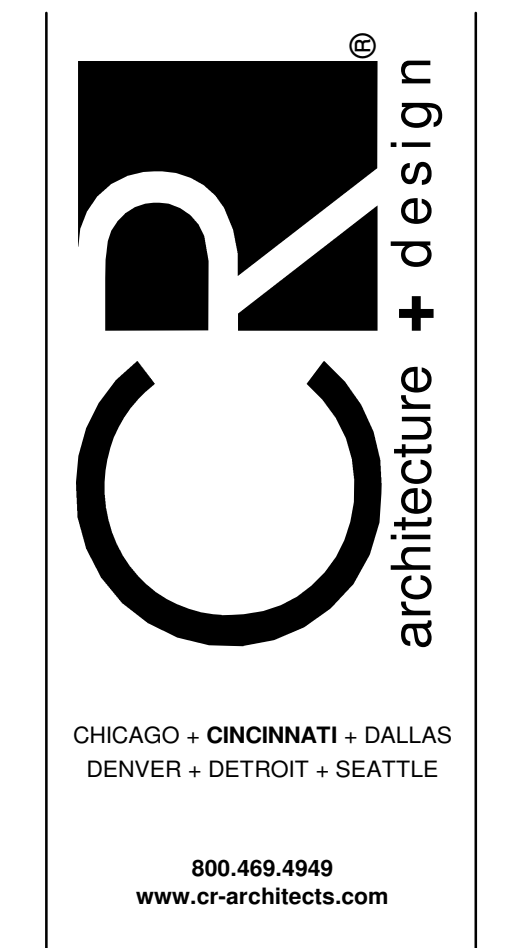


KEYED NOTES

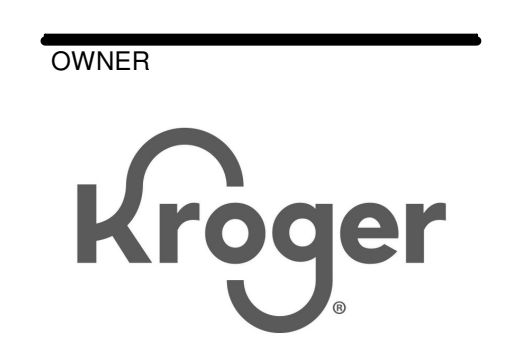
- M1 CONTRACTOR TO REFER TO HSD-3 FOR DUCTWORK INSTALLATION INFORMATION. TYPICAL.
- M2 THERMOSTAT TO BE MOUNTED A MINIMUM OF 4'0" AFF. PROVIDE LOCKABLE PROTECTIVE COVER OVER DEVICE.
- M5 DUCT UP TO OPENING THROUGH ROOF CAPPED WITH CURB AND KROGER FURNISHED EXHAUST FAN.
- M6 DUCT UP TO OPENING THRU ROOF. CONTRACTOR TO PROVIDE REVERSE ACTING THERMOSTAT FOR FAN. FAN TO ENERGIZE WHEN ROOM REACHES 80 DEG F.
- M7 SIDEWALL DIFFUSERS TO BE INSTALLED AT 45 DEGREES DOWNWARD. REFER TO 233713.00-02 ON M5.2 FOR INSTALLATION INFORMATION.
- M13 DROP BOX DIFFUSER SYSTEM. REFER TO DIFFUSER SCHEDULE FOR AFS MODEL NUMBERS AND QUANTITIES. REFER TO FLOOR PLANS FOR THROW DIRECTIONS AND AIRFLOW. REFER TO DETAIL HSD-1 FOR INSTALLATION.
- M14 TEMPERATURE SENSOR FOR RTU FURNISHED BY BUILDING CONTROL PROVIDER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING CONTROL PANEL.
- M16 HUMIDITY/TEMPERATURE SENSOR FURNISHED BY BUILDING CONTROLS PROVIDER. INSTALL PROBE AT 7'-0" AFF ON COLUMN. REFER TO EM SERIES OF DRAWINGS FOR FURTHER INFORMATION.
- M21 RETURN AIR GRILLE IN SIDE OF DUCT DROP. TITUS 50F WITH 1 INCH OPENINGS OR APPROVED EQUAL.
- M26 MOUNT GRILLE REGISTER 8" AFF.
- M27 MOUNT GRILLE REGISTER 10" AFF.
- M32 ROOFTOP UNIT FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. BALANCE TO SCHEDULED AIRFLOW. REFER TO ARCHITECTURAL ROOF PLAN FOR HVAC ROOFTOP DIMENSIONAL INFORMATION. REFER TO STRUCTURAL DRAWINGS FOR JOIST AND BEAM LOCATIONS AND DIMENSIONAL INFORMATION. REFER TO HSD-10 FOR SCHEDULE.
- M34 RETURN AIR GRILLE TO BE INSTALLED ON VERTICAL FACE OF RETURN DUCT DROP. OPPOSITE 6 WAY DROPBOX DIFFUSER. BASIS OF DESIGN TITUS 50F WITH 1" OPENINGS OR APPROVED EQUAL. PROVIDE 1" CLEARANCE TO FACE OF DUCT AND 1/2" CLEARANCE FROM WATER HEATERS UP THROUGH ROOF. REFER TO M1.2a AND DETAIL PSD-60 ON SHEET PS 1.
- M48 PROVIDE CO2 SENSOR WHERE SHOWN. ROUTE CONTROL WIRING TO BUILDING CONTROL PANEL.
- M53 LOCATION OF EMS PANEL.
- M62 6-BLADE FAN PROVIDED BY CONTRACTOR AND CONTROLLED BY REMOTE MOUNTED VFD INCLUDED WITH UNIT. MOUNT FAN AND INCLUDED DISCONNECT ABOVE LIGHTS AND PER MANUFACTURER'S SPECIFIC INSTALLATION INSTRUCTIONS. CONFIRM FINAL MOUNTING HEIGHT AND LOCATION (OF FAN AND CONTROLS) WITH OWNER AND ARCHITECT.

