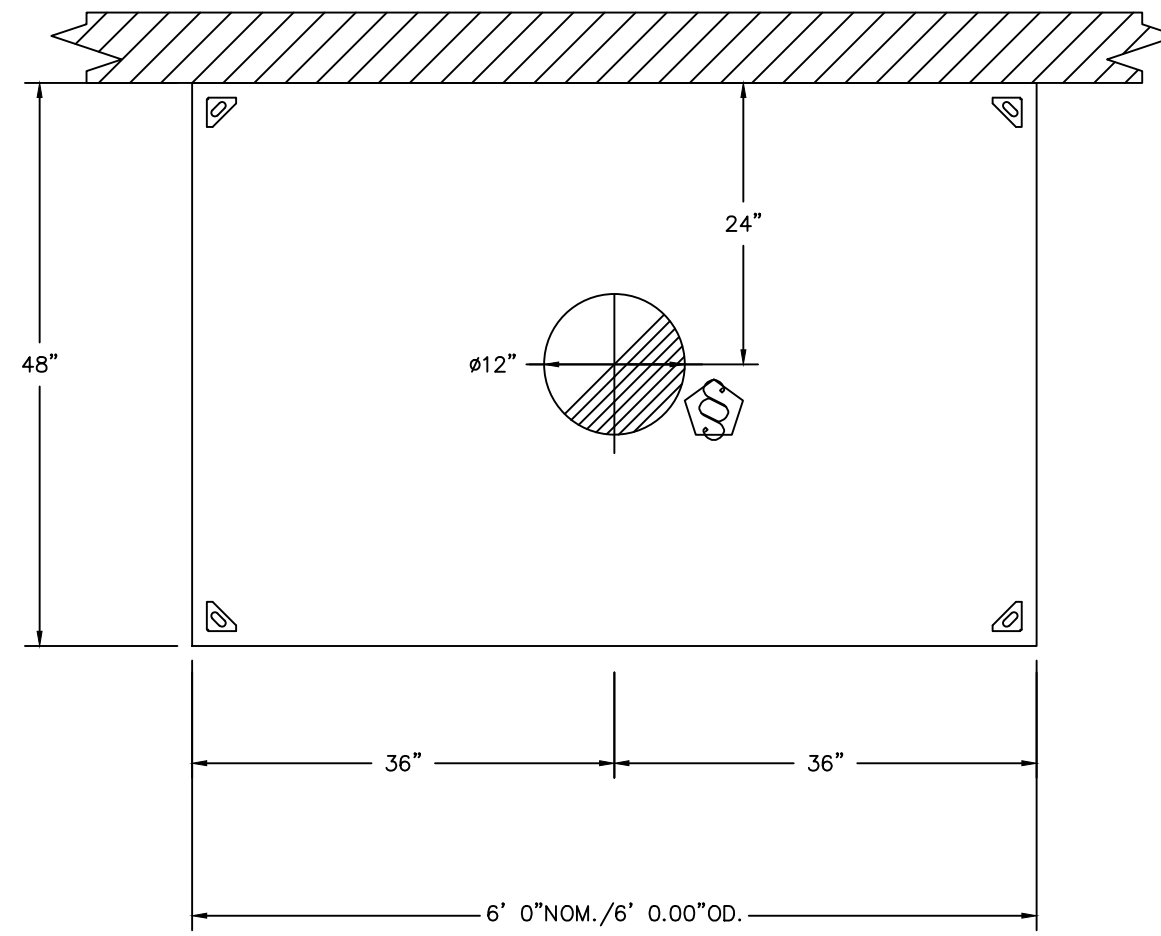
HOOD NO	TAG	TYPE	FILTER(S)			LIGHT(S)			UTILITY CABINET(S)			FIRE SYSTEM PIPING	HOOD HANGING WEIGHT				
			QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE			TYPE	SIZE	MODEL #	QUANTITY
1	Fry/Broiler	CAPTRATE SOLO FILTER	8	20"	16"	85% SEE FILTER SPEC	4	L55 SERIES E26	NO	RIGHT	12"x60"x30"	TANK FS	4.0/4.0/4.0/4.0	DCV-2111	1 LIGHT 1 FAN	YES	1264 LBS
2	Stockpot	CAPTRATE SOLO FILTER	9	20"	16"	85% SEE FILTER SPEC	4	L55 SERIES E26	NO	LEFT	12"x60"x30"	TANK FS	4.0/4.0/4.0/4.0			YES	1261 LBS
3	Dish						0									NO	228 LBS

**HOOD OPTIONS**

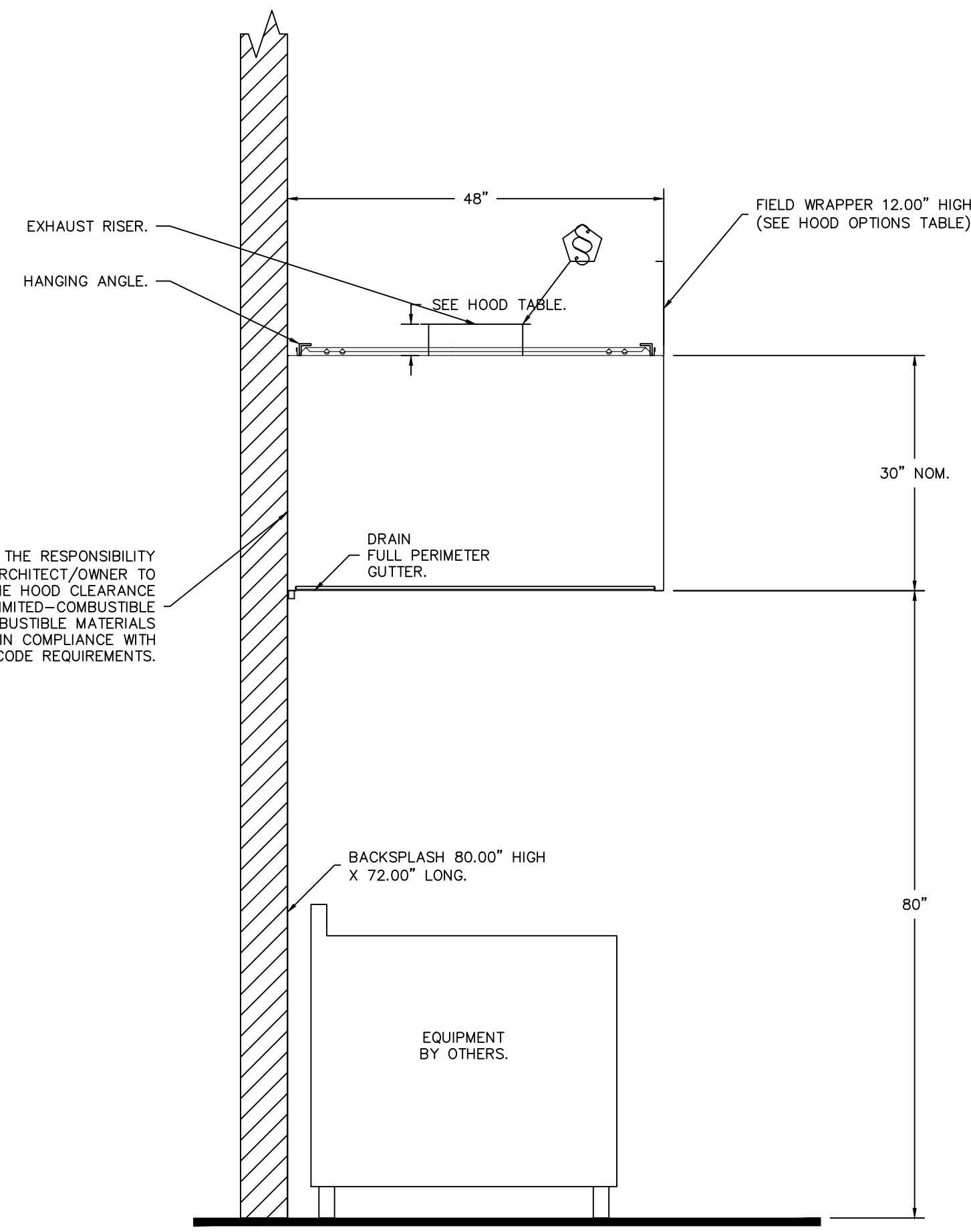
HOOD NO	TAG	OPTION
1	Fry/Broiler	FIELD WRAPPER 12.00" HIGH FRONT, LEFT, RIGHT.
		BACKSPLASH 128.00" HIGH X 163.00" LONG 430 SS VERTICAL.
		LEFT SIDESPLASH 128.00" HIGH X 54.00" LONG 430 SS VERTICAL.
		LEFT END STANDOFF (FINISHED) 1" WIDE 60" LONG INSULATED.
STRUCTURAL FRONT PANEL.		
2	Stockpot	RIGHT WIDE VERTICAL END PANEL 42" TOP WIDTH, 36" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.
		LEFT WIDE VERTICAL END PANEL 42" TOP WIDTH, 36" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.
		FIELD WRAPPER 12.00" HIGH FRONT, LEFT, RIGHT.
		BACKSPLASH 128.00" HIGH X 163.00" LONG 430 SS VERTICAL.
STRUCTURAL FRONT PANEL.		
3	Dish	FIELD WRAPPER 12.00" HIGH FRONT, LEFT, RIGHT.
		BACKSPLASH 80.00" HIGH X 72.00" LONG 430 SS VERTICAL.

**PERFORATED SUPPLY PLENUM(S)**

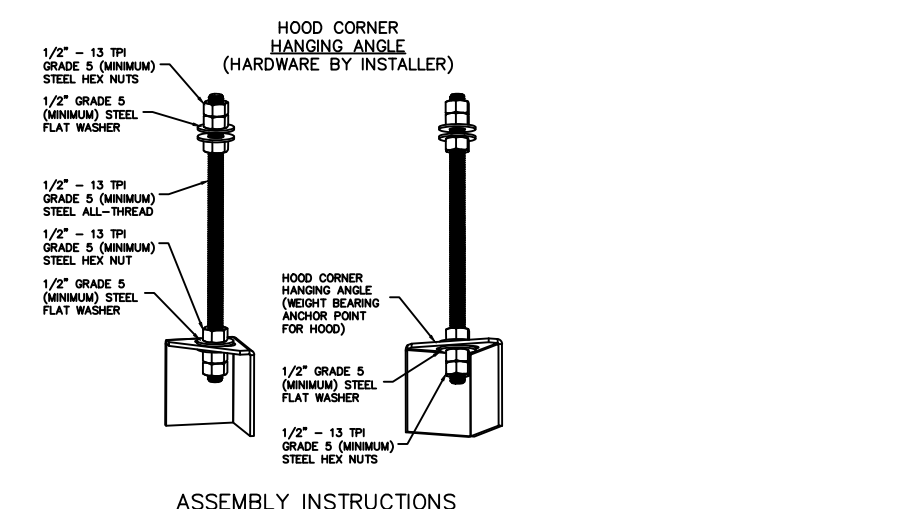
HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)				
							WIDTH	LENG	DIA	CFM	SP
1	Fry/Broiler	Front	156"	16"	6"	MUA	12"	28"		655	0.164"
							12"	28"		655	0.164"
							12"	28"		655	0.164"
							12"	28"		655	0.164"
2	Stockpot	Front	157"	14"	6"	MUA	12"	28"		720	0.195"
							12"	28"		720	0.195"
							12"	28"		720	0.195"
							12"	28"		720	0.195"



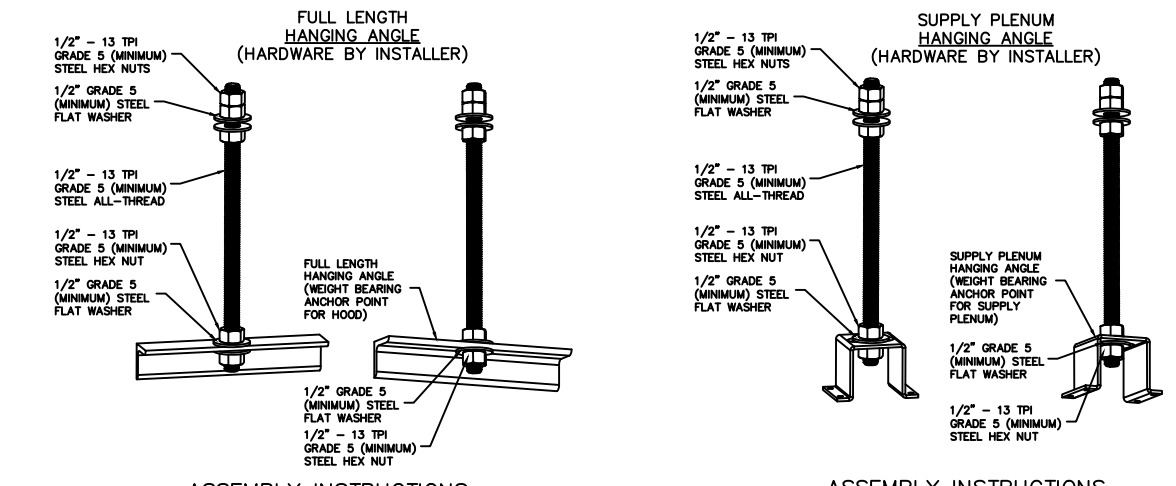
PLAN VIEW - HOOD #3 (Dish)  
 6" 0.00" LONG 4830VHB-G



SECTION VIEW - MODEL 4830VHB-G  
 HOOD - #3 (Dish)



**ASSEMBLY INSTRUCTIONS**  
 HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD, SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



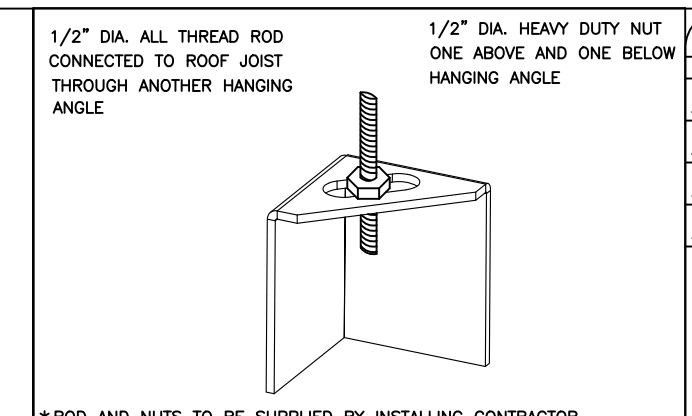
**ASSEMBLY INSTRUCTIONS**  
 HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD, SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PUP LENGTH HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

CAPTIVEAIRE SYSTEMS RECOMMENDS THE USE OF LISTED, PRE-FABRICATED ROUND GREASE EXHAUST DUCT TO REDUCE STATIC PRESSURE IN THE SYSTEM, MINIMIZE INSTALLATION AND INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

**VERIFY CEILING HEIGHT**  
 \_\_\_\_\_"  
 HEIGHT REQUIRED TO VERIFY THAT HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS

**HVAC DISTRIBUTION NOTE**  
 IT IS RECOMMENDED NOT TO INSTALL HIGH VELOCITY DIFFUSERS OR HVAC RETURNS WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.

**CUSTOMER APPROVAL TO MANUFACTURE:**  
 Approved as Noted   
 Approved with NO Exception Taken   
 Revise and Resubmit   
 SIGNATURE \_\_\_\_\_  
 Your Title \_\_\_\_\_ Date \_\_\_\_\_



1/2" DIA. ALL THREAD ROD CONNECTED TO ROOF JOIST THROUGH ANOTHER HANGING ANGLE

**ND-2 HANGING ANGLE DETAIL**

HOOD STYLE	DIM FROM REAR	DIM FROM FRONT (24" H)	DIM FROM (30" H)
CANOPY ND2	4.166"	2.246"	2.246"
ND2-PSP-F	4.166"	2.246"	2.246"
BACKSHELF 2847BD	2.00"	14.25"	-
VHB/VHB-G	36"x36"	42"x42"	48"x48"
FRONT/BACK DIMS BY SIZE	2.246"	2.246"	2.246"

**HANGING ANGLE LOCATIONS**

EXHAUST CFM=LENGTH OF HOOD X CFM/LIN.FT. (LOAD)  
 SUPPLY CFM=EXHAUST CFM X PERCENTAGE REQUIRED  
 TOTAL DUCT AREA=144 X CFM (FMV)  
 DUCT LENGTH= DUCT DEPTH  
 TOTAL DUCT AREA

\* CAPTIVE-AIRE VENTILATOR DUCT SIZES ARE CALCULATED USING AN EXHAUST VELOCITY OF 1500-1800 FPM AND A SUPPLY VELOCITY OF 1000 FPM.

**CALCULATIONS UTILIZED**  
 CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH:  
 ETL LISTED  
 UL STANDARD 710  
 IFTOR TEST  
 BALT ACCORDANCE WITH NFPA 96

**BUILDING CODES**  
 CAPTIVE-AIRE HOODS HAVE OPTIONAL CLEARANCE REDUCTION SYSTEMS AVAILABLE AS FOLLOWS:

MATERIAL	CLEARANCE REDUCTION SYSTEM
NON-COMBUSTIBLE	NONE REQUIRED
LIMITED-COMBUSTIBLE	3" UNINSULATED STANDOFF
COMBUSTIBLE	1" INSULATED STANDOFF

**CLEARANCE TO COMBUSTIBLES**

**INSTALLATION**

- ALL ELECTRICAL "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY ELECTRICAL CONTRACTORS.
- ALL PLUMBING "FIELD" CONNECTIONS AND RELATED INTERCONNECTIONS BY PLUMBING CONTRACTORS.
- HANGING BRACKETS LOCATED AND WELDED AS SHOWN ON PLANS. ALL OTHER HANGER MATERIALS PROVIDED BY INSTALLING CONTRACTORS.
- ALL CONNECTIONS FROM CAPTIVE-AIRE DUCT PER MECHANICAL CONTRACTORS' PLANS.
- COOKING EQUIPMENT TO SHUTOFF IN EVENT OF FIRE.
- EXHAUST FANS TO TURN ON IN EVENT OF FIRE.
- ALL LIGHTS FIXTURE SHOWN INSTALLED BY CAPTIVE-AIRE ARE FACTORY PREWIRED. INTERCONNECTIONS BETWEEN HOODS AND TO SWITCHES BY ELECTRICAL CONTRACTORS.
- LAMPS FOR LIGHT FIXTURES BY INSTALLING CONTRACTORS.
- SEISMO RESTRAINTS ARE RESPONSIBILITY OF INSTALLING CONTRACTOR.
- INSTALLING CONTRACTORS ASSUME ALL RELATED RESPONSIBILITY FOR VERIFICATION OF DIMENSIONAL DATA CONTAINED ON THESE DOCUMENTS FOR ACCURACY, INTEGRATION, AND ADMINISTRATION OF CODE REQUIREMENTS IN EFFECT PRIOR TO ANY RELEASE FOR PRODUCTION OF EQUIPMENT SHOWN.

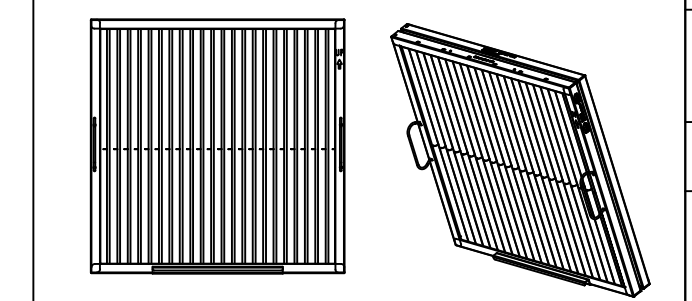
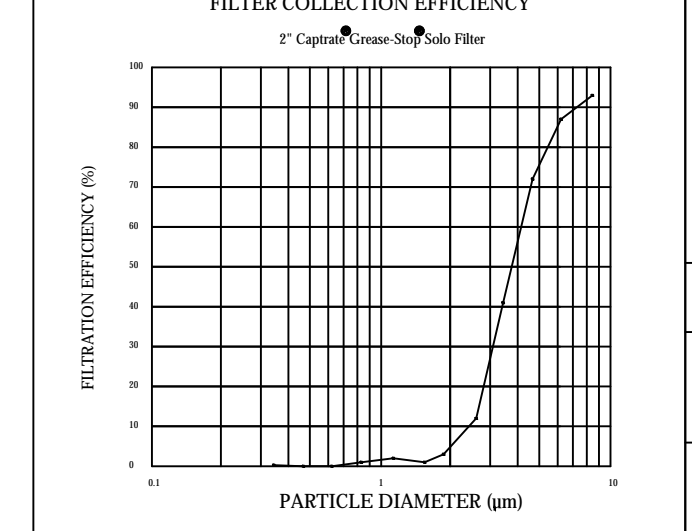
**BALANCE**

- KITCHEN HOODS MUST BE BALANCED WITH KITCHEN.
- KITCHEN SHALL BE NEGATIVE WITH RESPECT TO DINING AREA.
- RESTAURANT SHALL BE POSITIVE WITH RESPECT TO AMBIENT PRESSURE.