NOTE TO CONTRACTOR

- A CONTRACTOR TO VERIFY THE NECESSARY SIZES OF SUPPLY AND RETURN DUCT DROPS FROM ROOFTOP UNITS PRIOR TO ORDERING SHEET METAL. CONFIRM SIZES WITH APPROVED RTU SUBMITTAL. CONFIRM WITH OWNER THAT THE RTU LOCATIONS SHOWN WILL ALLOW BOTH THE SUPPLY AND RETURN DUCT DROPS TO FALL WITHIN SAME TWO STRUCTURAL JOISTS. REFER TO STRUCTURAL AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONS. CONTACT ENGINEER IMMEDIATELY WITH ANY DISCREPANCIES.



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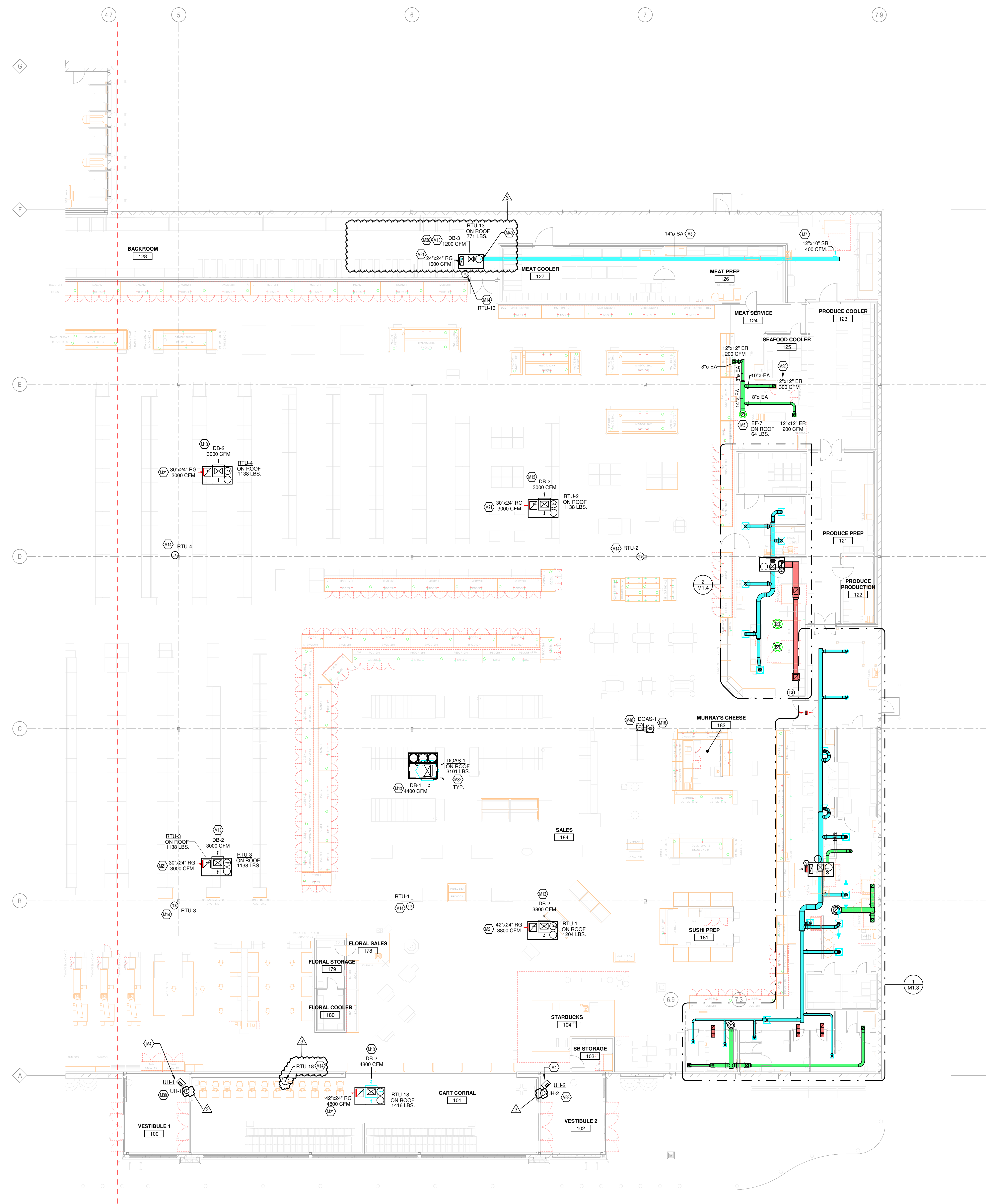
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3 11/13/2024	BULLETIN NO. 2
5 05/30/2025	BULLETIN NO. 6

EXECUTED BY: TDS
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 PROJECT TITLE
KROGER STORE L365
 265 + BEULAH CHURCH RD.
 LOUISVILLE, KY 40291
 COMMISSION NO. 524322
 ISSUE DATE 08/01/2024
 SHEET TITLE
HVAC FLOOR PLAN - LEFT

SHEET NO.
M1.1a

2 HVAC FLOOR PLAN - LEFT
 3/32" = 1'-0"

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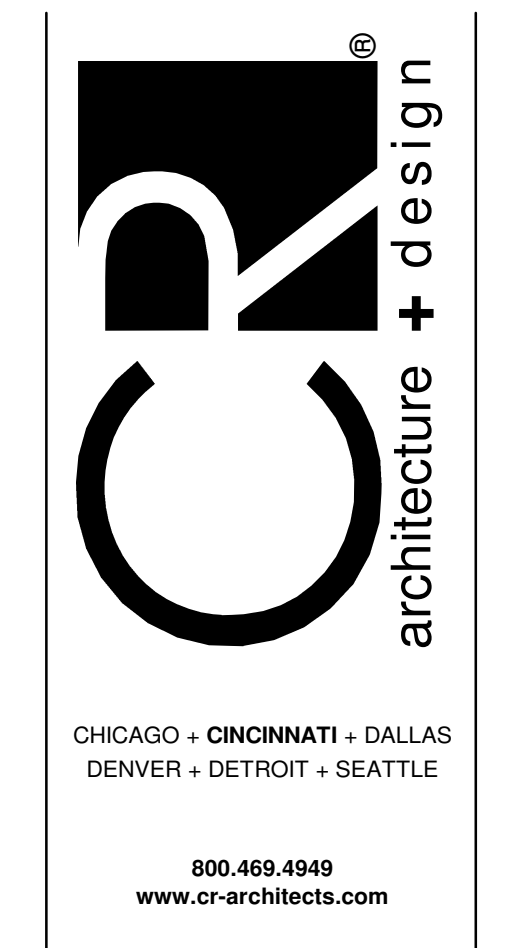


KEYED NOTES

- M4 SUSPEND ELECTRIC HEATER USING THREADED ROD TO UNISTRUT CHANNEL OR APPROVED EQUAL. MOUNT 18" AFF TO BOTTOM OF UNIT. VERIFY LOCATION AND REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION. REFER TO HSD-16 ON M5.1 AND TO M6.1 FOR MORE INFORMATION.
- M5 DUCT UP TO OPENING THROUGH ROOF CAPPED WITH CURB AND KROGER FURNISHED EXHAUST FAN.
- M7 SIDEWALL DIFFUSERS TO BE INSTALLED AT 45 DEGREES DOWNWARD. REFER TO 233713.00-02 ON M5.2 FOR INSTALLATION INFORMATION.
- M8 DUCTWORK TO BE HELD TIGHT TO STRUCTURE.
- M13 DROP BOX DIFFUSER SYSTEM. REFER TO DIFFUSER SCHEDULE FOR AFS MODEL NUMBERS AND QUANTITIES. REFER TO FLOOR PLANS FOR THROW DIRECTIONS AND AIRFLOW. REFER TO DETAIL HSD-1 FOR INSTALLATION.
- M14 TEMPERATURE SENSOR FOR RTU FURNISHED BY BUILDING CONTROL PROVIDER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING CONTROL PANEL.
- M16 HUMIDITY/TEMPERATURE SENSOR FURNISHED BY BUILDING CONTROLS PROVIDER. INSTALL PROBE AT 7'-9" AFF ON COLUMN. REFER TO EM SERIES OF DRAWINGS FOR FURTHER INFORMATION.
- M21 RETURN AIR GRILLE IN SIDE OF DUCT DROP. TITUS SOF WITH 1 INCH OPENINGS OR APPROVED EQUAL.
- M32 ROOFTOP UNIT FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. BALANCE TO SCHEDULED AIRFLOW. REFER TO ARCHITECTURAL ROOF PLAN FOR HVAC ROOFTOP DIMENSIONAL INFORMATION. REFER TO STRUCTURAL DRAWINGS FOR JOIST AND BEAM LOCATIONS AND DIMENSIONAL INFORMATION. REFER TO HSD-10 FOR SEISMIC WIND RESISTANCE INFORMATION.
- M35 ENSURE EXHAUST REGISTER IS INSTALLED DIRECTLY ABOVE SEAFOOD OPENING.
- M36 DOWN DUCTWORK SHALL BE AS HIGH AS POSSIBLE. THERMOSTAT TO BE CONFIGURED WITH AUTOMATIC HEATING SHUTOFF TO PREVENT OVERHEATING. AIR FLOW SHALL BE AS SHOWN IN THIS DETAIL. 233300.00-01 ON M5.2.
- M48 PROVIDE CO2 SENSOR WHERE SHOWN. ROUTE CONTROL WIRING TO BUILDING CONTROL PANEL.