**ADDITIONAL**

- WRITTEN HOOD DIMENSIONS HAVE PRECEDENCE OVER SCALE.
- SIGNED AND "APPROVED" COPIES OF THIS DOCUMENT MUST BE RECEIVED BY THE FACTORY PRIOR TO COMMENCEMENT OF FABRICATION.

**GENERAL NOTES**



**CaptiveAir Captrate Solo Filter**  
 ETL Listed Grease Extracting Filters  
 Made From 430 Stainless Steel

**FILTER DETAIL**

**REVISIONS**

NO.	DESCRIPTION	DATE

**CAPTIVEAIRE**  
 Arizona Office  
 19206 N 19th Ave, Ste A-1-B, Phoenix, AZ 85023 PHONE: (480) 926-8810 FAX: 877-19227 EMAIL: reg93@captiveaire.com

Angry Crab - Chandler, AZ  
 CHANDLER, AZ, 85224

DATE: 2/26/2024  
 DWG #: 6617175  
 DRAWN BY: tim.mathis  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING  
 SHEET NO. 1

**STATUS**

**REV.**

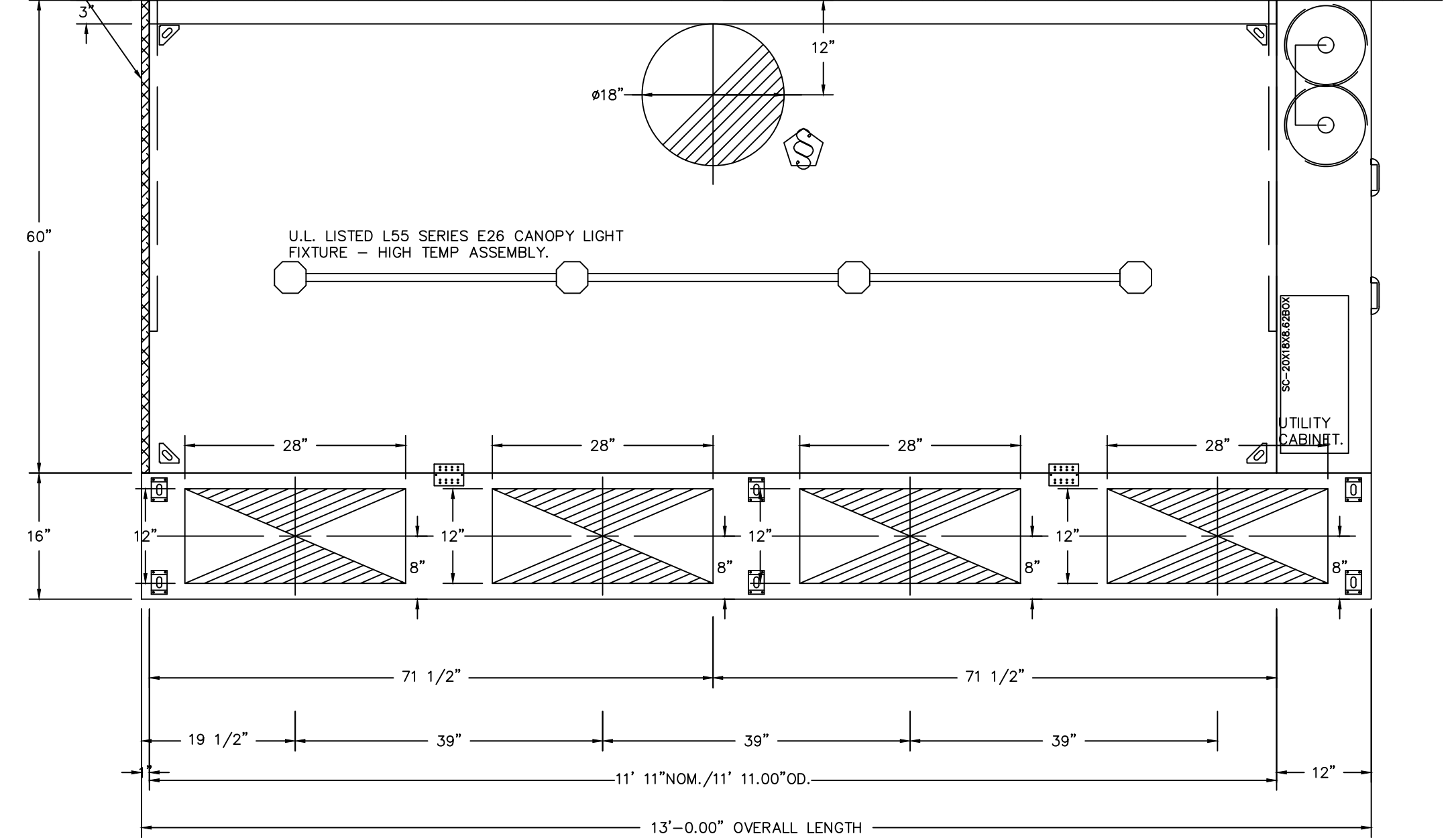
**ARCHITECT**  
**LARSON & ASSOCIATES**  
 3807 N. 24TH STREET #100  
 PHOENIX, ARIZONA 85016  
 (602) 955-9929

**ANGRY CRAB SHACK**  
**GILBERT ARIZONA**  
**MECHANICAL SPECIFICATIONS**

Drawn by: TM  
 Checked by: JBM  
 Date: 2/27/2024  
 Sheet Number:

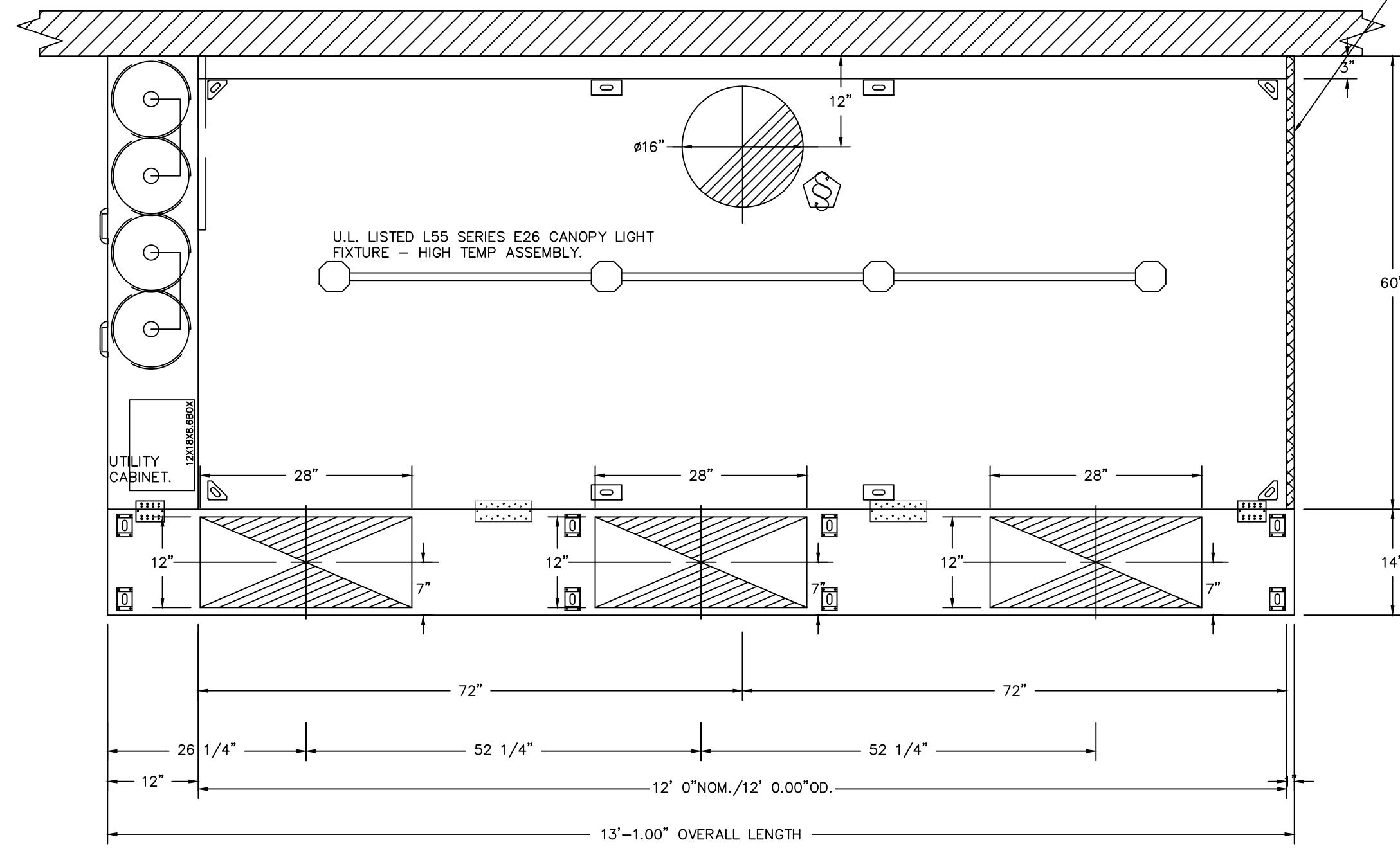
**FS-4.1**

1" LAYER OF INSULATION FACTORY INSTALLED IN 1.00" END STANDOFF MEETS 0" REQUIREMENTS CLEARANCE TO COMBUSTIBLE SURFACES.



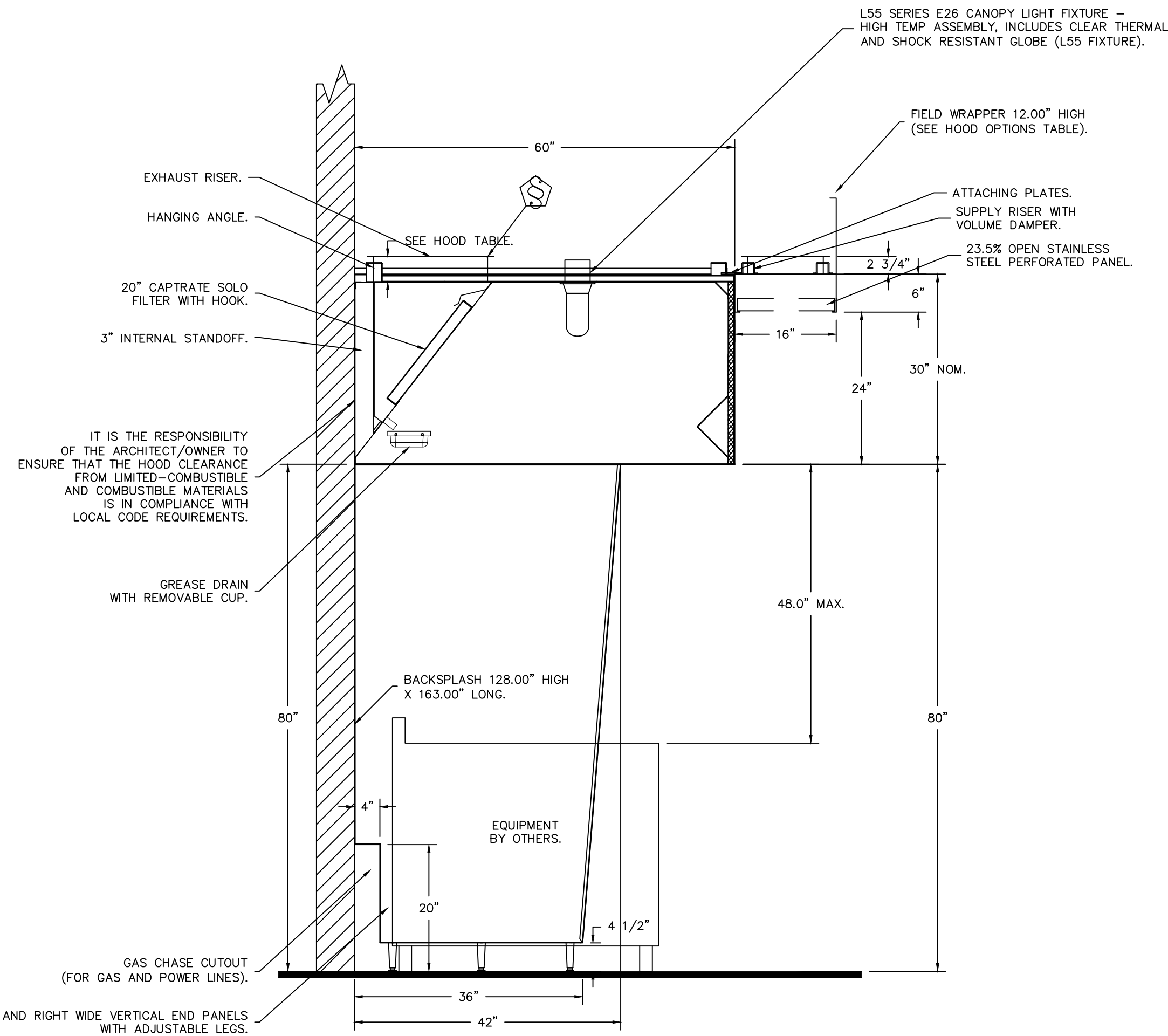
PLAN VIEW - HOOD #1 (Fry/Broiler)  
11' 11.00\"/>

1" LAYER OF INSULATION FACTORY INSTALLED IN 1.00" END STANDOFF MEETS 0" REQUIREMENTS CLEARANCE TO COMBUSTIBLE SURFACES.

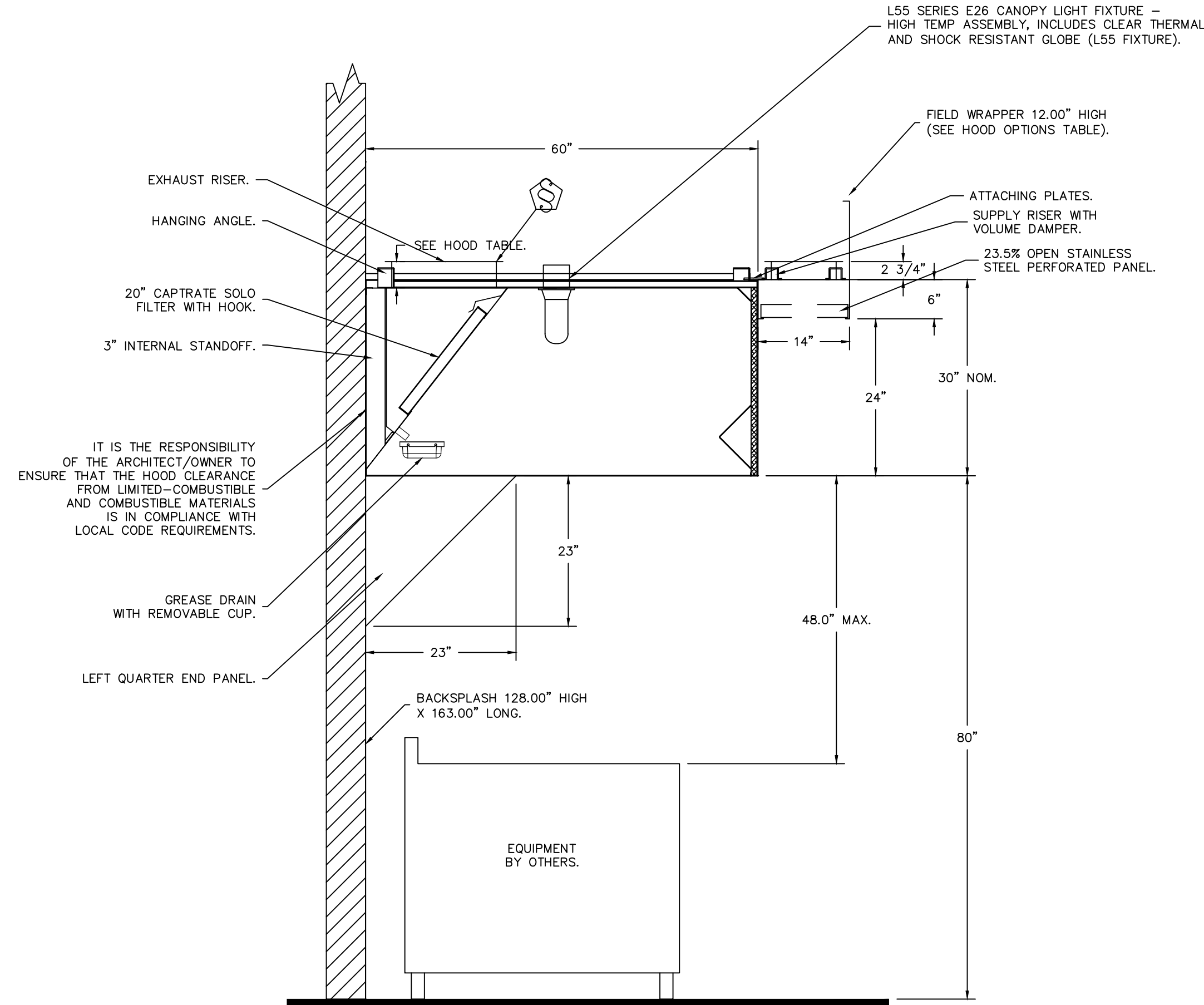


PLAN VIEW - HOOD #2 (Stockpot)  
12' 0.00\"/>

NOTE: ADDITIONAL HANGING ANGLES PROVIDED FOR HOODS 12' AND LONGER.

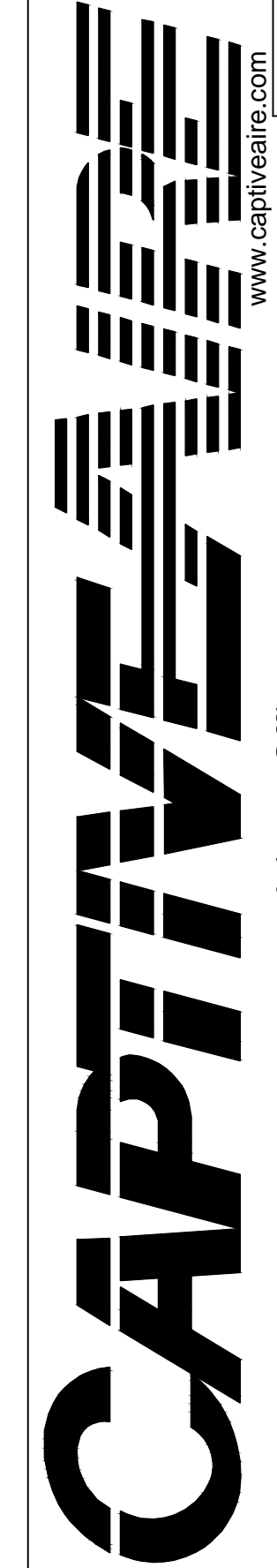


SECTION VIEW - MODEL 6030ND-2-PSP-F  
HOOD - #1 (Fry/Broiler)



SECTION VIEW - MODEL 6030ND-2-PSP-F  
HOOD - #2 (Stockpot)

REVISIONS	
DESCRIPTION	DATE



Arizona Office  
18206 N 19th Ave, Ste 1A-B, Phoenix, AZ 85023 PHONE: (480) 926-6810 FAX: 8777192227 EMAIL: reg@captivate.com www.captivate.com

Angry Crab - Chandler, AZ  
CHANDLER, AZ, 85224

DATE: 2/26/2024
DWG.#: 6617175
DRAWN BY: tim.mathis
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 2

REV.	DESCRIPTION	DATE	STATUS
A			
B			
C			
D			
E			

ARCHITECT  
**LARSON & ASSOCIATES**  
3807 N. 24TH STREET #100  
PHOENIX, ARIZONA 85016  
(602) 955-9929



**ANGRY CRAB SHACK**  
GILBERT ARIZONA  
MECHANICAL SPECIFICATIONS

Drawn by: TM  
Checked by: JBM  
Date: 2/27/2024  
Sheet Number:

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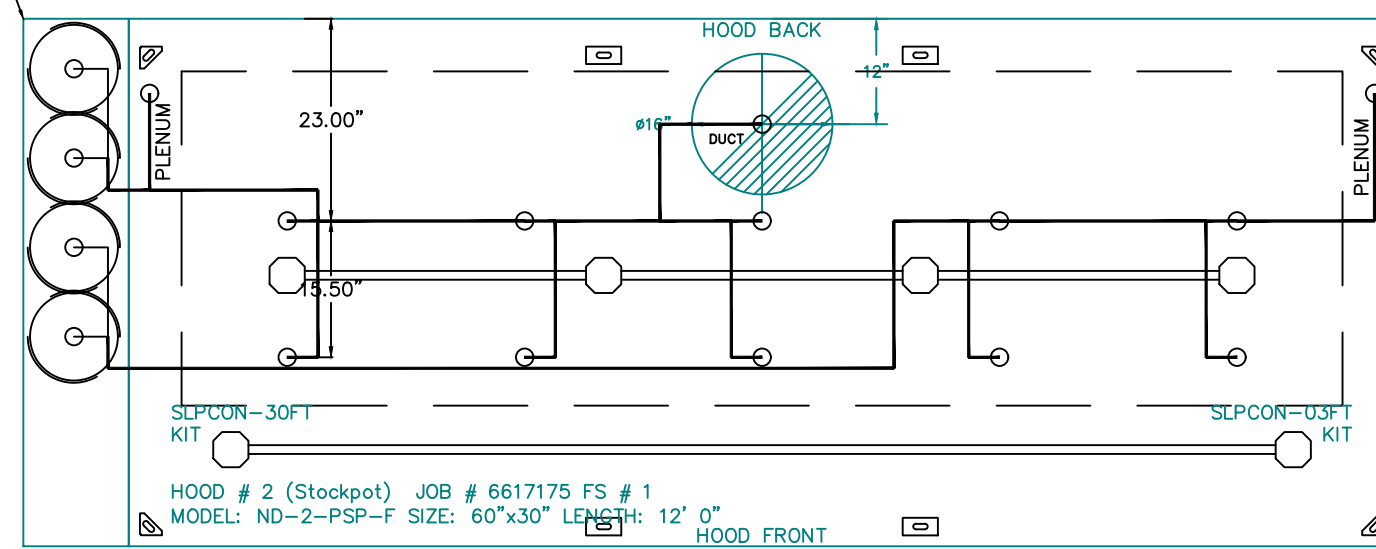
**FIRE SYSTEM INFORMATION - JOB#6617175**

FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION	
						SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0/4.0/4.0/4.0	80	99	FIRE CABINET LEFT	LEFT, HOOD 2
						FIRE CABINET RIGHT	RIGHT, HOOD 1

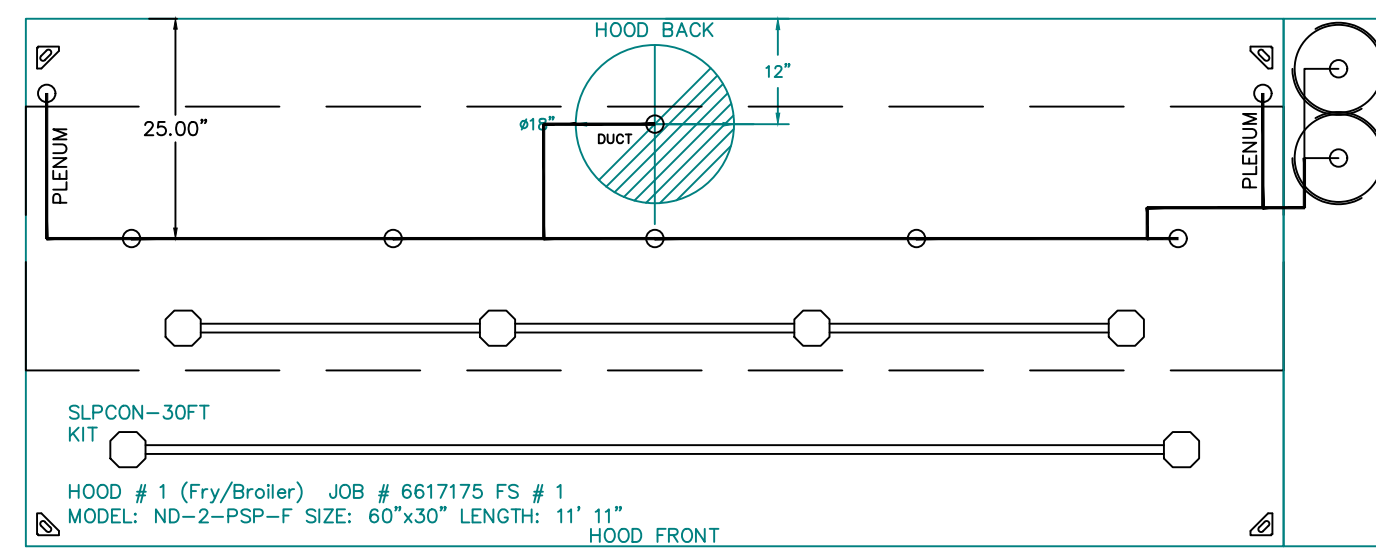
**GAS VALVE(S)**

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1		SC ELECTRICAL	TBD	CAPTIVEAIRE SYSTEMS

- SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.3 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS



- SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.3 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS



**NOTES**

- FIELD PIPE DROPS AS SHOWN
- PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- FIELD INSTALLED DROP: FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
- SHIP LOOSE DROP: FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
- IF APPLICABLE, EXTENDED PRE-PIPED 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 U.L. 300 REQUIREMENTS.
- OL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS

JOB #: 6617175  
JOB NAME: ANGRY CRAB - CHANDLER ,AZ.

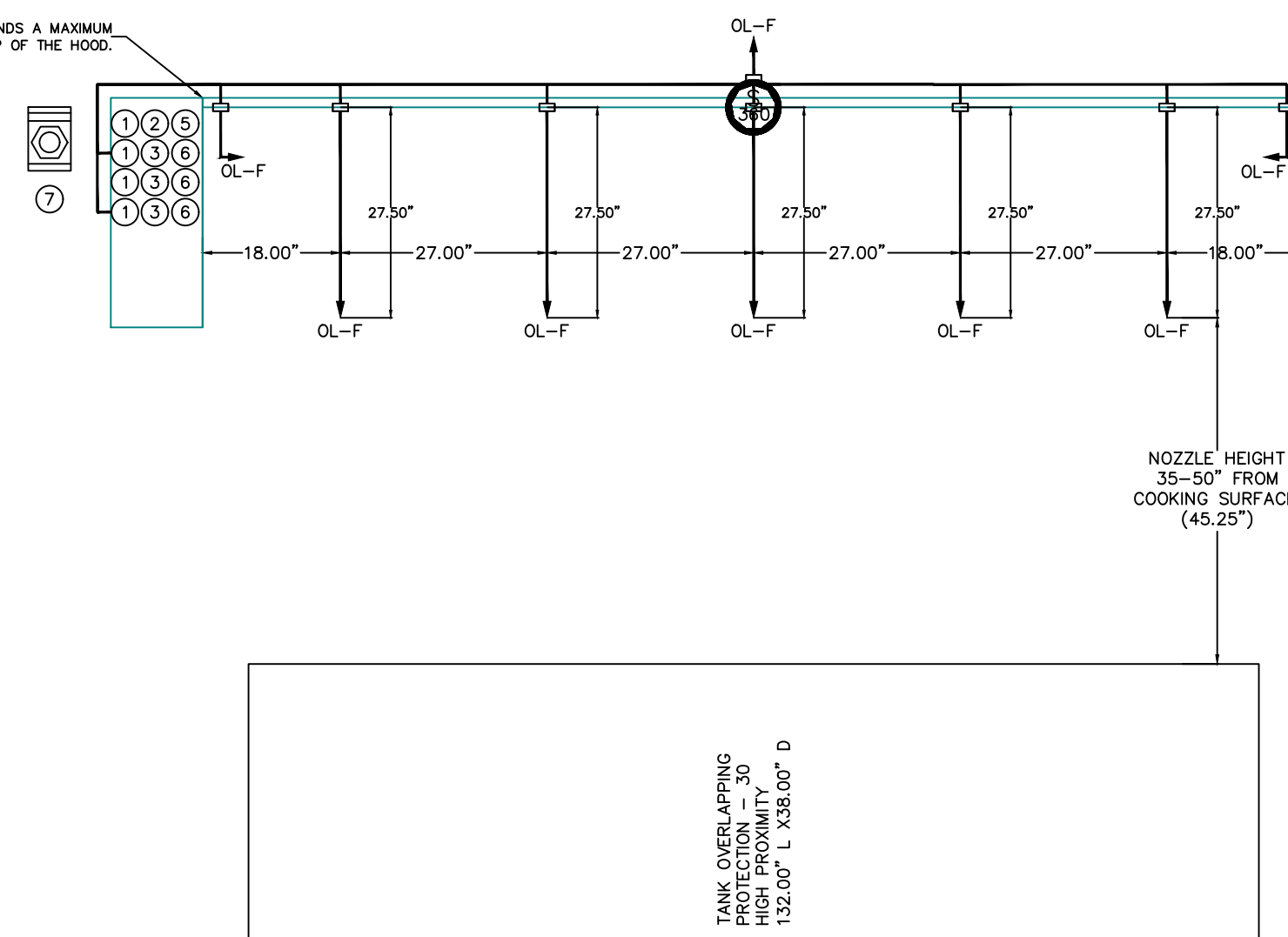
SYSTEM SIZE: TANK-SP-4 WITH REMOTE TANK-SP-2 DESIGN FP: 99. MAXIMUM FP: 120.  
HOOD # 1 11" 11.00" LONG x 60" WIDE x 30" HIGH.  
RISER # 1 SIZE: 1/2" DIA  
HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.  
HOOD # 2 12" 0.00" LONG x 60" WIDE x 30" HIGH.  
RISER # 1 SIZE: 1/2" DIA  
HOOD # 2 METAL BLOW-OFF CAPS INCLUDED.

- HEAVY-DUTY APPLIANCES (RATED 600F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRE-STAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.  
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

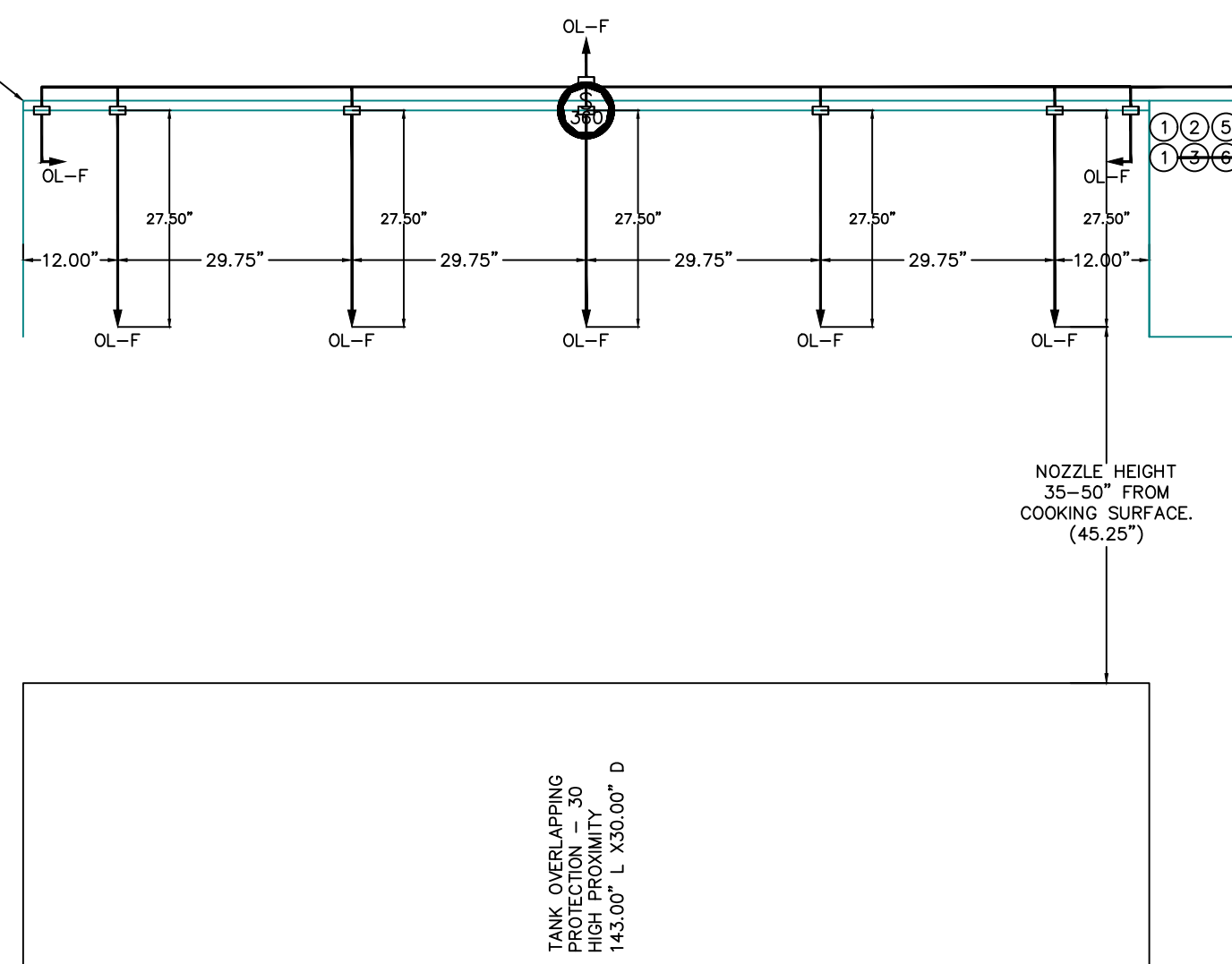
**LEGEND - FIRE CABINET TANK SYSTEM**

- 4 GALLON TANK.
- PRIMARY ACTUATOR RELEASE.
- SECONDARY ACTUATOR RELEASE.
- PRESSURE SUPERVISION SWITCH.
- PRIMARY HOSE ASSEMBLY.
- SECONDARY HOSE ASSEMBLY.
- REMOTE MANUAL ACTUATION DEVICE.

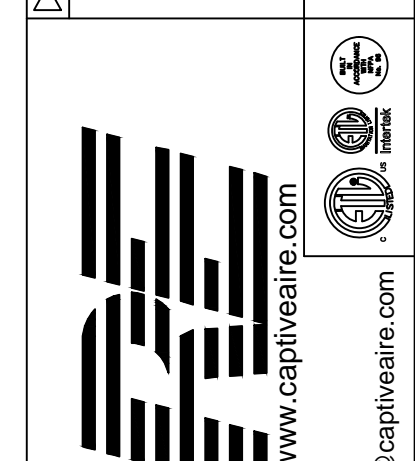
FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.



FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.



REVISIONS	
DESCRIPTION	DATE



Arizona Office  
18206 N 19th Ave, Ste 1A-1B, Phoenix, AZ 85023 PHONE: (480) 926- 6810 FAX: 8777192227 EMAIL: negs9@captiveaire.com

Angry Crab - Chandler ,AZ  
CHANDLER, AZ, 85224

DATE: 2/26/2024  
DWG #: 6617175  
DRAWN BY: tim.mathis  
SCALE: 3/4" = 1'-0"  
MASTER DRAWING

SHEET NO. 3

REV.	DESCRIPTION	DATE	STATUS
A			
B			
C			
D			
E			

ARCHITECT  
**LARSON & ASSOCIATES**  
3807 N. 24TH STREET #100  
PHOENIX, ARIZONA 85016  
(602) 955-9929



**ANGRY CRAB SHACK**  
GILBERT ARIZONA  
MECHANICAL SPECIFICATIONS

Drawn by: TM  
Checked by: JBM  
Date: 2/27/2024  
Sheet Number:

FS-4.3

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EXHAUST FAN INFORMATION - JOB#6617175																
FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL.	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	KEF-1 (FRY/BROIL)	1	DJ200HA	CAPTIVEAIRE	3277	1.750	1298	ODP/PREMIUM	5.000	2.1220	3	208	15.0	797 FPM	215	25.9
2	KEF-2 (STOCK)	1	DJ180HA	CAPTIVEAIRE	2400	1.300	1170	ODP/PREMIUM	2.000	1.0780	3	208	8.3	554 FPM	184	14.2
3	KEF-3 (DISH)	1	DJ50HFA	CAPTIVEAIRE	900	0.400	1293	TEAO-ECM	0.500	0.2140	1	115	6.3	342 FPM	76	11.3

MAU FAN INFORMATION - JOB#6617175																								
FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL.	HP	BHP	PHASE	VOLT	FLA	MCA	MOCP	EVAP FLOW RATE (Gp/Min)	EVAP ENTERING DB TEMP	EVAP COOLER ENTERING WB TEMP	EVAP COOLER LEAVING DB TEMP	EVAP COOLER LEAVING WB TEMP	WEIGHT (LBS)	SONES
4	MAU-1	1	A2-200	2CMP-2-MOC	A2	1500	4782	0.500	1741	ODP/PREMIUM	5.000	2.7920	3	208	15.0	18.8A	30A	6.58	110.0°F	70.0°F	89.0°F	70.0°F	692	25.7

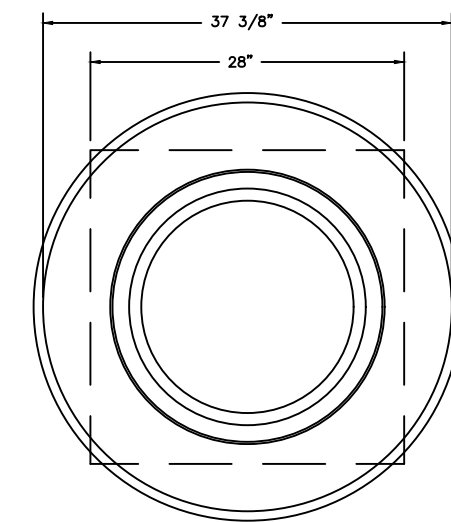
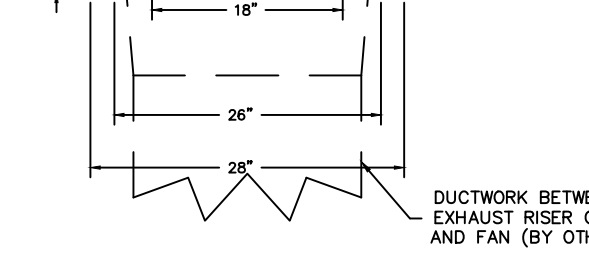
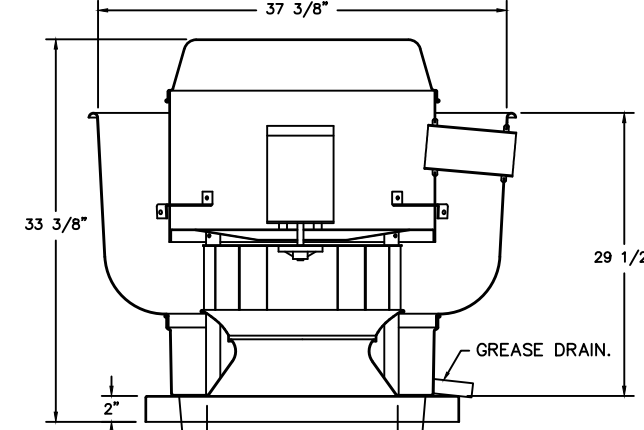
FAN OPTIONS		DESCRIPTION
1	KEF-1 (FRY/BROIL)	1 GREASE BOX 1 FAN BASE CERAMIC SEAL - DU/DR200HA - INSTALLED AT PLANT - FOR GREASE DUCTS 1 2 YEAR PARTS WARRANTY
2	KEF-2 (STOCK)	1 GREASE BOX 1 FAN BASE CERAMIC SEAL - DU/DR180HA - INSTALLED AT PLANT - FOR GREASE DUCTS 1 2 YEAR PARTS WARRANTY
3	KEF-3 (DISH)	1 ECM WIRING PACKAGE - EXHAUST - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -MSC-(TELOCO) COV ROTATION 1 SCR-13 BIRD SCREEN 1 15-BOD DAMPER 1 2 YEAR PARTS WARRANTY
4	MAU-1	1 SIZE 2 UNIMPROVED COMMERCIAL DOWN DISCHARGE FOR DIRECT DRIVE AHUS 1 EVAPORATIVE COOLER WIRING HARNESS 1 SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH VFD) - THREE PHASE ONLY 1 2 YEAR PARTS WARRANTY

FAN ACCESSORIES		EXHAUST	SUPPLY					
FAN UNIT NO	TAG	GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	KEF-1 (FRY/BROIL)	YES						
2	KEF-2 (STOCK)	YES						
3	KEF-3 (DISH)	YES						
4	MAU-1							

CURB ASSEMBLIES		WEIGHT	ITEM	SIZE
1	# 1 KEF-1 (FRY/BROIL)	43 LBS	CURB	26.500"W X 26.500"L X 20.000"H VENTED HINGED.
2	# 2 KEF-2 (STOCK)	43 LBS	CURB	26.500"W X 26.500"L X 20.000"H VENTED HINGED.
3	# 3 KEF-3 (DISH)	27 LBS	CURB	19.500"W X 19.500"L X 20.000"H.
4	# 4 MAU-1	52 LBS	CURB	31.000"W X 31.000"L X 15.000"H.
5	# 5		RAIL	4.000"W X 4.000"L X 36.000"H.

VERIFY PITCH CURB  
Curb Pitch Required in order to manufacture the curb to specification.