NOTE TO CONTRACTOR

A. CONTRACTOR TO VERIFY THE NECESSARY SIZES OF SUPPLY AND RETURN DUCT DROPS FROM ROOFTOP UNITS PRIOR TO ORDERING SHEET METAL. CONFIRM SIZES WITH APPROVED RTU SUBMITTAL. CONFIRM WITH OWNER THAT THE RTU LOCATIONS SHOWN WILL ALLOW BOTH THE SUPPLY AND RETURN DUCT DROPS TO FALL WITHIN SAME TWO STRUCTURAL JOISTS. REFER TO STRUCTURAL AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONS. CONTACT ENGINEER IMMEDIATELY WITH ANY DISCREPANCIES.



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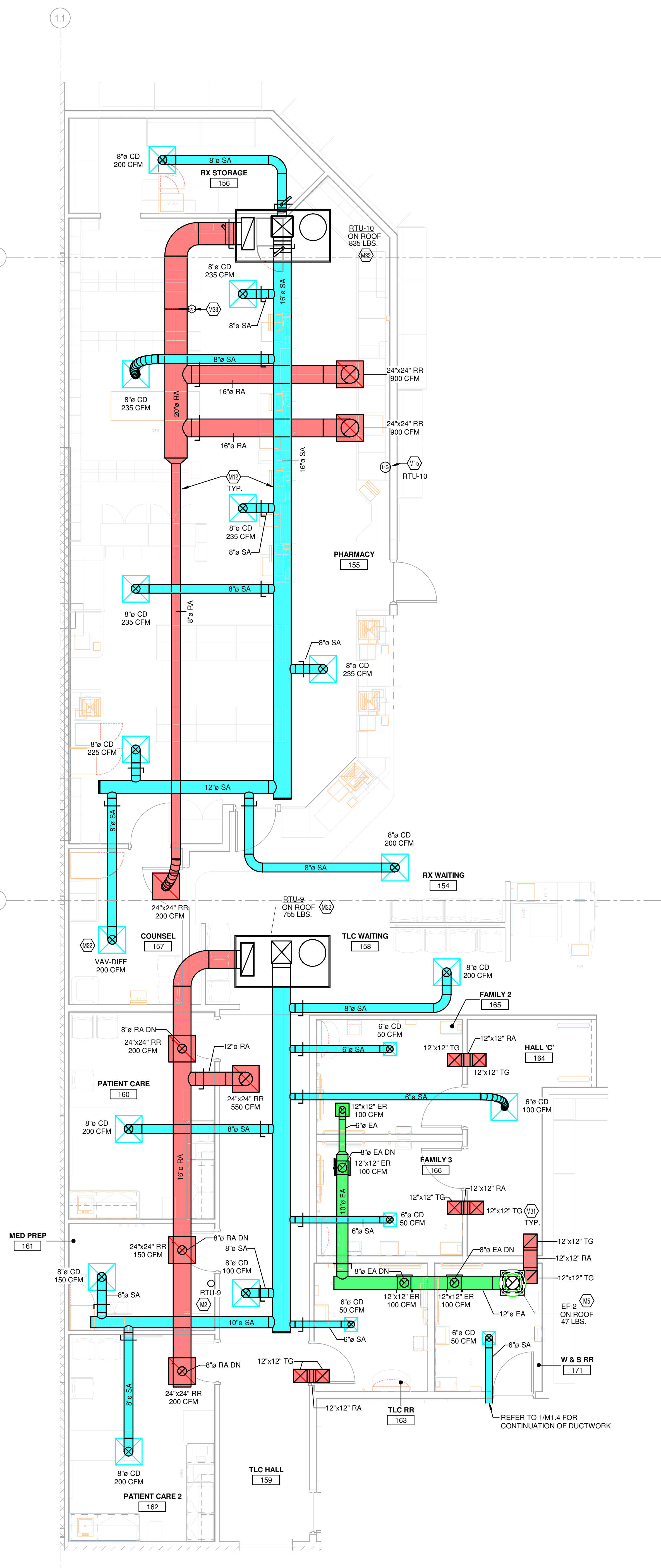
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KROGER STORE L365
265 + BEULAH CHURCH RD.
LOUISVILLE, KY 40291
COMMISSION NO. 524322
ISSUE DATE 08/01/2024
SHEET TITLE
HVAC FLOOR PLAN - RIGHT