FAN #1 DU200HA - EXHAUST FAN (KEF-1 (FRY/BROIL))



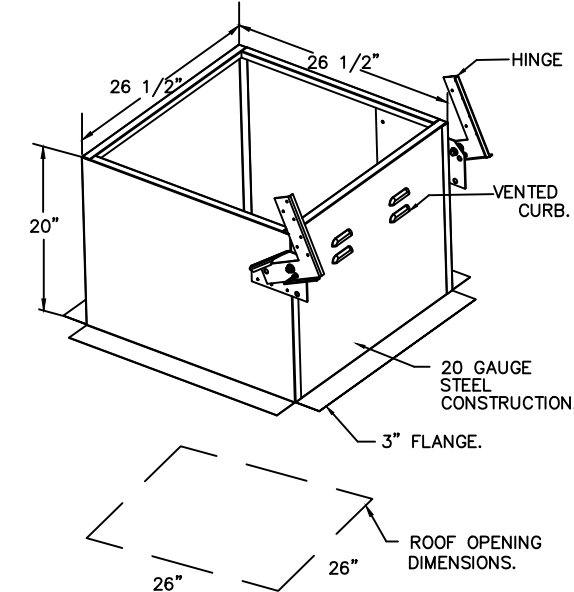
TOP VIEW

- FEATURES:**
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
  - ROOF MOUNTED FANS.
  - RESTAURANT MODEL.
  - UL705 AND UL782 AND ULC-5845
  - VARIABLE SPEED CONTROL.
  - INTERNAL WIRING.
  - THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
  - HIGH HEAT OPERATION 300°F (149°C).
  - GREASE CLASSIFICATION TESTING.
  - NEMA 3R SAFETY DISCONNECT SWITCH.

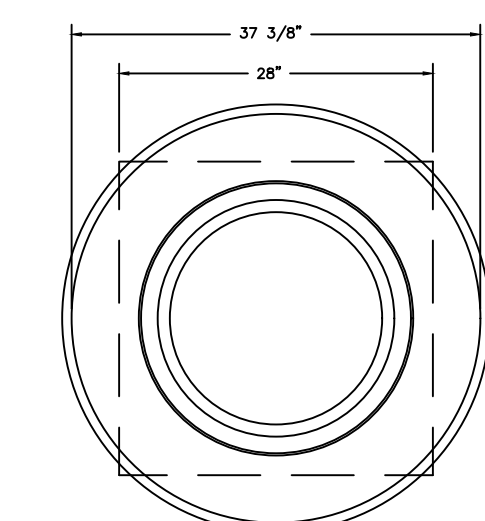
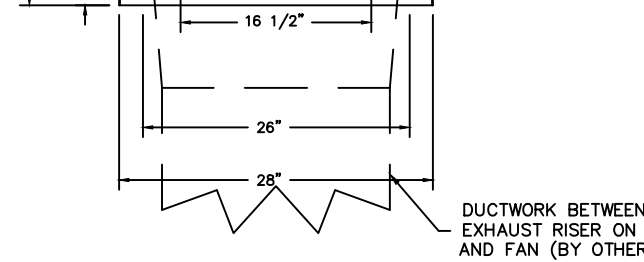
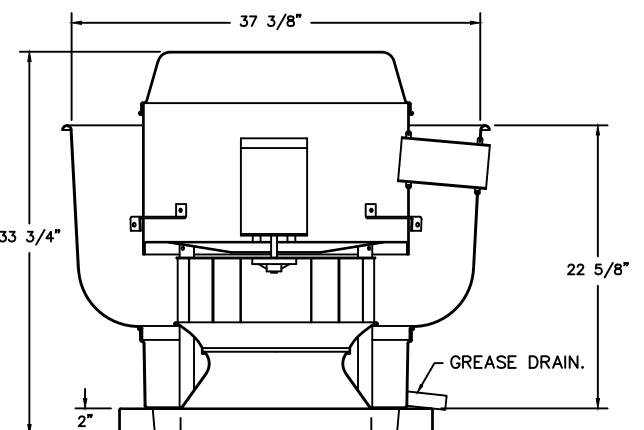
**NORMAL TEMPERATURE TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**ABNORMAL FLARE-UP TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 800°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

- OPTIONS**
- GREASE BOX.
  - FAN BASE CERAMIC SEAL - DU/DR200HA - INSTALLED AT PLANT - FOR GREASE DUCTS.
  - 2 YEAR PARTS WARRANTY.



FAN #2 DU180HA - EXHAUST FAN (KEF-2 (STOCK))



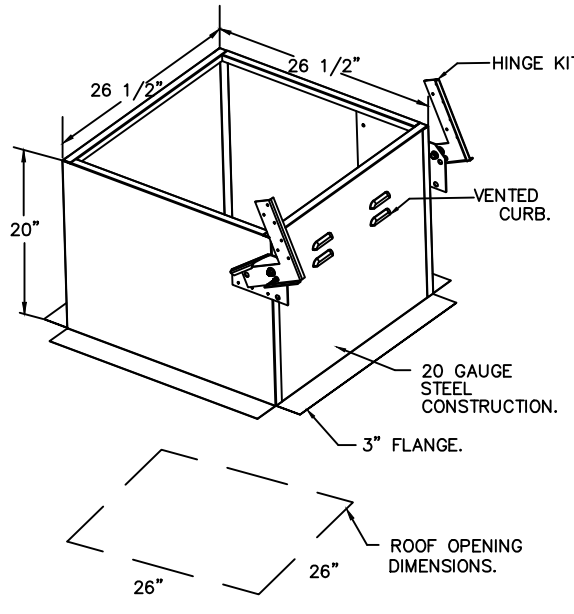
TOP VIEW

- FEATURES:**
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
  - ROOF MOUNTED FANS.
  - RESTAURANT MODEL.
  - UL705 AND UL782 AND ULC-5845
  - VARIABLE SPEED CONTROL.
  - INTERNAL WIRING.
  - THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
  - HIGH HEAT OPERATION 300°F (149°C).
  - GREASE CLASSIFICATION TESTING.
  - NEMA 3R SAFETY DISCONNECT SWITCH.

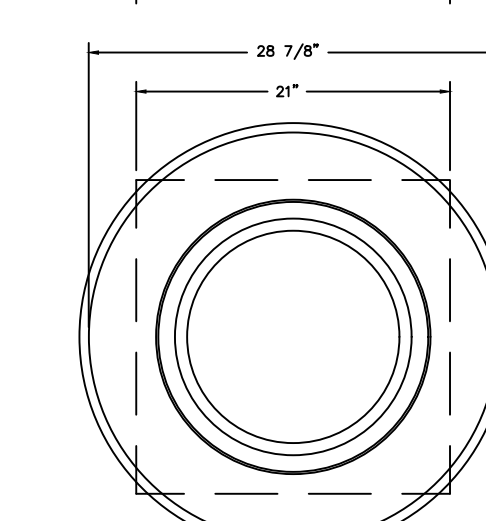
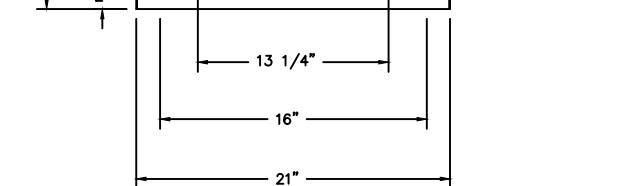
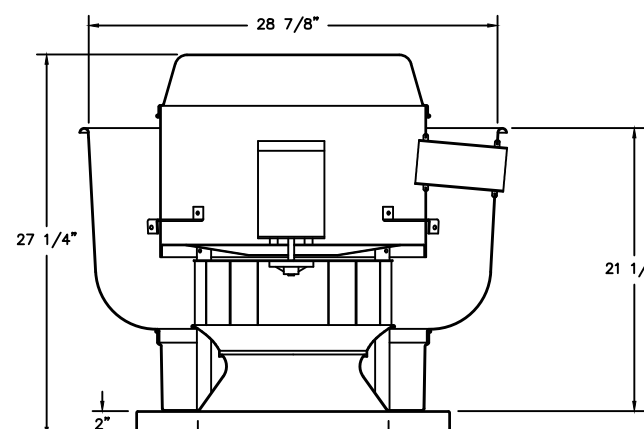
**NORMAL TEMPERATURE TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

**ABNORMAL FLARE-UP TEST**  
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 800°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

- OPTIONS**
- GREASE BOX.
  - FAN BASE CERAMIC SEAL - DU/DR180HA - INSTALLED AT PLANT - FOR GREASE DUCTS.
  - 2 YEAR PARTS WARRANTY.



FAN #3 DU50HFA - EXHAUST FAN (KEF-3 (DISH))

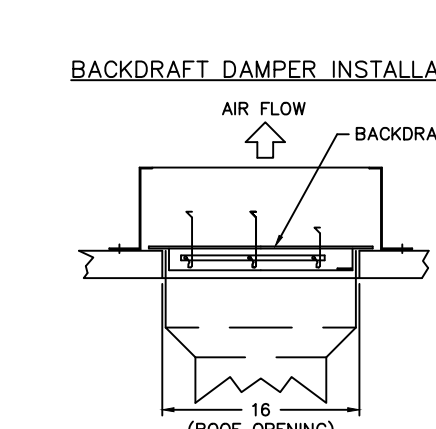
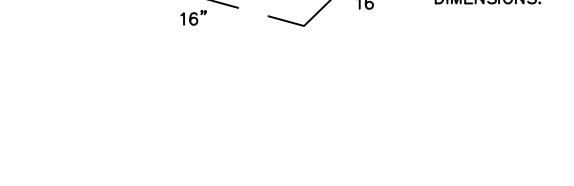
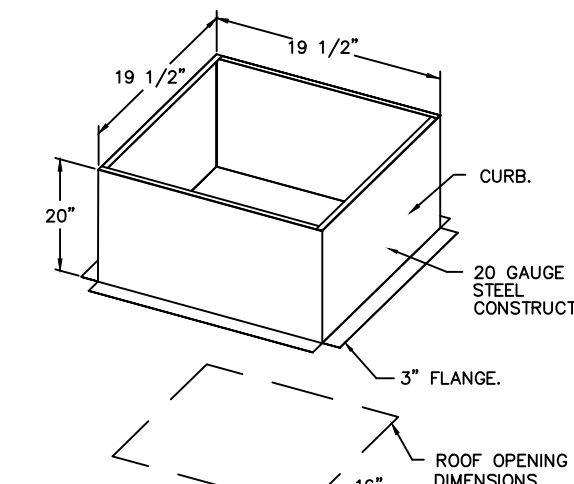


TOP VIEW

- FEATURES:**
- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
  - ROOF MOUNTED FANS.
  - UL705.
  - VARIABLE SPEED CONTROL.
  - INTERNAL WIRING.
  - THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
  - NEMA 3R SAFETY DISCONNECT SWITCH.

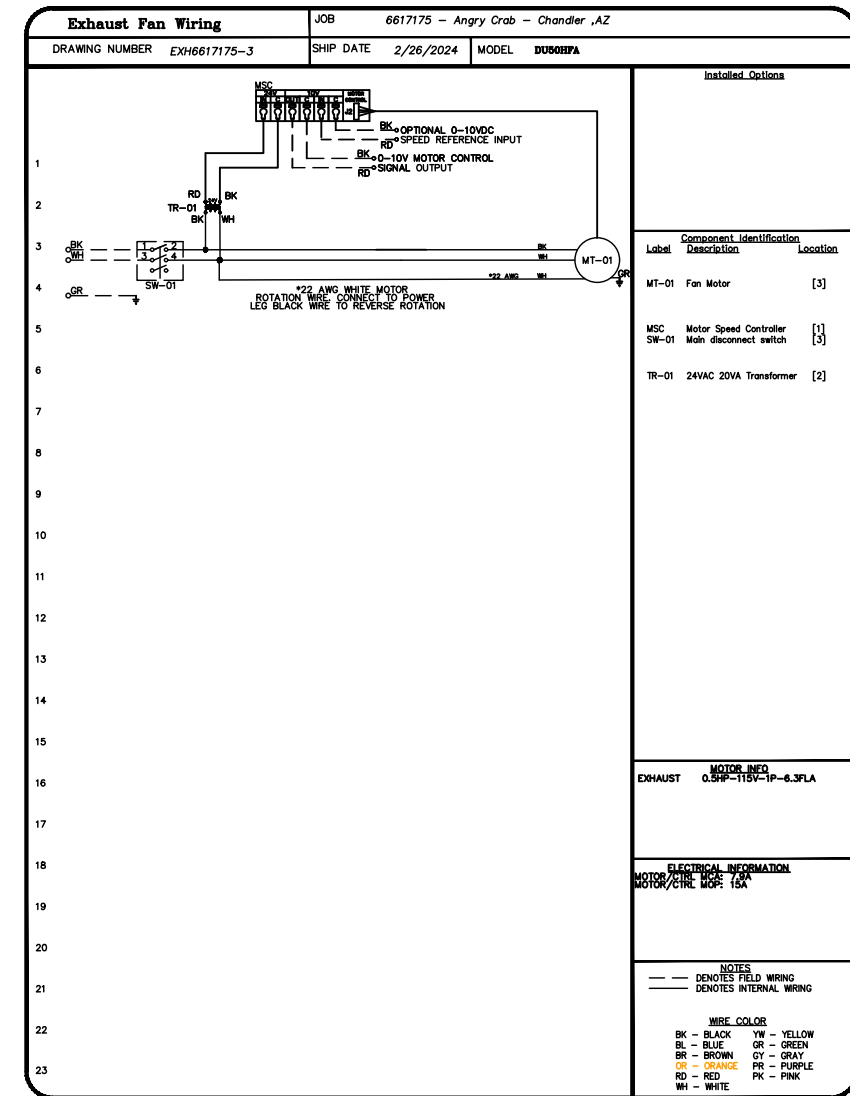
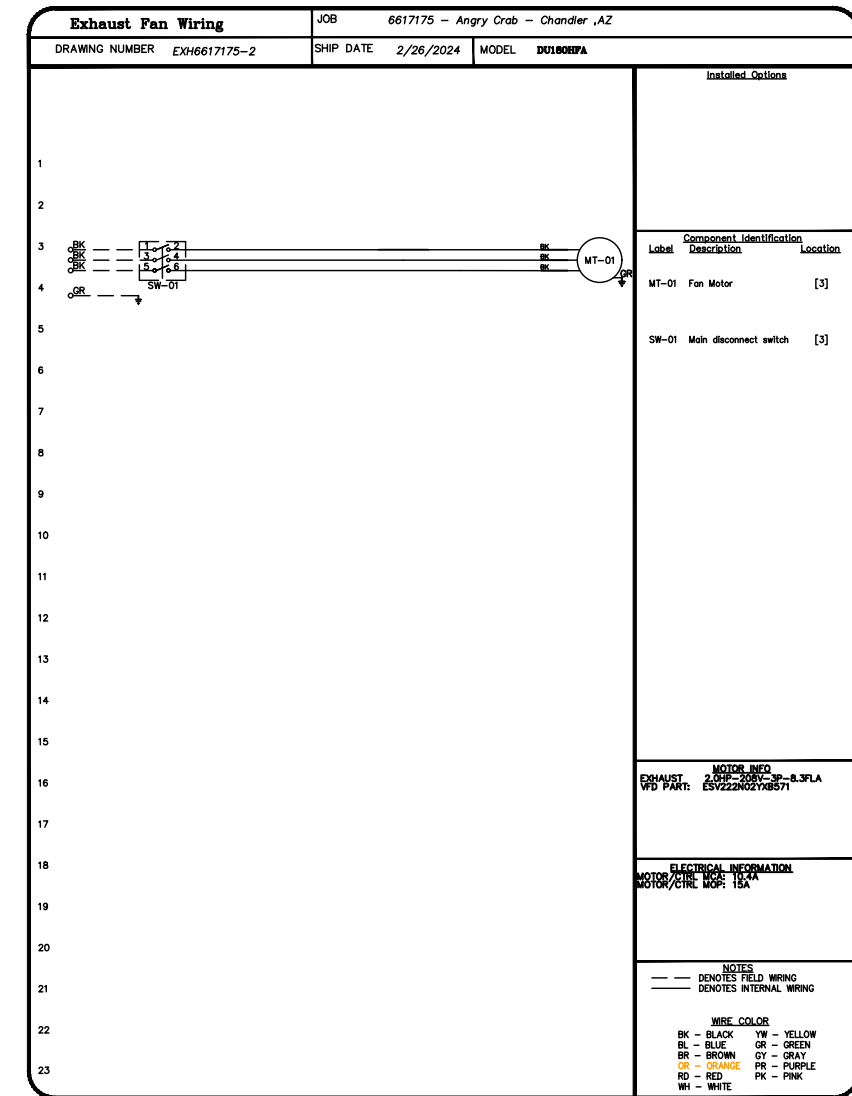
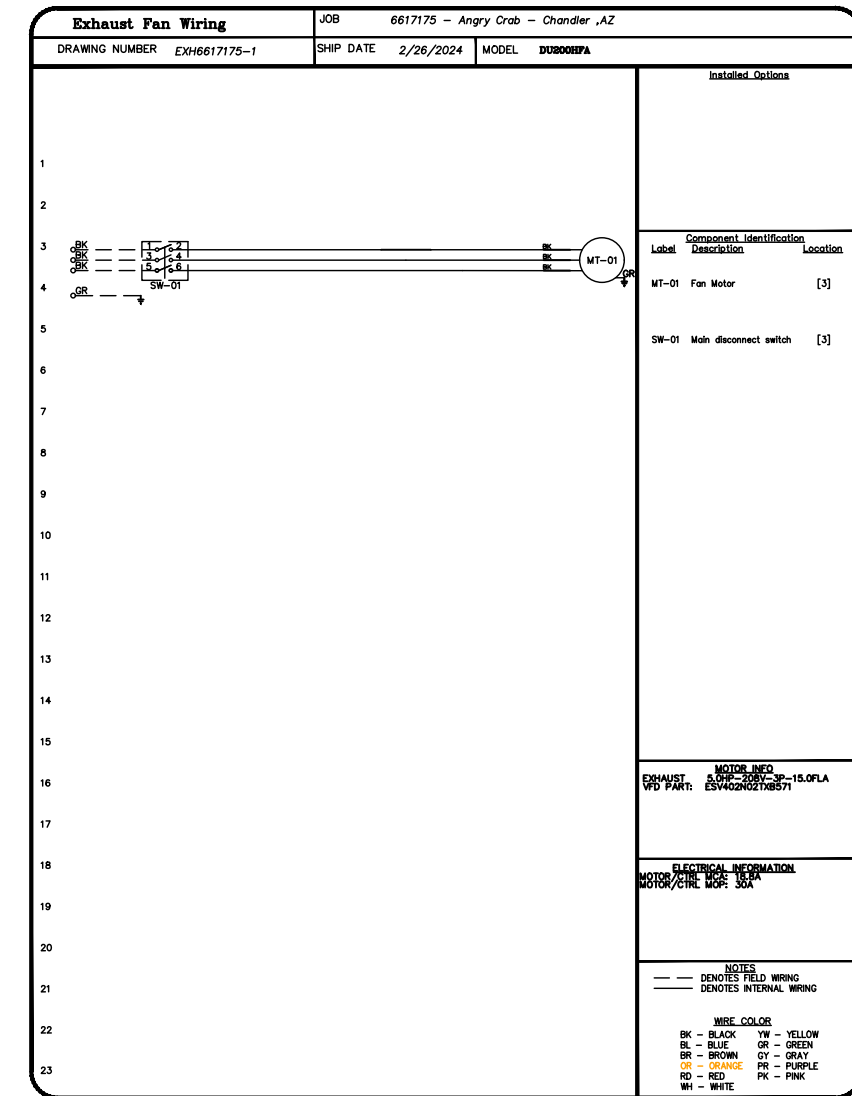
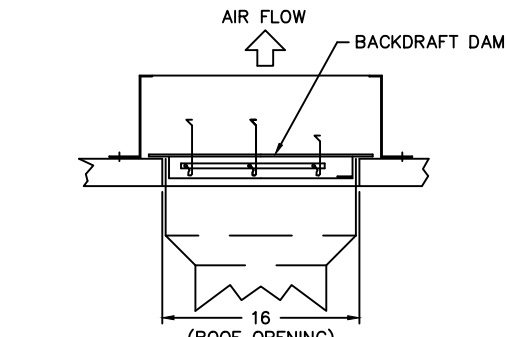
**OPTIONS**

- ECM WIRING PACKAGE - EXHAUST - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -MSC-(TELOCO) COV ROTATION.
- SCR-13 BIRD SCREEN.
- 15-BOD DAMPER.
- 2 YEAR PARTS WARRANTY.



TOP VIEW

BACKDRAFT DAMPER INSTALLATION



REVISIONS

NO.	DESCRIPTION	DATE:

www.captiveaire.com

Arizona Office  
18206 N 19th Ave, Ste 1A-1B, Phoenix, AZ 85023 PHONE: (480) 926 - 6810 FAX: 877-192227 EMAIL: reg@3@captiveaire.com

Angry Crab - Chandler, AZ  
CHANDLER, AZ, 85224

DATE: 2/26/2024  
DWG.#: 6617175  
DRAWN BY: tim.mathis  
SCALE: 1/2" = 1'-0"  
MASTER DRAWING

SHEET NO. 4

REV.	ARCHITECT	STATUS
A		
B		
C		
D		
E		

ARCHITECT  
**LARSON & ASSOCIATES**  
3807 N. 24TH STREET #100  
PHOENIX, ARIZONA 85016  
(602) 955-9929

**AZ★RC**  
**ARIZONA**  
RESTAURANT CONSULTING  
7920 E. OAK STREET - SCOTTSDALE, ARIZONA 85257  
JUSTIN@AZRESTAURANTCONSULTING.COM

**ANGRY CRAB SHACK**  
GILBERT ARIZONA  
MECHANICAL SPECIFICATIONS

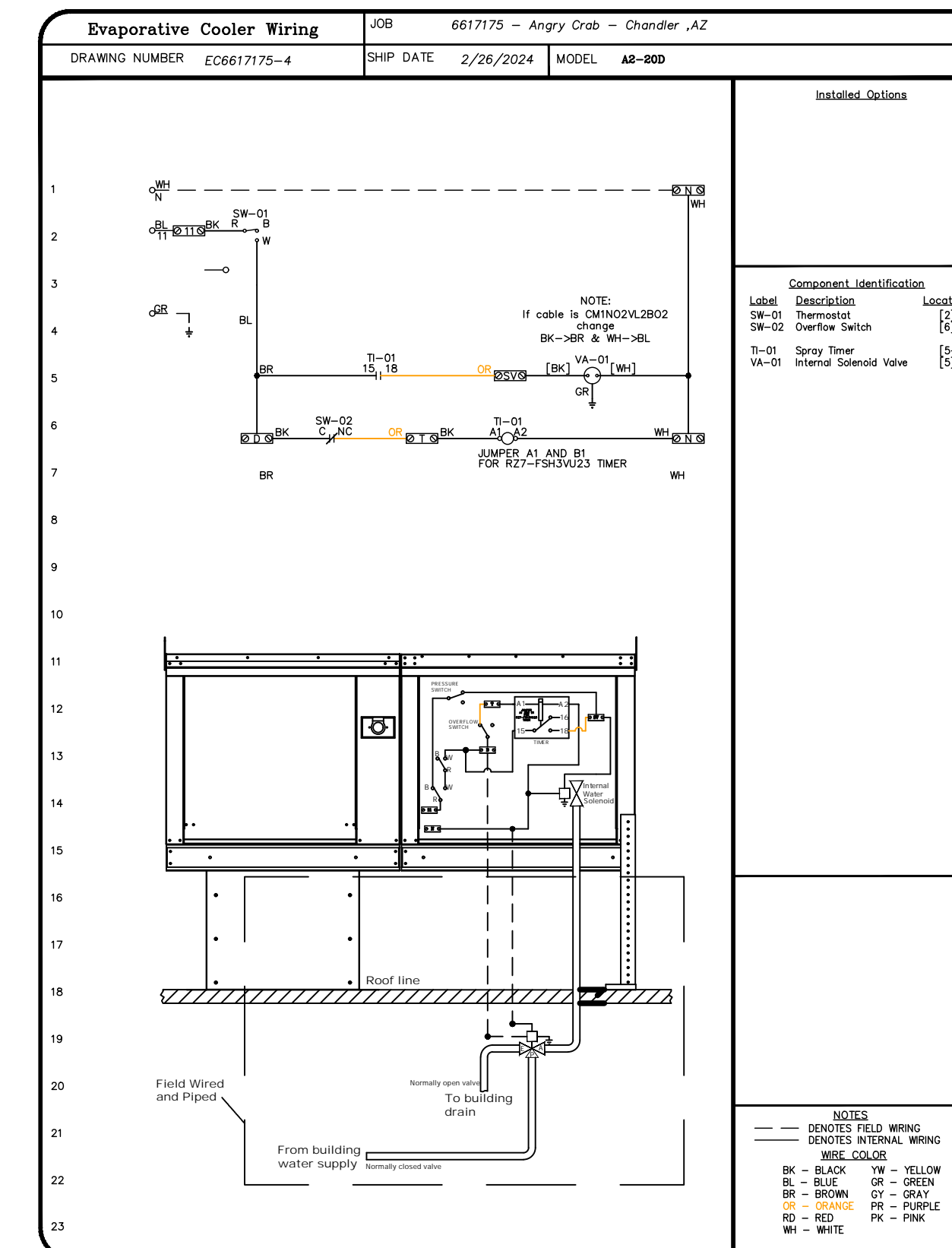
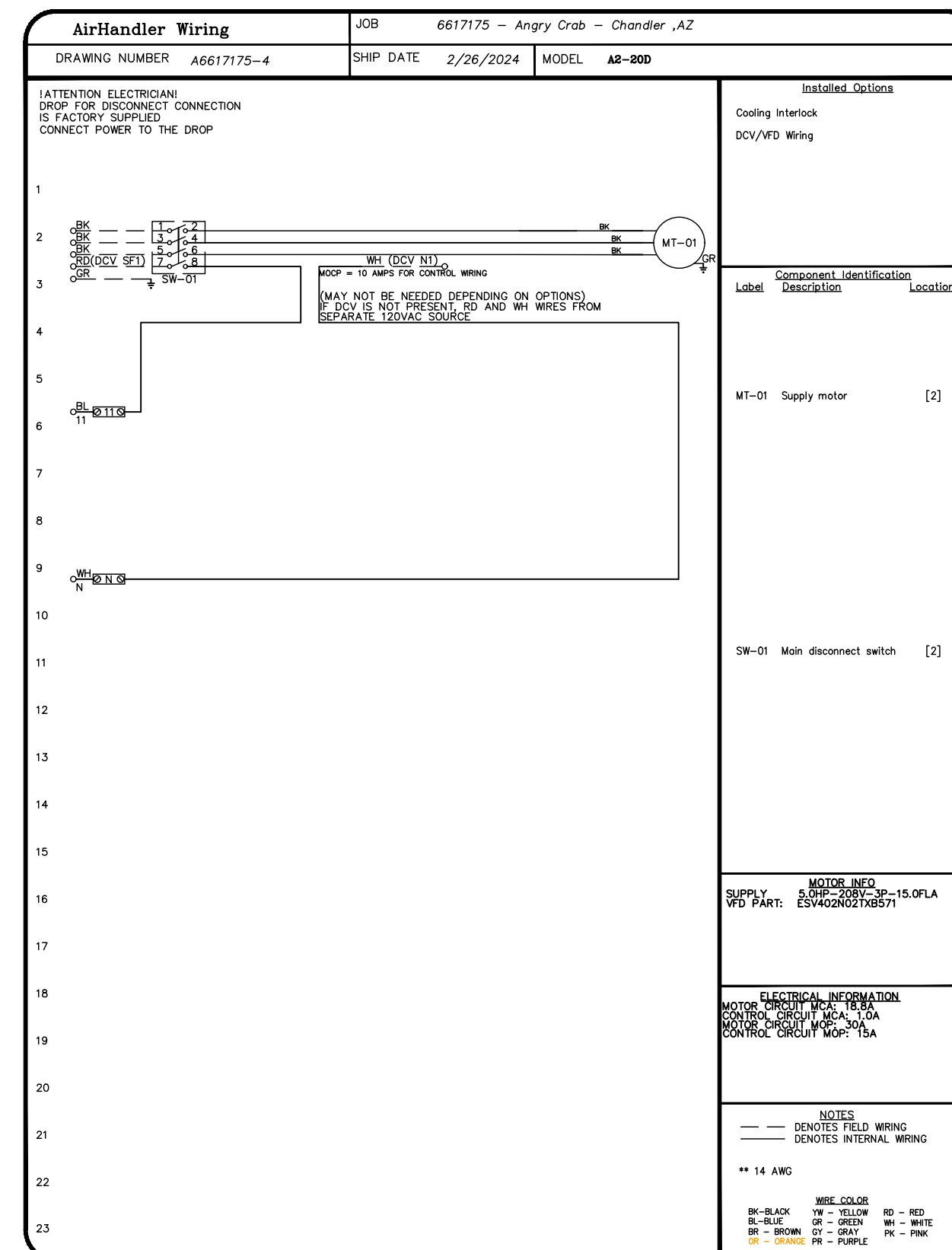
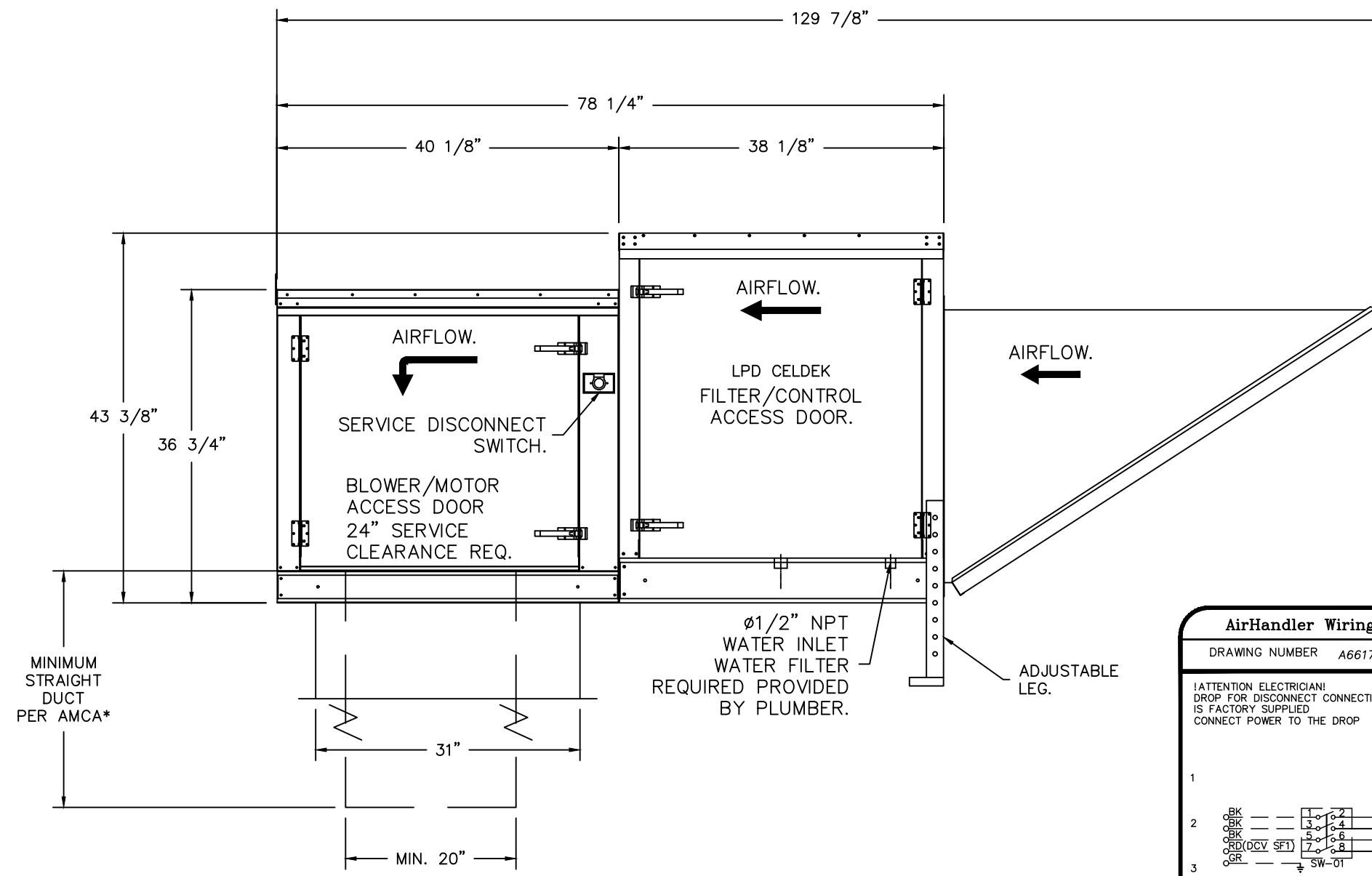
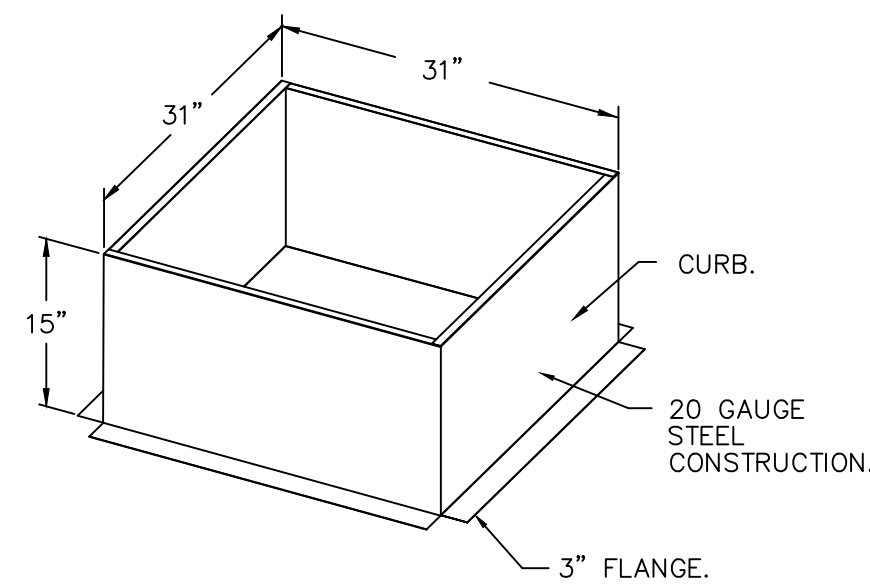
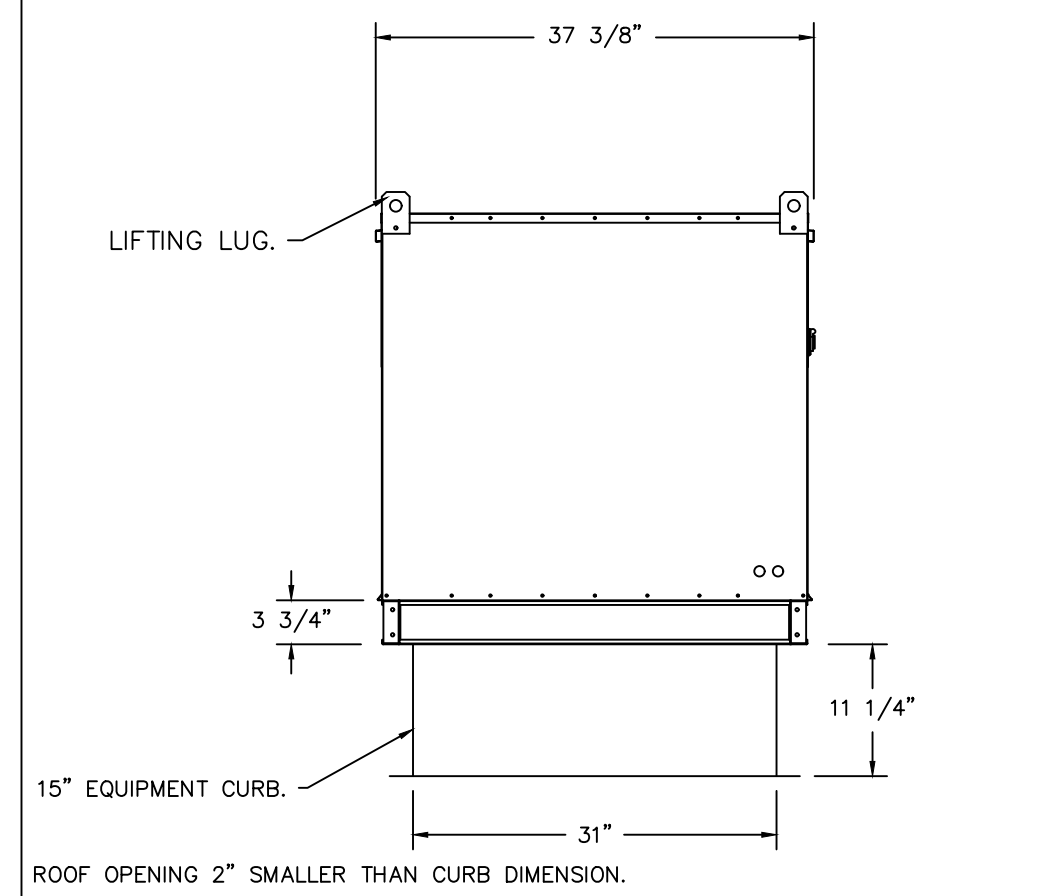
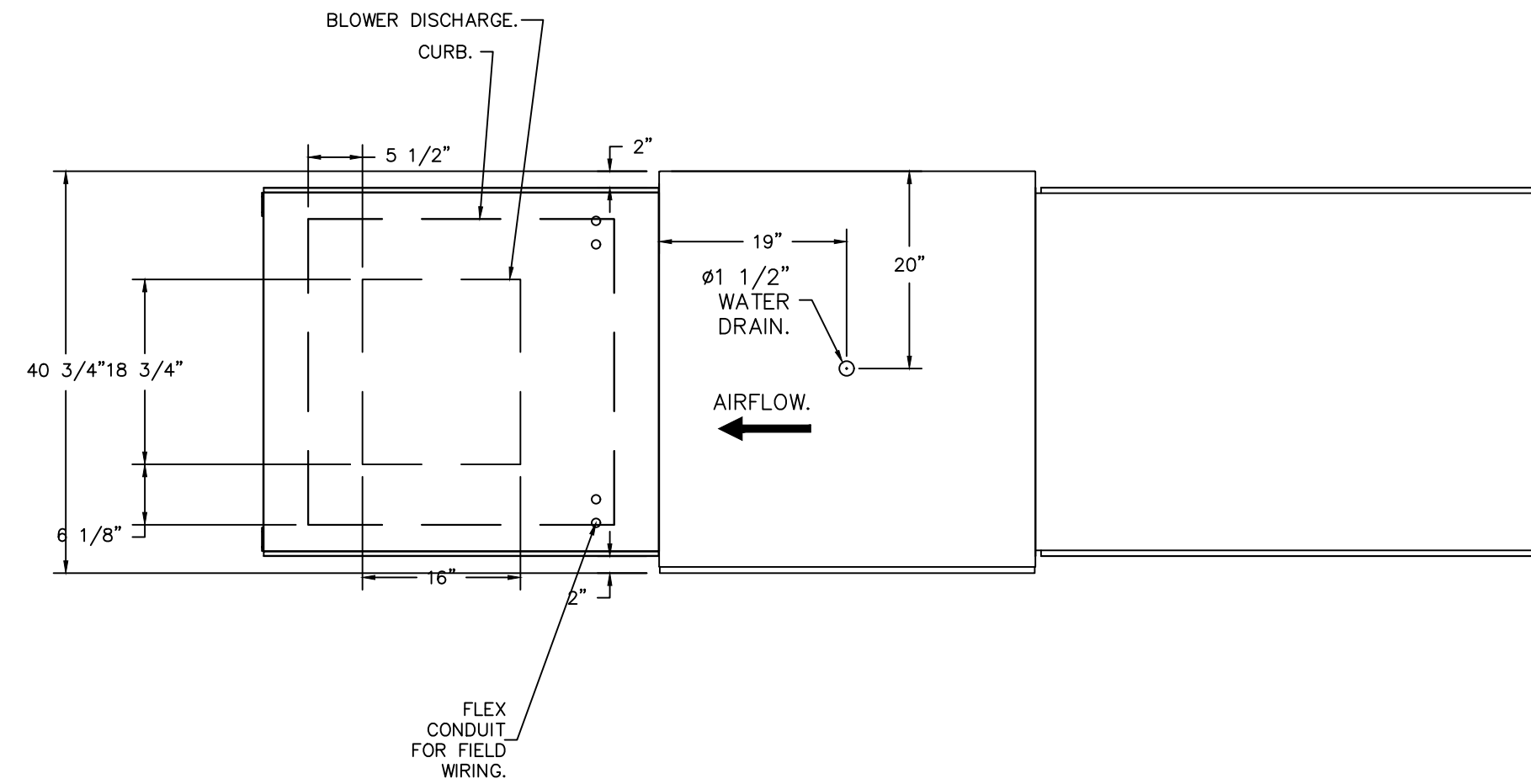
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Checked by: JBM  
Date: 2/27/2024  
Sheet Number:

FS-4.4

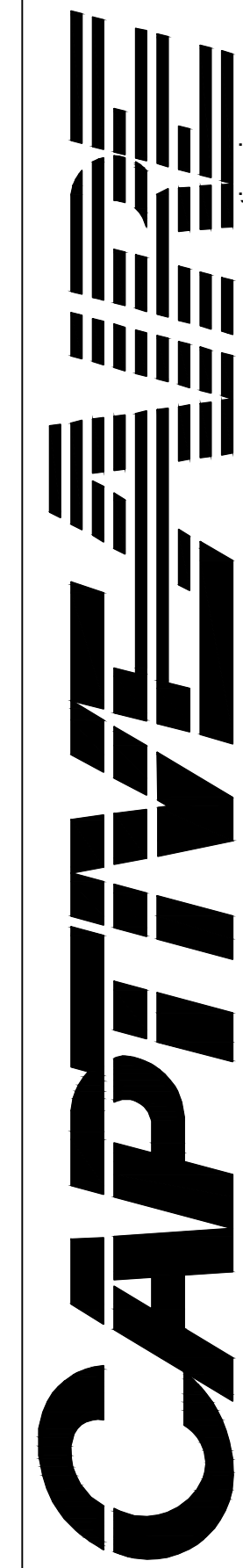
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- FAN #4 A2-20D - SUPPLY FAN (MAU-1)
1. UNTEMPERED SUPPLY UNIT WITH 20" MIXED FLOW DIRECT DRIVE FAN IN SIZE #2 HOUSING.
  2. EVAP COOLER (LPD CELDEK) - W/INTAKE HOOD W/EZ FILTERS.
  3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
  4. DOWN DISCHARGE CONSTRUCTION FOR SIZE 2 UNTEMPERED DIRECT DRIVE AHUS.
  5. 120V WIRING CONNECTION TO ENERGIZE EVAPORATIVE COOLERS FROM UNTEMPERED SUPPLY FANS.
  6. SEPARATE 120VAC WIRING PACKAGE FOR MAKE-UP AIR UNITS. OPTION MUST BE SELECTED WHEN MOUNTING VFD IN PREWIRE PANEL OR WITH DCV PACKAGE. PROVIDES SEPARATE 120VAC INPUT TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM DCV TO MUA SWITCH.
  7. HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER/EVAP SECTION).
  8. 2 YEAR PARTS WARRANTY.