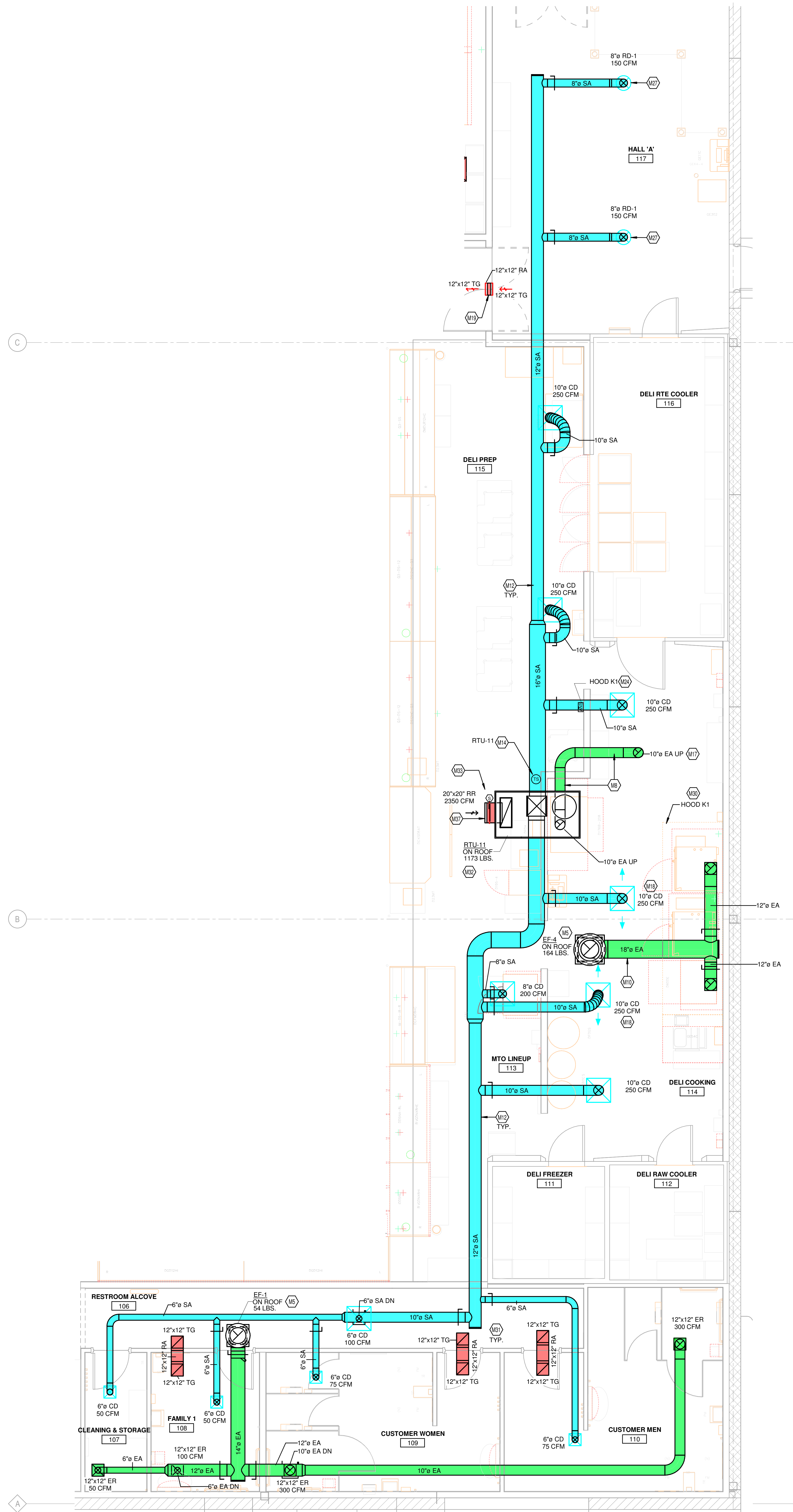
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M1.1b

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1 HVAC FLOOR PLAN - RIGHT
3/32" = 1'-0"



3 HVAC ENLARGED PLAN - PHARMACY & TLC
1/4" = 1'-0"



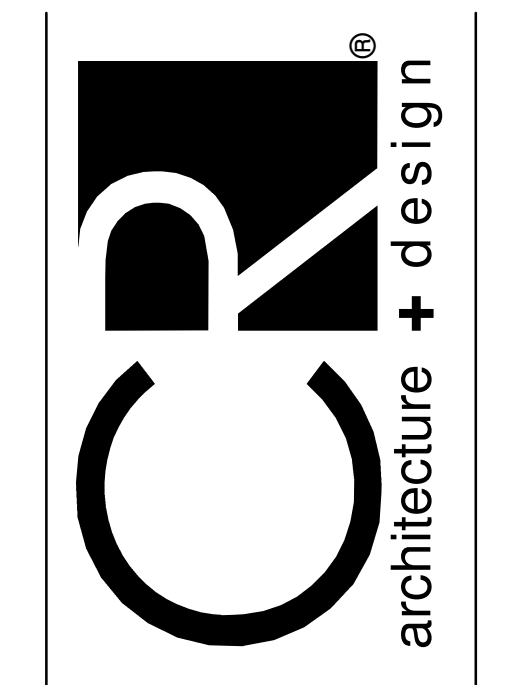
1 HVAC ENLARGED PLAN - DELI
1/4" = 1'-0"