\*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 20" x 20".



REVISIONS	
DESCRIPTION	DATE



Arizona Office  
18206 N 19th Ave, Ste 111-B, Phoenix, AZ 85023 PHONE: (480) 926-6810 FAX: 8777192227 EMAIL: negs3@captivewire.com

Angry Crab - Chandler, AZ  
CHANDLER, AZ, 85224

DATE: 2/26/2024  
DWG #: 6617175  
DRAWN BY: tim.mathis  
SCALE: 3/4" = 1'-0"  
MASTER DRAWING  
SHEET NO. 5

REV.	ARCHITECT	STATUS
A	LARSON & ASSOCIATES	-
B	3807 N. 24TH STREET #100	-
C	PHOENIX, ARIZONA 85016	-
D	(602) 955-9929	4/22/24
E		1st CITY COMMENTS



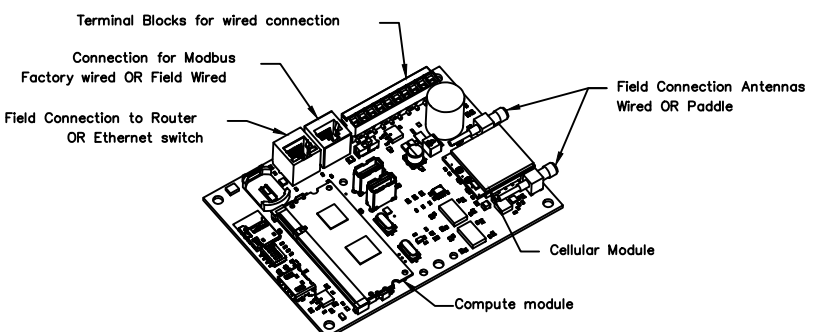
ANGRY CRAB SHACK  
GILBERT ARIZONA  
MECHANICAL SPECIFICATIONS  
Drawn by: TM  
Checked by: JBM  
Date: 2/27/2024  
Sheet Number:

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FS-4.5

ELECTRICAL PACKAGE - JOB#6617175

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED						
				LOCATION	QUANTITY		FAN TAG	TYPE	HP	VOLT	FLA		
1		DCV-2111	UTILITY CABINET RIGHT	UTILITY CABINET RIGHT	1 LIGHT								
				HOOD # 1	1 FAN								

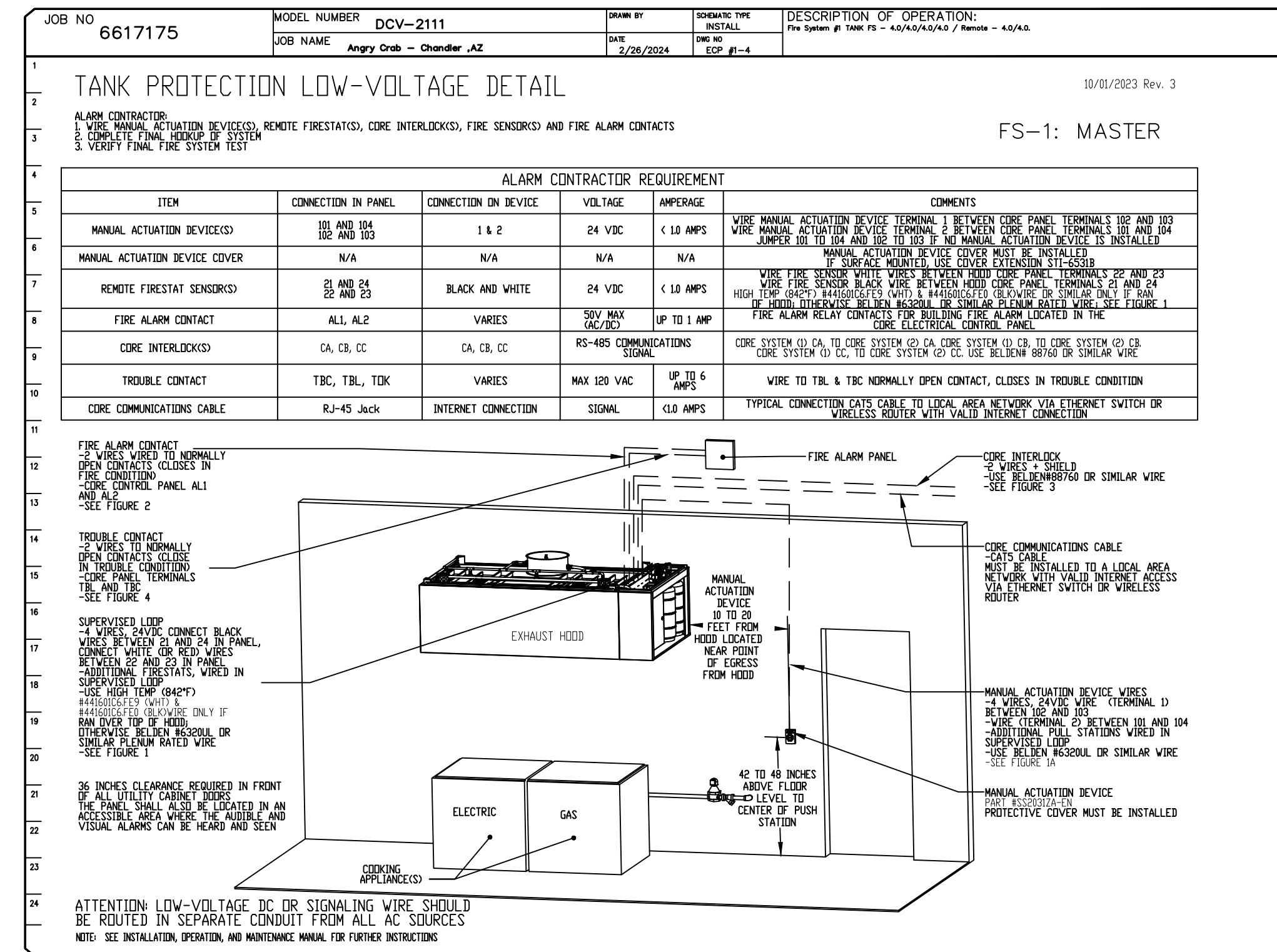
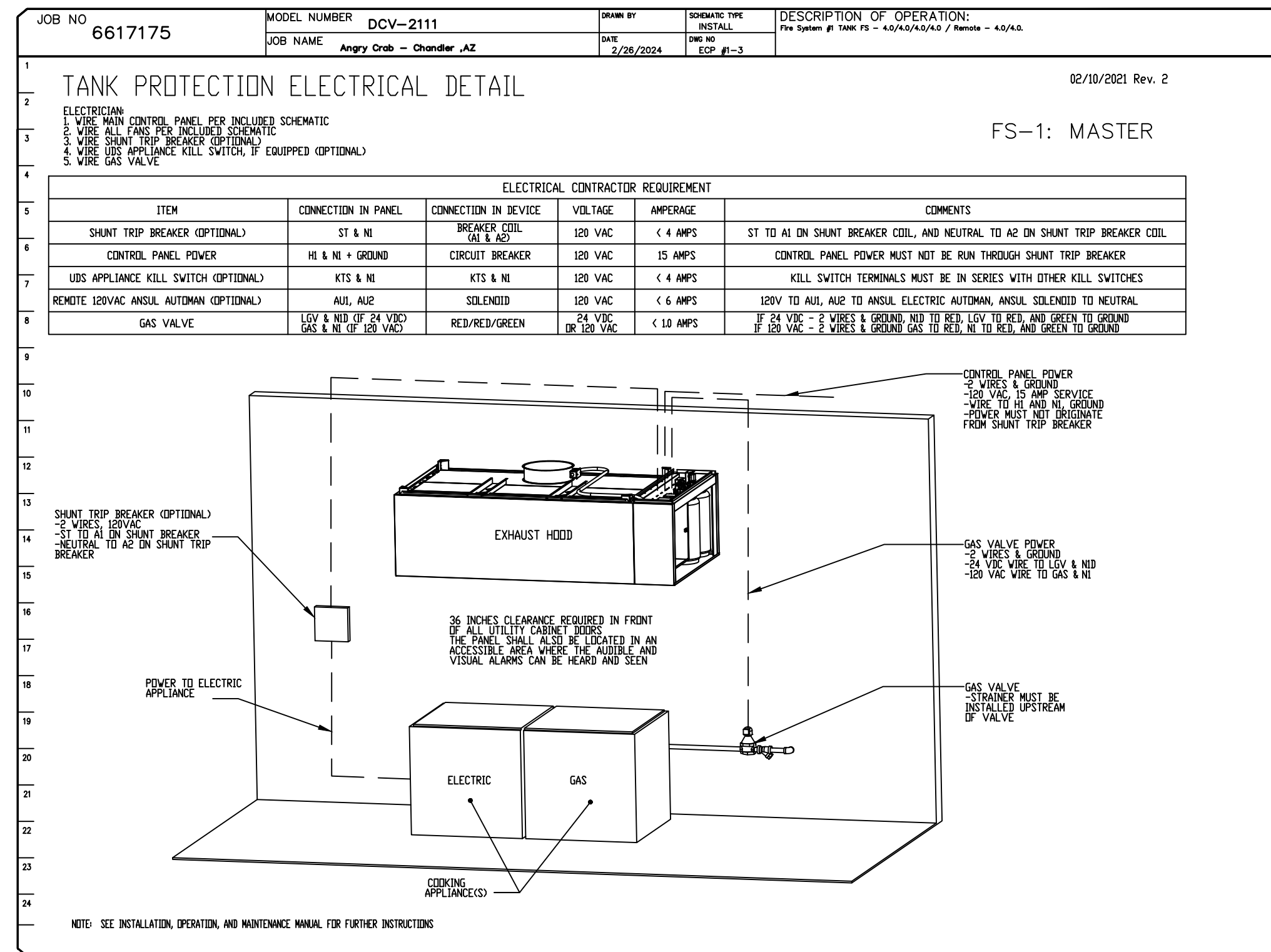
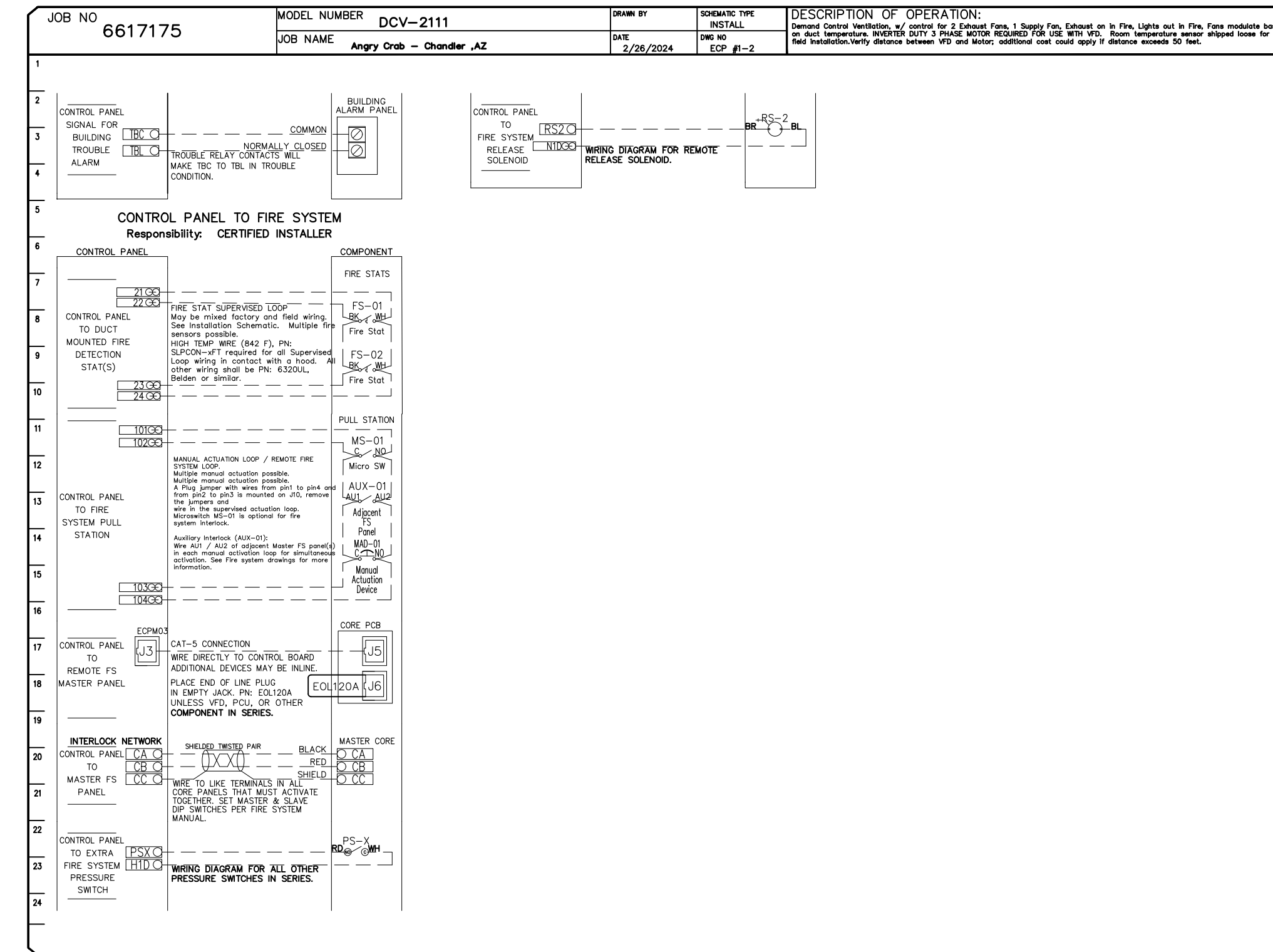
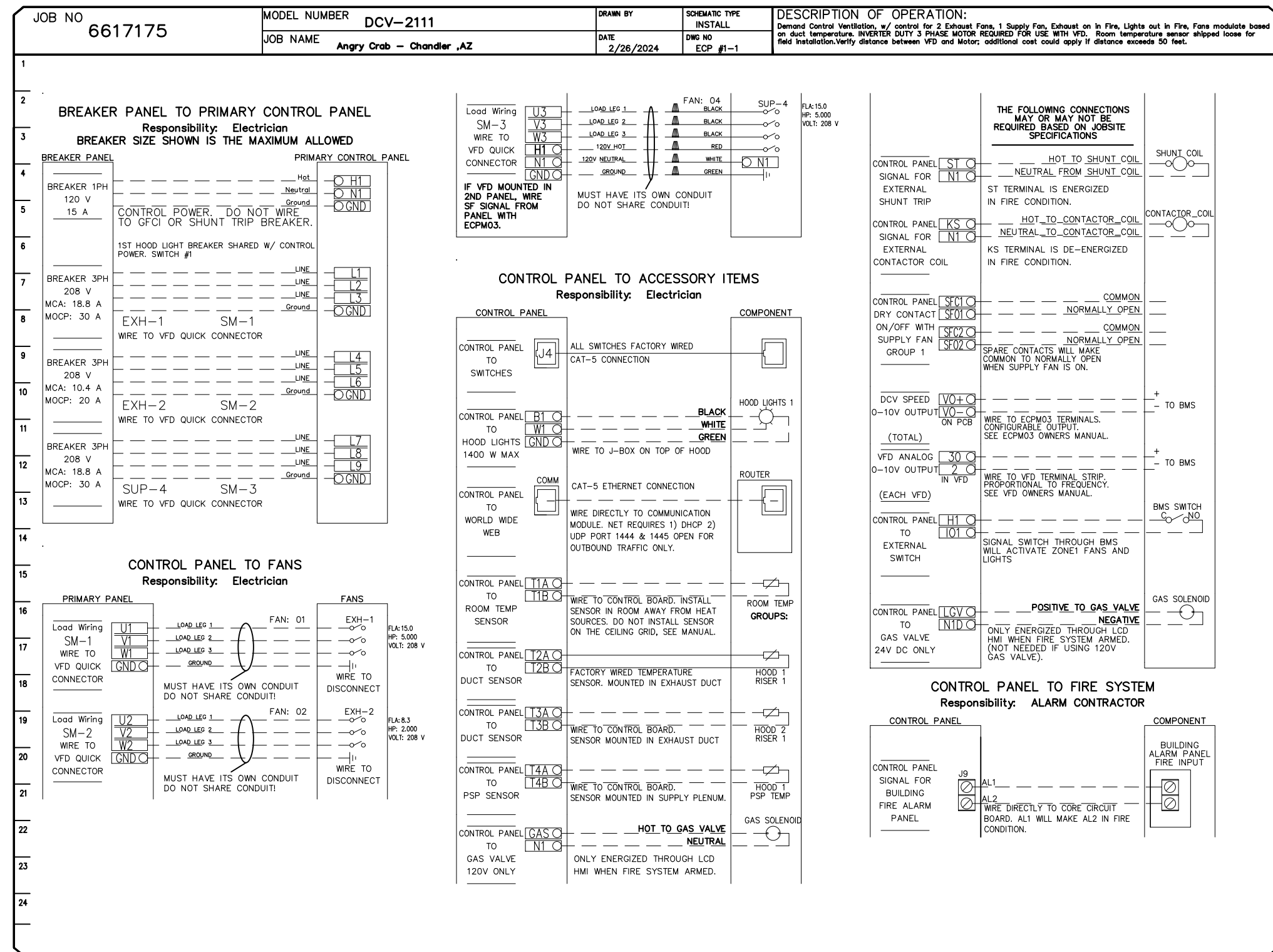


CASlink Monitor and Control

- Hood control panel to support communications to cloud-based Building Management System.
- Hood Control Panel to allow cloud-based Building Management System to monitor real time parameters outlined as MONITOR in the points list.
- Hood Control Panel to allow cloud-based Building Management System to control parameters outlined as CONTROL in the points list.
- Hood Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZER control strategies for fully integrated Building Management.