KEYED NOTES

- M2 THERMOSTAT TO BE MOUNTED A MINIMUM OF 4' AFF. PROVIDE LOCKABLE PROTECTIVE COVER OVER DEVICE.
- M5 DUCT UP TO OPENING THROUGH ROOF CAPPED WITH CURB AND KROGER FURNISHED EXHAUST FAN.
- M8 DUCTWORK TO BE HELD TIGHT TO STRUCTURE.
- M10 GREASE DUCT FROM EXHAUST HOOD TO OPENING THROUGH ROOF PER NFPA 96. MECHANICAL CONTRACTOR TO INSTALL PROVIDED HINGE KIT. DUCTWRAP IS TO RUN THE ENTIRE LENGTH OF GREASE DUCT FROM CEILING PENETRATION TO FAN. REFER TO HSD-4, HSD-5A AND HSD-4B ON MS.1, AND BOTH 233813.00-04 AND 233813.00-02 ON MS.2 FOR ADDITIONAL INFORMATION.
- M12 ROUTE DUCTWORK AT A REASONABLE HEIGHT ABOVE THE CEILING TO ENSURE EASE OF ACCESS FOR CLEANING AND MAINTENANCE.
- M14 TEMPERATURE SENSOR FOR RTU FURNISHED BY BUILDING CONTROL PROVIDER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING CONTROL PANEL.
- M15 COMBINATION TEMPERATURE/RELATIVE HUMIDITY SENSOR FOR RTU FURNISHED BY BUILDING CONTROL PROVIDER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING CONTROL PANEL.
- M17 LW-50 VENT KIT INCLUDED WITH UNIT AND SUPPLIED BY HOBART. VENT KIT AUTOMATICALLY REMOVES STEAM/CONDENSATION AT THE COMPLETION OF THE WAREWASH CYCLE. WAREWASH DOOR WILL NOT OPEN UNTIL THIS PROCESS IS COMPLETED. MECHANICAL CONTRACTOR TO CONNECT STAINLESS STEEL DUCT TO THE VENT KIT OPENING THROUGH ROOF. REFER TO HSD-8 FOR ADDITIONAL INFORMATION.
- M18 DIFFUSER AROUND HOOD TO BE A 2-WAY DIFFUSER FACING AWAY FROM THE HOOD TO PREVENT INTERFERENCE WITH THE HOOD'S CONTAIN AND CAPTURE.
- M19 INSTALL TRANSFER GRILLES IN WALL AS HIGH AS POSSIBLE. COORDINATE FINAL LOCATIONS WITH OWNER AND ARCHITECT PRIOR TO WORK.
- M22 MECHANICAL CONTRACTOR TO PROVIDE VAV DIFFUSER, ACCUTHERM THERMA-FUSE MODEL TF-HC OR APPROVED EQUAL.
- M24 HOOD ANSUL PULL STATION LOCATION. COORDINATE FINAL LOCATION WITH ELECTRICAL PLANS. PROVIDE NAMEPLATE AT STATION WITH HOOD NUMBER AND LOCATIONS. REFERENCE HSD-4A AND 4B FOR ADDITIONAL INFORMATION.
- M27 MOUNT GRILLE/REGISTER 10" AFF.
- M30 REFER TO ARCHITECTURAL DRAWINGS FOR FINAL HOOD LOCATION AND HOOD DIMENSIONS.
- M31 INSTALL TRANSFER IN ACCORDANCE WITH 230713.00-19 ON MS.2.
- M32 ROOFTOP UNIT FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. BALANCE TO SCHEDULED AIRFLOW. REFER TO ARCHITECTURAL ROOF PLAN FOR HVAC ROOFTOP DIMENSIONAL INFORMATION. REFER TO STRUCTURAL DRAWINGS FOR JOIST AND BEAM LOCATIONS AND DIMENSIONAL INFORMATION. REFER TO HSD-10 FOR SEISMIC WIND RESISTANCE INFORMATION.
- M33 DUCT MOUNTED SMOKE DETECTOR TO BE INSTALLED IN THE RETURN DUCTWORK, DOWNSTREAM OF FILTERS AND UPSTREAM OF ANY BRANCH CONNECTIONS. INSTALL SAMPLING TUBE(S) AND DETECTOR HOUSING IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. DETECTOR, FAN SHUTDOWN WIRING, AND CONTROLS BY OTHERS.
- M37 INSTALL TOP OF RETURN GRILLE 15" AFF IN SOFFIT. COORDINATE FINAL LOCATION WITH ARCHITECT AND WITH DECOR. LOCATION OF DECOR TAKES PRECEDENCE OVER LOCATION OF RETURN GRILLE.

NOTE TO CONTRACTOR

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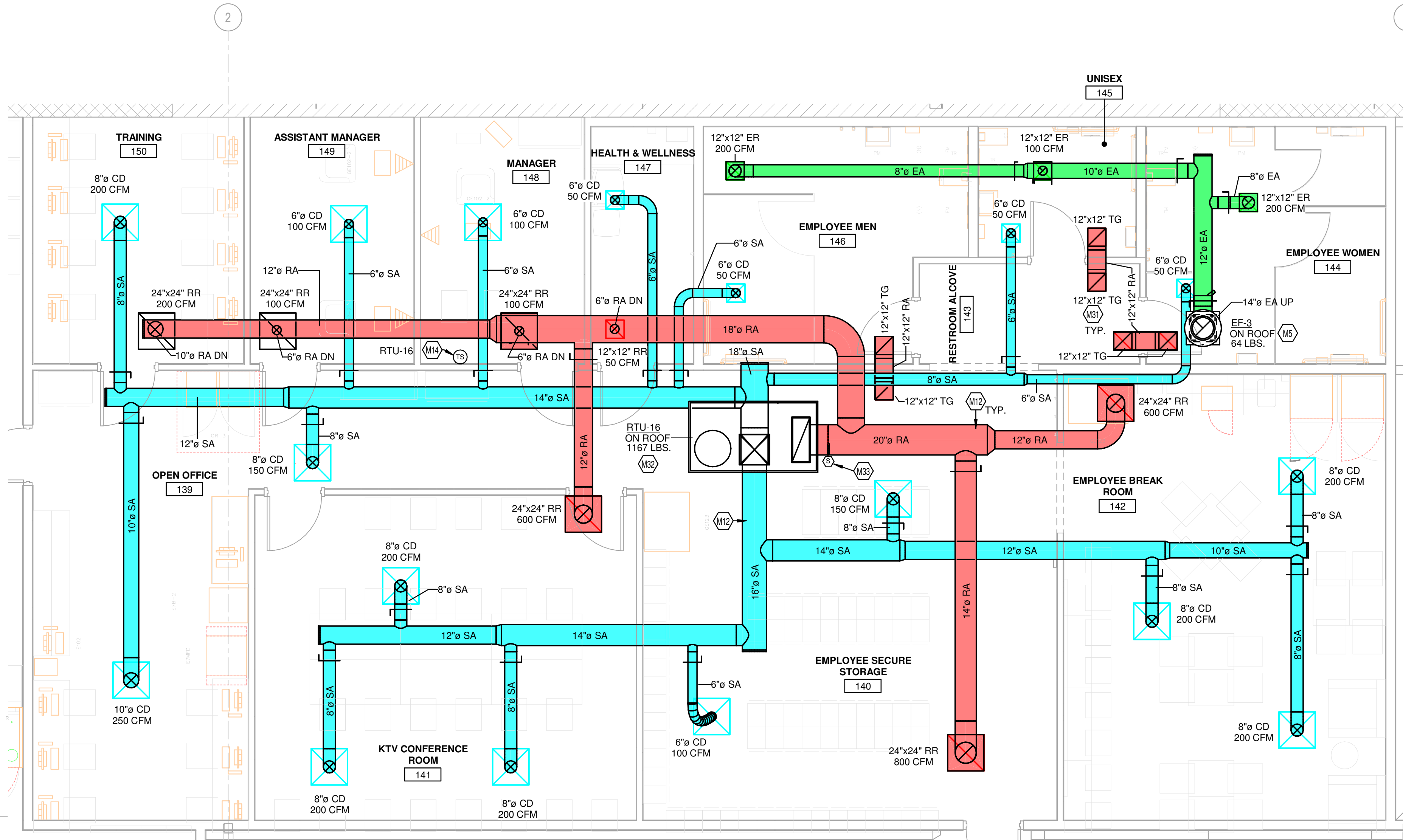
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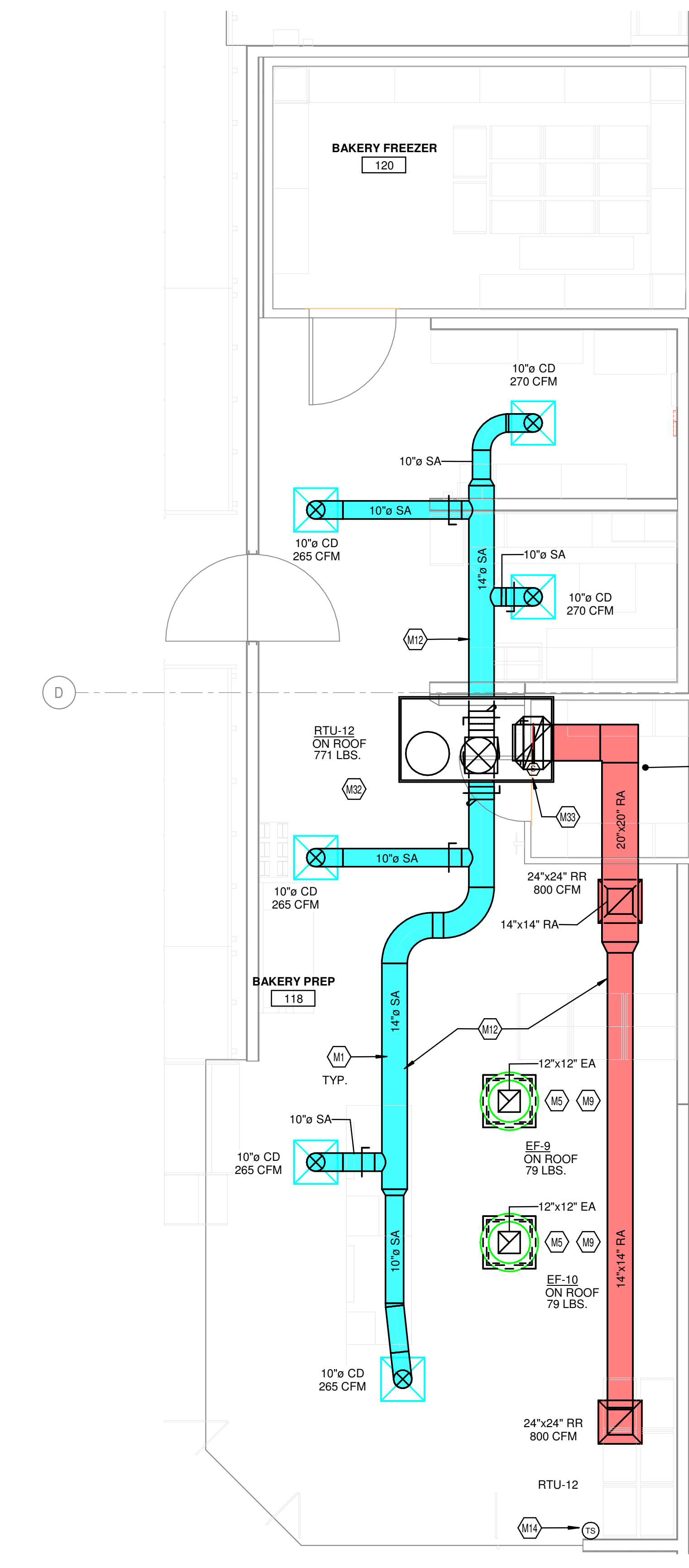
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PROJECT TITLE
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265 + BEULAH CHURCH RD.
LOUISVILLE, KY 40291
COMMISSION NO. 524322
ISSUE DATE 08/01/2024
SHEET TITLE
HVAC ENLARGED PLANS