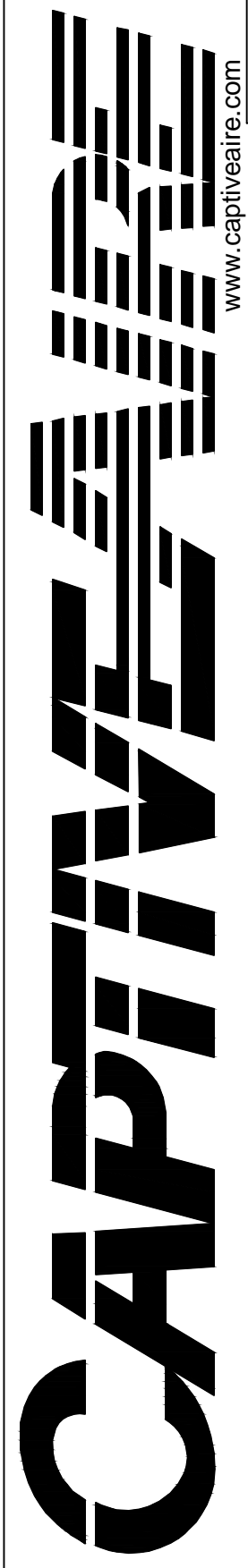
MONITORING AND CONTROL POINTS LIST

DCV Packages	Function	SC Packages	Function
Room Temperature	MONITOR	Room Temperature(s)	MONITOR
Duct Temperature(s)	MONITOR	Duct Temperature(s)	MONITOR
MHA Discharge Temperature	MONITOR	MHA Discharge Temperature	MONITOR
Blowdown ATU Discharge Temperature	MONITOR	Blowdown ATU Discharge Temperature	MONITOR
Fan Speed	MONITOR	Controller Faults	MONITOR
Fan Amperage	MONITOR	Fan Faults	MONITOR
Fan Power	MONITOR	Fan Status	MONITOR
VFD Faults	MONITOR	PCV Faults	MONITOR
Controller Faults	MONITOR	PCV Filter Clog Percentages	MONITOR
Fan Status	MONITOR	Fan Condition	MONITOR
Fan Status	MONITOR	Core Fire System	MONITOR
PCV Faults	MONITOR	Building Pressure	MONITOR
PCV Filter Clog Percentages	MONITOR	Light(s) Button(s)	MONITOR & CONTROL
PCV Status	MONITOR	Light(s) Button(s)	MONITOR & CONTROL
PCV Status	MONITOR	Light(s) Button(s)	MONITOR & CONTROL
PCV Status	MONITOR	Light(s) Button(s)	MONITOR & CONTROL
PCV Status	MONITOR	Light(s) Button(s)	MONITOR & CONTROL
PCV Status	MONITOR	Light(s) Button(s)	MONITOR & CONTROL
PCV Status	MONITOR	Light(s) Button(s)	MONITOR & CONTROL



REVISIONS

DESCRIPTION	DATE



Arizona Office  
18206 N 19th Ave, Ste 1A-1B, Phoenix, AZ 85023 PHONE: (480) 926 - 8810 FAX: 877 192227 EMAIL: reg@3.com

Angry Crab - Chandler, AZ  
CHANDLER, AZ, 85224

DATE: 2/26/2024  
DWG.#: 6617175  
DRAWN BY: tim.mothis  
SCALE: 3/4" = 1'-0"  
MASTER DRAWING  
SHEET NO. 6

REV.	DESCRIPTION	DATE
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C		
D		
E		

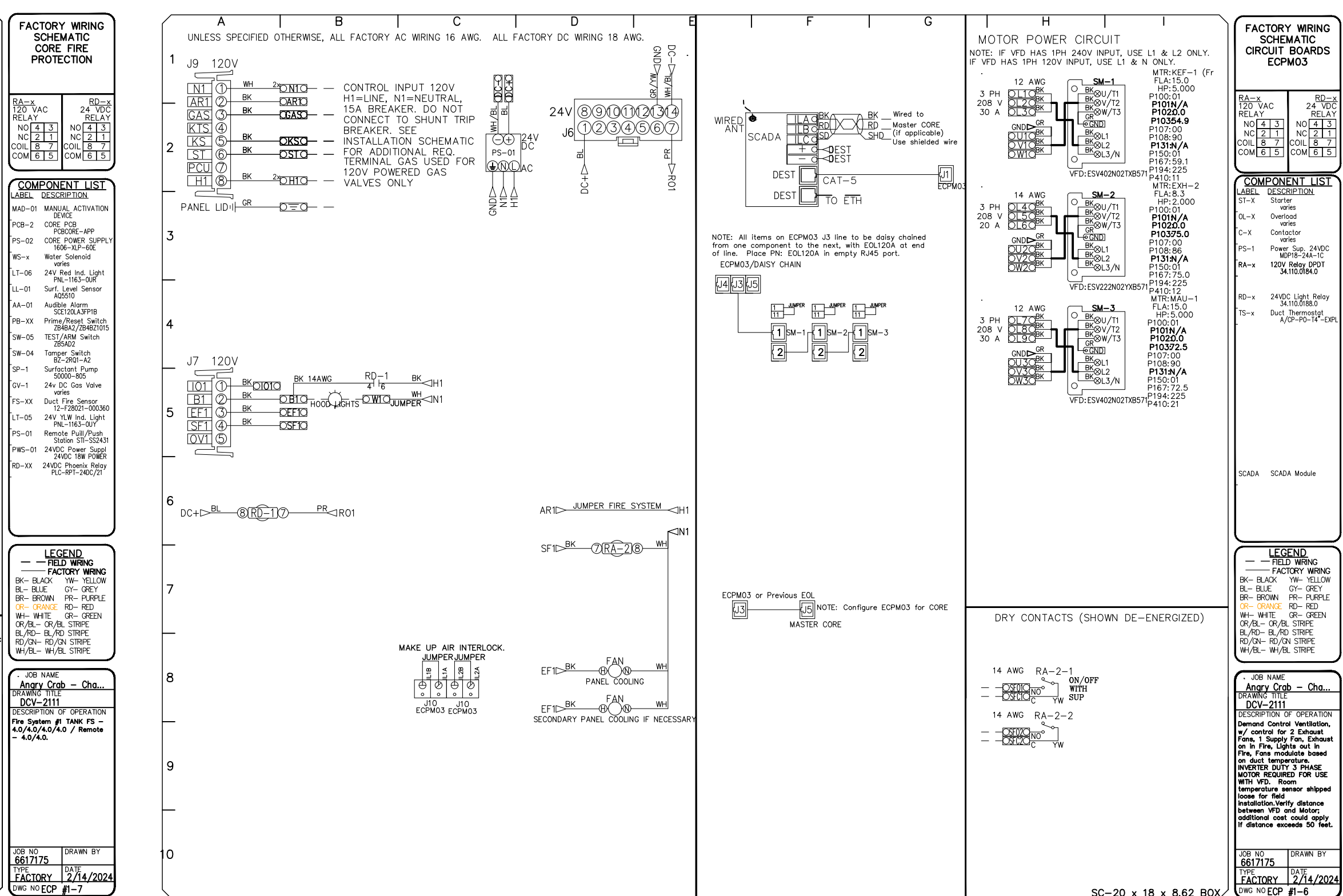
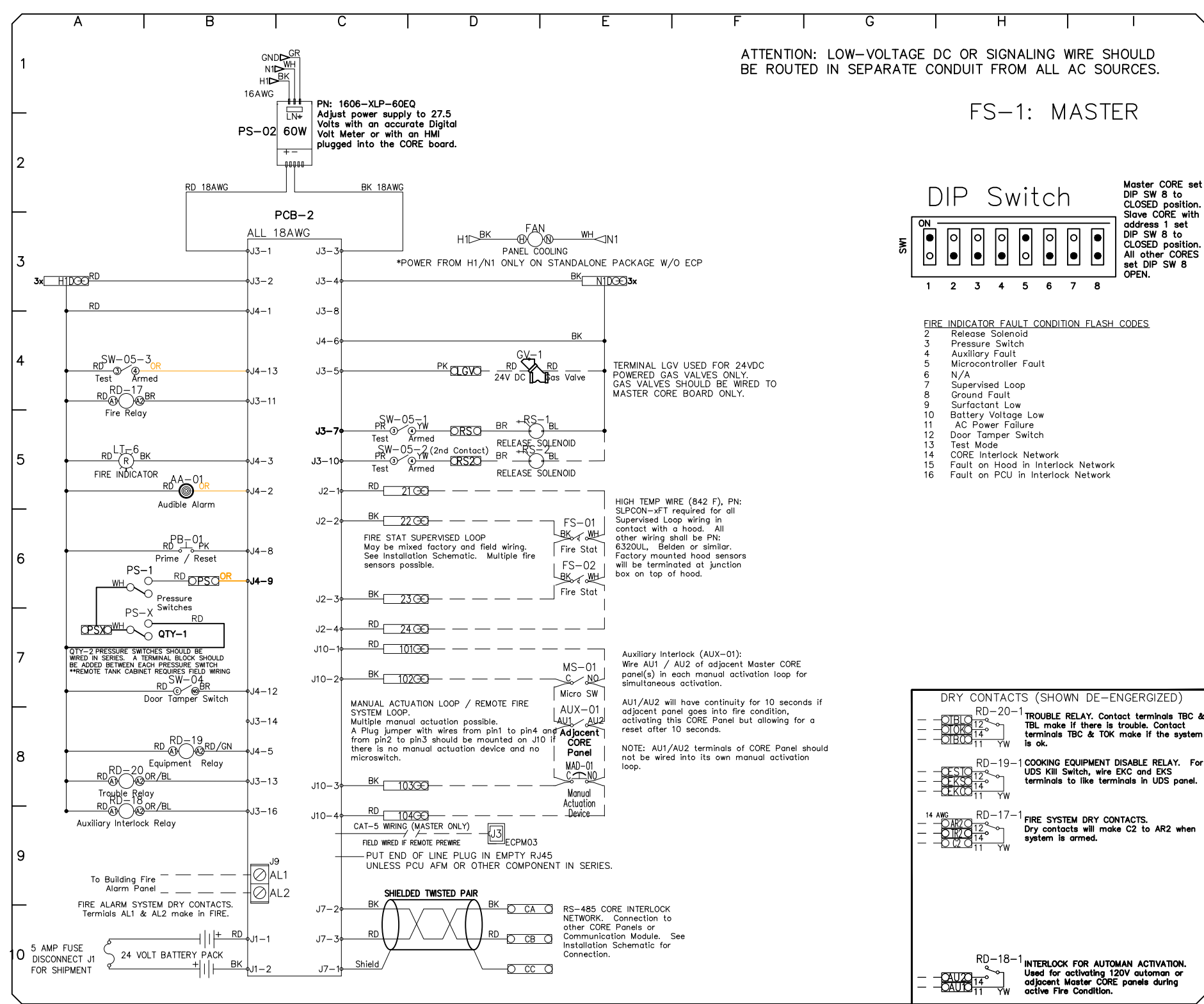
ARCHITECT  
LARSON & ASSOCIATES  
3807 N. 24TH STREET #100  
PHOENIX, ARIZONA 85016  
(602) 955-9929

ANGRY CRAB SHACK  
GILBERT ARIZONA  
MECHANICAL SPECIFICATIONS

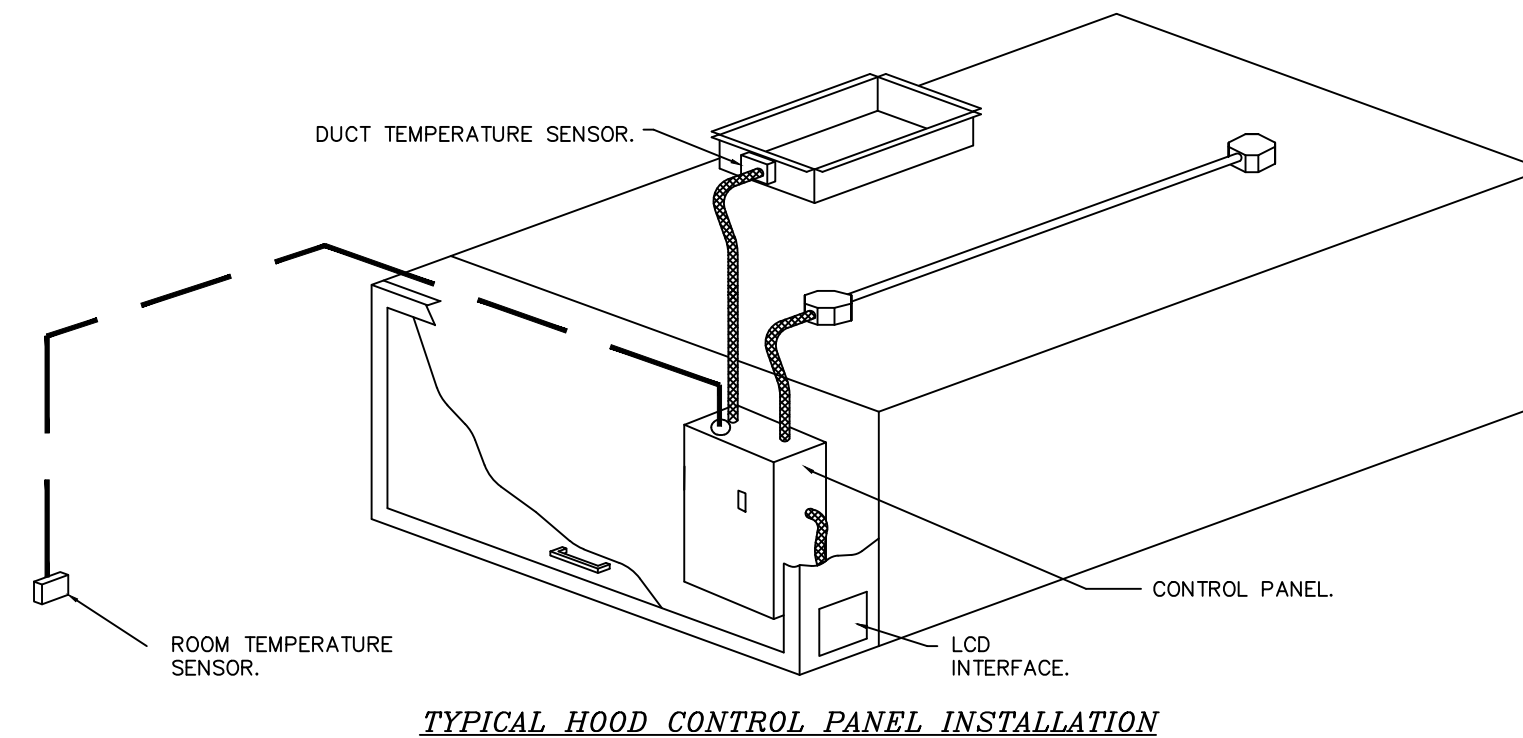
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Date: 2/27/2024  
Sheet Number:

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- DEMAND CONTROL VENTILATION HOOD CONTROL PANEL SPECIFICATIONS:**
- CONTROLS SHALL BE LISTED BY ETL (UL 508A) AND SHALL COMPLY WITH DEMAND VENTILATION SYSTEM TURNDOWN REQUIREMENTS OUTLINED IN IECC 403.7.5 (2021).
  - 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 PROBE(S) LOCATED IN THE EXHAUST DUCT RISER(S) SHALL BE CONSTRUCTED OF STAINLESS STEEL.
  - A DIGITAL CONTROLLER SHALL BE PROVIDED TO ACTIVATE THE HOOD EXHAUST FANS DYNAMICALLY BASED ON A FIXED DIFFERENTIAL BETWEEN THE AMBIENT AND DUCT TEMPERATURE SENSORS. THIS FUNCTION SHALL MEET THE REQUIREMENTS OF IMC 507.1.1.
  - A DIGITAL CONTROLLER SHALL PROVIDE ADJUSTABLE HYSTERESIS SETTINGS TO PREVENT CYCLING OF THE FANS AFTER THE COOKING APPLIANCES HAVE BEEN TURNED OFF AND/OR THE HEAT IN THE EXHAUST SYSTEM IS REDUCED.
  - A DIGITAL CONTROLLER SHALL PROVIDE AN ADJUSTABLE MINIMUM FAN RUN-TIME SETTING TO PREVENT FAN CYCLING.
  - VARIABLE FREQUENCY DRIVES (VFDs) SHALL BE PROVIDED FOR FANS AS REQUIRED. THE DIGITAL CONTROLLER SHALL MODULATE THE VFDs BETWEEN A MINIMUM SETPOINT AND A MAXIMUM SETPOINT ON DEMAND. THE DUCT TEMPERATURE SENSOR INPUT(S) TO THE DIGITAL CONTROLLER SHALL BE USED TO CALCULATE THE SPEED REFERENCE SIGNAL.
  - THE VFD SPEED RANGE OF OPERATION SHALL BE FROM 0% TO 100% FOR THE SYSTEM, WITH THE ACTUAL MINIMUM SPEED SET AS REQUIRED TO MEET MINIMUM VENTILATION REQUIREMENTS.
  - AN INTERNAL ALGORITHM TO THE DIGITAL CONTROLLER SHALL MODULATE SUPPLY FAN SPEED PROPORTIONAL TO ALL EXHAUST FANS THAT ARE LOCATED IN THE SAME FAN GROUP AS THE SUPPLY FAN.
  - THE SYSTEM SHALL OPERATE IN PREP MODE DURING LIGHT COOKING LOAD OR COOL DOWN MODE WHEN SUFFICIENT HEAT REMAINS UNDERNEATH THE HOOD SYSTEM AFTER COOKING OPERATIONS HAVE COMPLETED. OPERATION DURING EITHER OF THESE PERIODS WILL DISABLE THE SUPPLY FANS AND PROVIDE AN EXHAUST FAN SPEED THAT IS EQUAL TO THE MINIMUM VENTILATION REQUIREMENT.
  - A DIGITAL CONTROLLER SHALL DISABLE THE SUPPLY FAN(S), ACTIVATE THE EXHAUST FAN(S), ACTIVATE THE APPLIANCE SHUNT TRIP, AND DISABLE AN ELECTRIC GAS VALVE AUTOMATICALLY WHEN FIRE CONDITION IS DETECTED ON A COVERED HOOD.
  - A DIGITAL CONTROLLER SHALL ALLOW FOR EXTERNAL BMS FAN CONTROL VIA DRY CONTACT (EXTERNAL CONTROL SHALL NOT OVERRIDE FAN OPERATION LOGIC AS REQUIRED BY CODE).
  - AN LCD INTERFACE SHALL BE PROVIDED WITH THE FOLLOWING FEATURES:
    - ON/OFF PUSH BUTTON FAN & LIGHT SWITCH ACTIVATION.
    - INTEGRATED GAS VALVE RESET FOR ELECTRONIC GAS VALVES (NO RESET RELAY REQUIRED).
    - VFD FAULT DISPLAY WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
    - DUCT TEMPERATURE SENSOR FAILURE DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
    - MIS-WIRED DUCT TEMPERATURE SENSOR DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
    - A SINGLE LOW VOLTAGE CAT-5 RJ45 WIRING CONNECTION.
    - AN ENERGY SAVINGS INDICATOR THAT UTILIZES MEASURED KWH FROM THE VFDs.



- SEQUENCE OF OPERATIONS:**
- THE HOOD CONTROL PANEL IS CAPABLE OF OPERATING IN ONE OR MORE OF THE FOLLOWING STATES AT ANY GIVEN TIME:
- AUTOMATIC:** THE SYSTEM OPERATES BASED ON THE DIFFERENTIAL BETWEEN ROOM TEMPERATURE AND THE TEMPERATURE AT THE HOOD CAVITY OR EXHAUST DUCT COLLAR. FANS ACTIVATE AT A CONFIGURABLE TEMPERATURE DIFFERENTIAL THRESHOLD, DEPENDING ON THE JOB CONFIGURATION EACH FAN ZONE CAN BE CONFIGURED AS STATIC OR DYNAMIC. THESE TERMS REFER TO WHETHER A VARIABLE MOTOR (SUCH AS EC MOTORS OR VFD DRIVEN MOTORS) MODULATE WITH TEMPERATURE. IF THE PANEL IS EQUIPPED WITH VARIABLE SPEED FANS AND THE ZONE IS DEFINED AS "DYNAMIC", THESE WILL MODULATE WITHIN A USER-DEFINED RANGE BASED ON THE TEMPERATURE DIFFERENTIAL. PANELS EQUIPPED WITH VARIABLE SPEED FANS AND A FAN ZONE DEFINED AS "STATIC", FANS WILL RUN AT A SET SPEED CALCULATED FOR THE DRIVE. DEMAND CONTROL VENTILATION SYSTEMS ARE CAPABLE OF MODULATING EXHAUST AND MAKE UP AIR FAN SPEEDS PER THE REQUIREMENTS OUTLINED IN IECC 403.7.5 (2021).
  - MANUAL:** THE SYSTEM OPERATES BASED ON HUMAN INPUT FROM AN HMI.
  - SCHEDULE:** A WEEKLY SCHEDULE CAN BE SET TO RUN FANS FOR A SPECIFIED PERIOD THROUGHOUT THE DAY. THERE ARE THREE OCCUPIED TIMES PER DAY TO ALLOW FOR THE USER TO SET UP A TIME THAT IS SUITABLE TO THEIR NEEDS. ANY TIME THAT IS WITHIN THE DEFINED OCCUPIED TIME, THE SYSTEM WILL RUN AT MODULATION MODE AND FOLLOW THE FAN PROCEDURE ALGORITHM BASED ON TEMPERATURE DURING THIS TIME. DURING UNOCCUPIED TIME, THE SYSTEM WILL HAVE AN EXTRA OFFSET TO PREVENT UNINTENDED ACTIVATION OF THE SYSTEM DURING A TIME WHERE THE SYSTEM IS NOT BEING OCCUPIED.
  - OTHER:** THE SYSTEM OPERATES BASED ON THE INPUT FROM AN EXTERNAL SOURCE (DDC, BMS OR HARD-WIRED INTERLOCK).
  - FIRE:** UPON ACTIVATION OF THE HOOD FIRE SUPPRESSION SYSTEM, THE EXHAUST FAN WILL COME ON OR CONTINUE TO RUN, THE HOOD MAKEUP AIR WILL SHUTDOWN, AND A SIGNAL WILL BE SENT FOR ACTIVATING THE SHUNT TRIP BREAKER PROVIDED BY THE ELECTRICIAN. FUEL GAS WILL SHUT OFF VIA A MECHANICAL/ELECTRICAL GAS VALVE ACTUATED BY THE HOOD FIRE SUPPRESSION SYSTEM.

REVISIONS	
DESCRIPTION	DATE

**Arizona Office**  
 18206 N 19th Ave, Ste 1A-1B, Phoenix, AZ, 85023 PHONE: (480) 926-6810 FAX: 877192227 EMAIL: reg93@captivae.com

Angry Crab - Chandler, AZ  
 CHANDLER, AZ, 85224

DATE: 2/26/2024  
 DWG.#: 6617175  
 DRAWN BY: tim.mathis  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

SHEET NO. 7

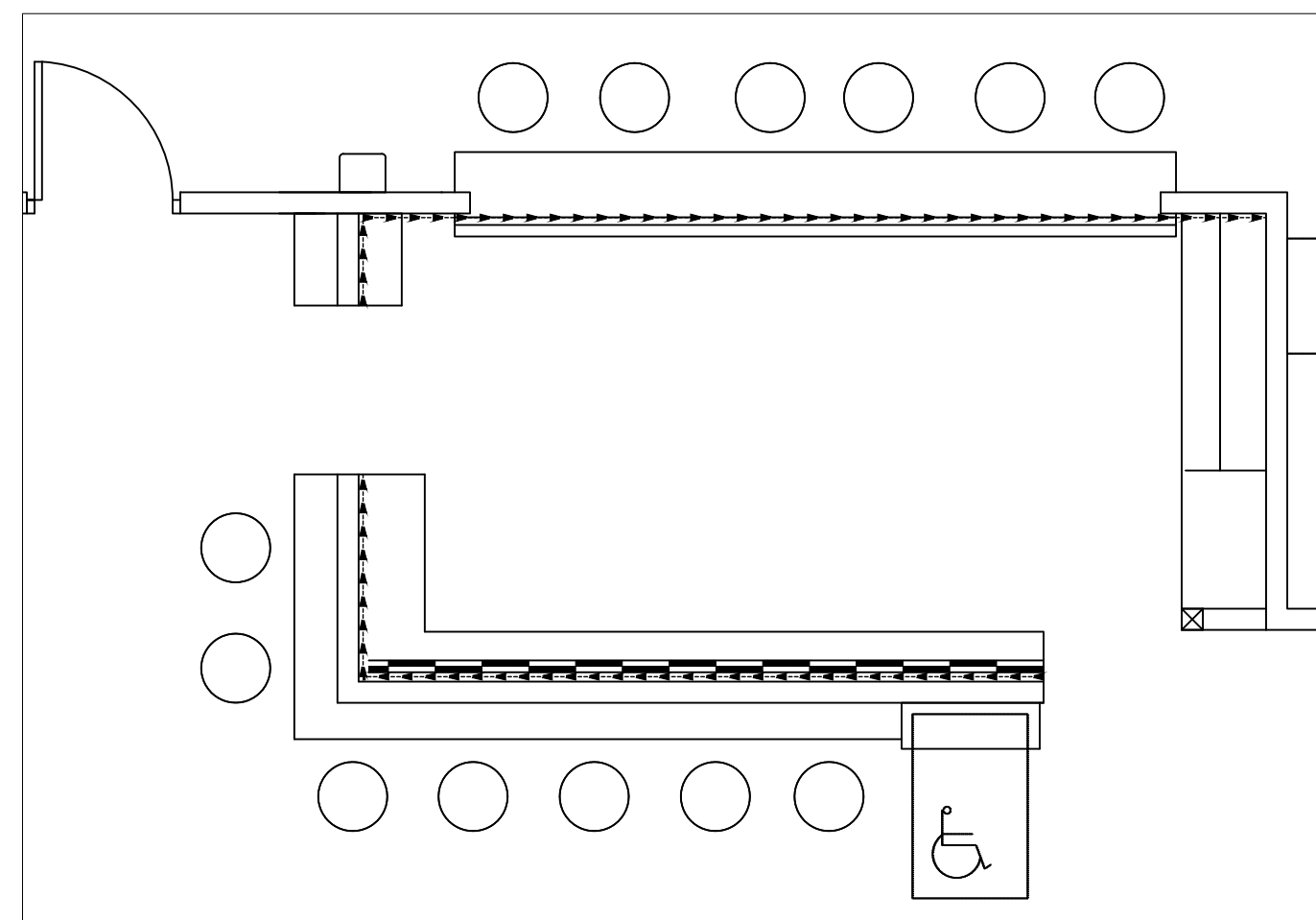
REV.	ARCHITECT	STATUS	1st CITY COMMENTS
A	LARSON & ASSOCIATES	-	-
B	3807 N. 24TH STREET #100	-	-
C	PHOENIX, ARIZONA 85016	-	-
D	(602) 955-9929	-	-

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 JUSTIN@AZRESTAURANTCONSULTING.COM

**ANGRY CRAB SHACK**  
 GILBERT ARIZONA

**MECHANICAL SPECIFICATIONS**

Drawn by: TM  
 Checked by: JBM  
 Date: 2/27/2024  
 Sheet Number:



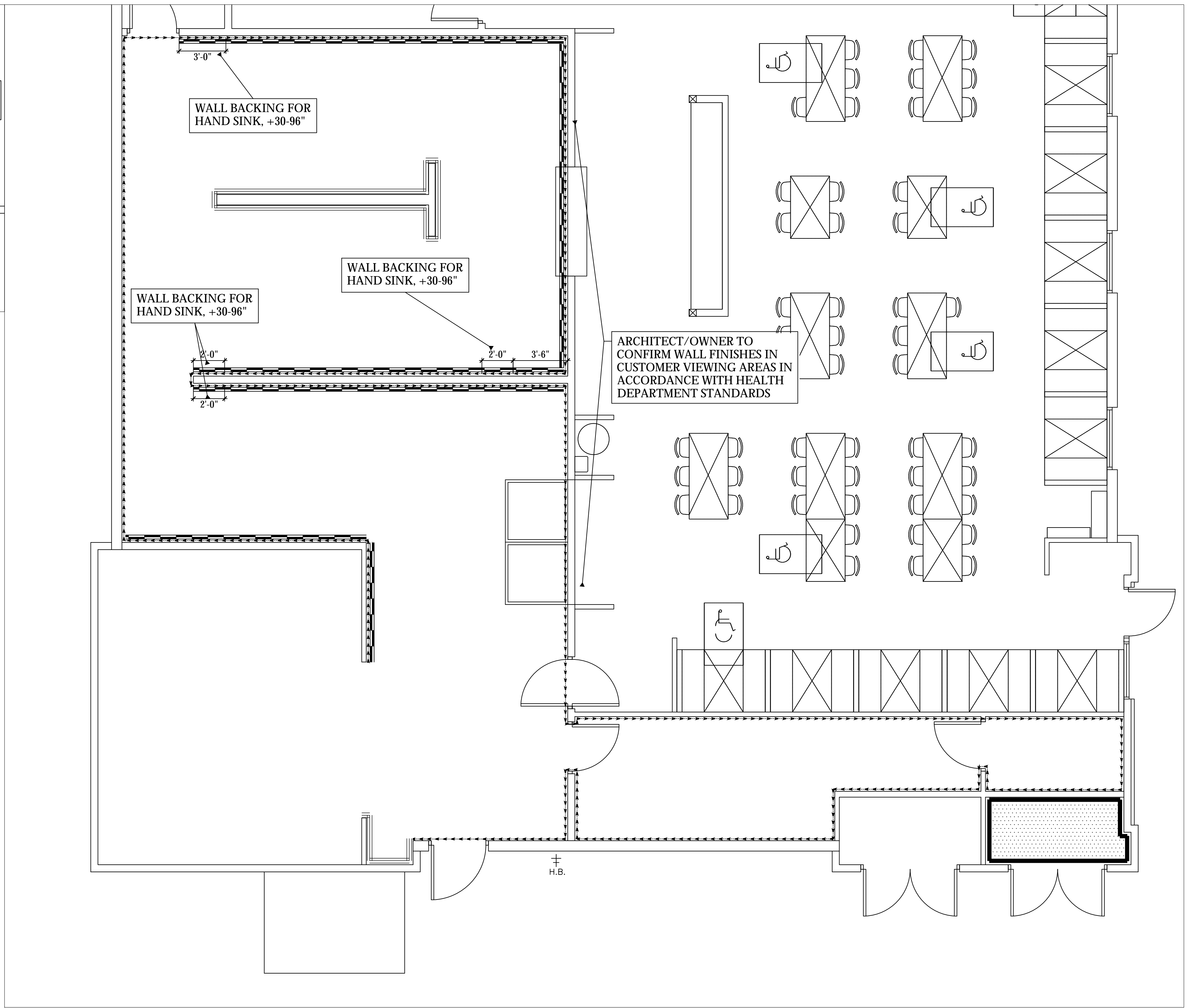
BAR SPECIAL CONDITIONS PLAN  
SCALE: 1/4"=1'-0"

**WALL FINISH DETAILS IN FOODSERVICE AREAS**  
NOT ALL SYMBOLS MAY BE USED

- S/S WALL FLASHING, 20 GAUGE W/ JOINING STRIPS @ SEAMS, MOUNT FROM 6" TO 8'-6" AFF. W/ 6" COVERED BASE
- FRP, WHITE W/ JOINING STRIPS @ SEAMS, MOUNT FROM TOP OF COVERED BASE TO CEILING GRID UNLESS OTHERWISE NOTED ON PLAN.
- EPOXY PAINT, NSF APPROVED OVER BLOCK CONSTRUCTION AS APPROVED BY HEALTH DEPARTMENT.

**WALL BACKING DETAILS IN FOODSERVICE AREAS**  
NOT ALL SYMBOLS MAY BE USED

- 5/8" PLYWOOD WALL BACKING, IN LIEU OF SHEETROCK FROM 4'-0" TO 8'-0" UNLESS OTHERWISE NOTED ON PLAN
- NON-COMBUSTIBLE WALL BACKING, TBD BY GC, BEHIND SHEETROCK FROM 4'-0" TO 8'-0" UNLESS OTHERWISE NOTED ON PLAN



KITCHEN SPECIAL CONDITIONS PLAN  
SCALE: 1/4"=1'-0"

REV.	STATUS
△	-
△	-
△	-
△	4/22/24
△	-

ARCHITECT  
**LARSON & ASSOCIATES**  
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ANGRY CRAB SHACK  
GILBERT ARIZONA  
SPECIAL CONDITIONS PLAN

Drawn by: **JBM**  
Checked by:  
Date: **2/27/2024**  
Sheet Number:

**FS-5.0**

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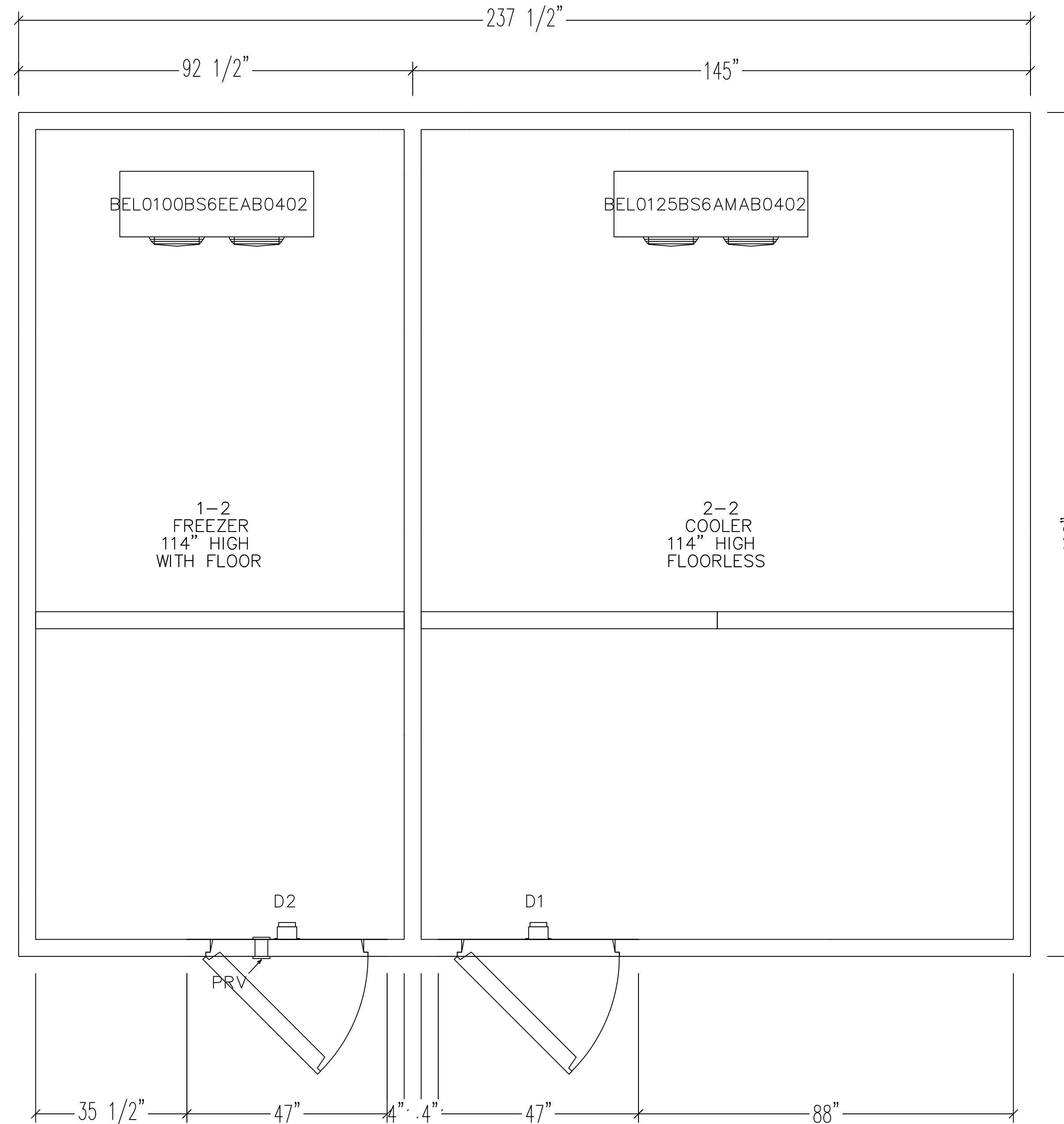
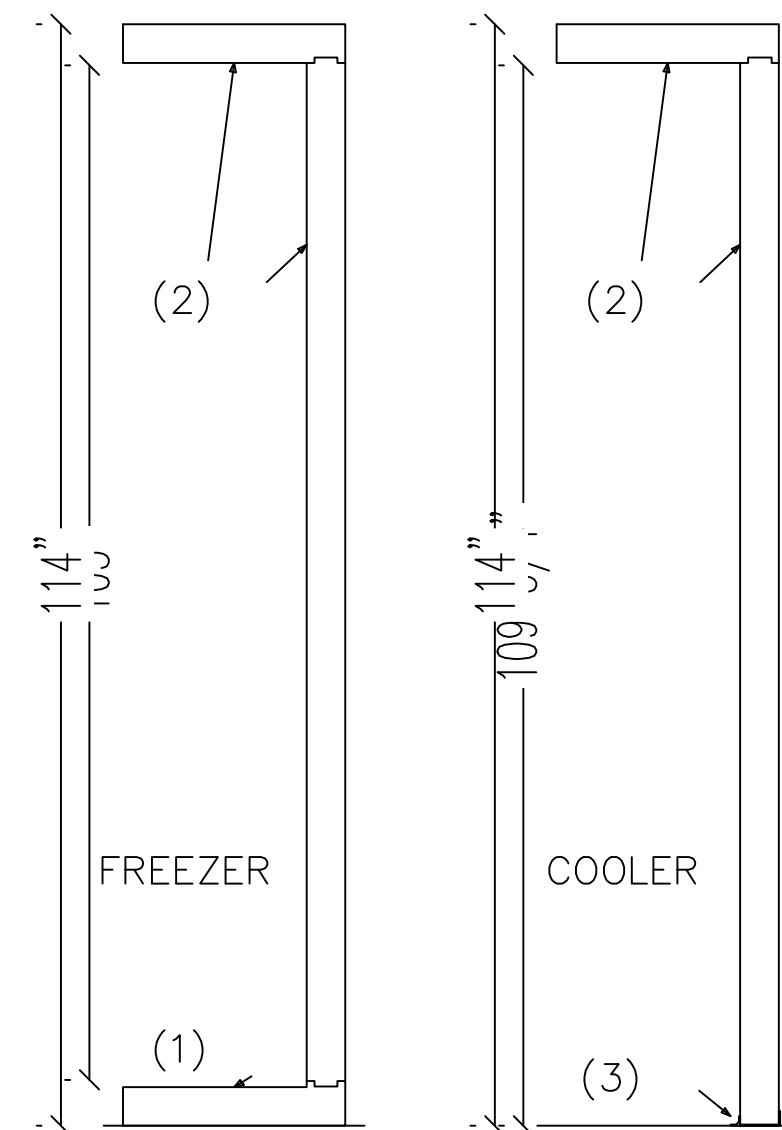


VERIFY ALL INTERIOR AND EXTERIOR DIMENSIONS AND ALLOW A MINIMUM 2" CLEAR (AIR) BETWEEN WALK-IN AND EXISTING/PROJECTED STRUCTURES.  
BE SURE THE LARGEST PANEL TO BE MANUFACTURED WILL BE HANDLED WITHOUT PROBLEM INSIDE YOUR ROOM

4" INSULATION, AK-XPS4 HI-PERFORMANCE PANEL CORE  
COOLERS R-29, FREEZERS R-32  
CORE FLAME SPREAD RATING OF 15  
SMOKE DEVELOPED OF 165  
INSULATION WITH 50 YEAR R-VALUE WARRANTY

SECTIONAL VIEW

- (1) .050 SMOOTH ALUMINUM OVER 1/2" PLYWOOD UNDERLAY FOR 1200 LB/SQ.FT UNIFORMLY DISTRIBUTED LOAD
- (2) 4" INSULATED PANELS.
- (3) 26 GA. STUCCO EMBOSSED ACRYLUME NSF VINYL SCREED



**amerikooler**  
taking smart further™

CUSTOMER NAME: AZ Restaurant Consulting  
JOB NAME: 20' x 12' Combo

SCALE: 3/8" = 1" DRAWN BY: VF  
DATE: 02/22/2024 REV: 4/24/2024

575 EAST 10th AVENUE, HIALEAH, FLORIDA 33010  
FAX (305) 884-8330

JOB NUMBER: 24-05498-1  
QUOTE#: 24-05498  
PO#: 4/22/24  
PAGE: 1 of 1  
FAX#:

<p><b>AZ-ARC</b> ARIZONA RESTAURANT CONSULTING 7920 E. OAK STREET - SCOTTSDALE, ARIZONA 85257 JUSTIN@AZRESTAURANTCONSULTING.COM</p>		<p>ARCHITECT <b>LARSON &amp; ASSOCIATES</b> 3807 N. 24TH STREET #100 PHOENIX, ARIZONA 85016 (602) 955-9929</p>	<p>STATUS</p>
<p>ANGRY CRAB SHACK GILBERT ARIZONA</p>	<p>WALK IN SPECIFICATIONS</p>	<p>REV. <math>\Delta</math> - <math>\Delta</math> - <math>\Delta</math> - <math>\Delta</math> 4/22/24 <math>\Delta</math> -</p>	<p>1st CITY COMMENTS -</p>
<p>Drawn by: -</p>	<p>Checked by: JBM</p>	<p>Date: 2/27/2024</p>	
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FREEZER REFRIGERATION

BCH0035LBACZA0200 - SUBMITTAL
BOHN
General Product Information
Technical Information
Minimum Unit Clearances
Walls or Obstructions for Horizontal Air Flow

BCH0035LBACZA0200 - SUBMITTAL
BOHN
Standard Features
Performance
Minimum Unit Clearances
Walls or Obstructions for Horizontal Air Flow

BEL0100BS6EEAB0402 - SUBMITTAL
BOHN
General Product Information
Technical Information
Minimum Unit Clearances
Walls or Obstructions for Horizontal Air Flow

BEL0100BS6EEAB0402 - SUBMITTAL
BOHN
Standard Features
Performance
Minimum Unit Clearances
Walls or Obstructions for Horizontal Air Flow

COOLER REFRIGERATION

BCH0020MBACZA0000 - SUBMITTAL
BOHN
General Product Information
Technical Information
Minimum Unit Clearances
Walls or Obstructions for Horizontal Air Flow

BCH0020MBACZA0000 - SUBMITTAL
BOHN
Standard Features
Performance
Minimum Unit Clearances
Walls or Obstructions for Horizontal Air Flow

BEL0125BS6AMAB0402 - SUBMITTAL
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General Product Information
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STATUS
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PHOENIX, ARIZONA 85016
(602) 955-9929
ANGRY CRAB SHACK
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