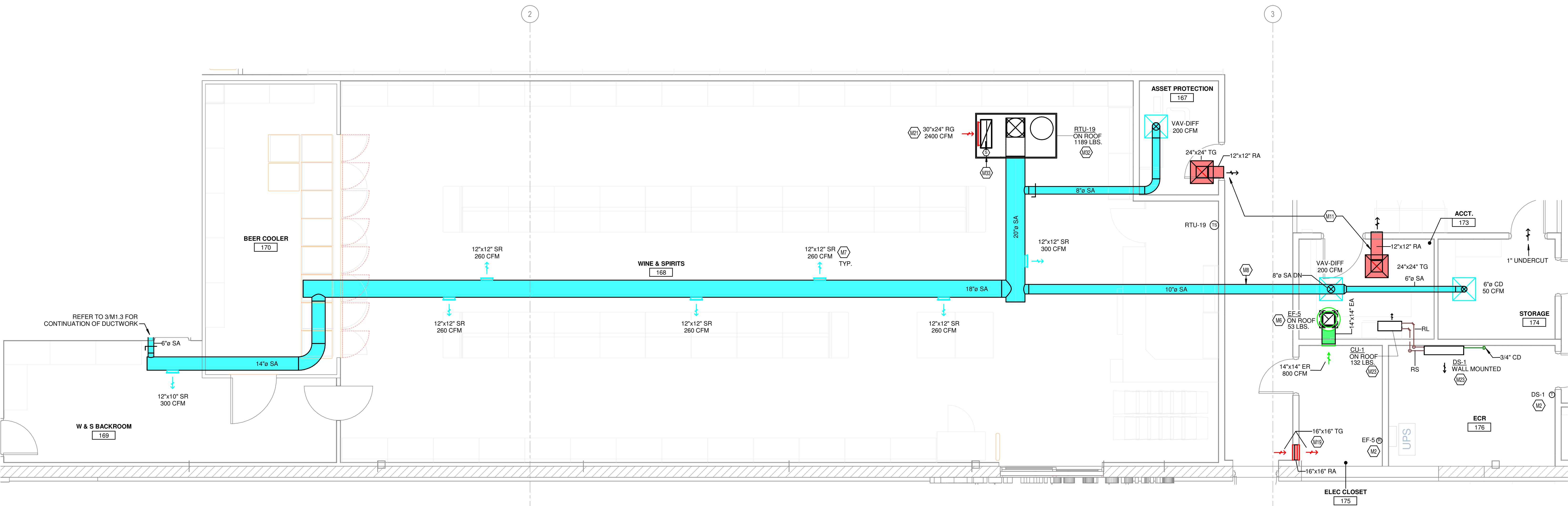
SHEET NO.
M1.3



3 HVAC ENLARGED PLAN - BACK OFFICES
1/4" = 1'-0"



2 HVAC ENLARGED PLAN - BAKERY
1/4" = 1'-0"

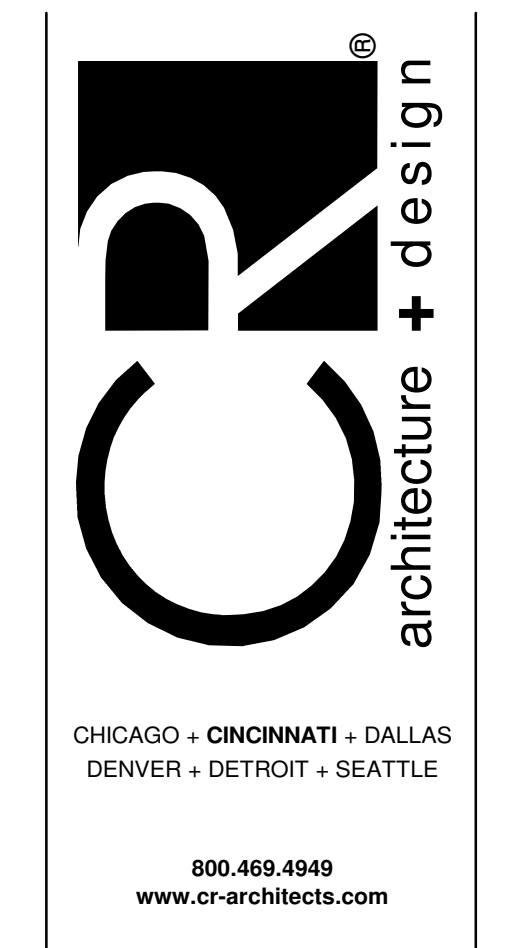


1 HVAC ENLARGED PLAN - CUSTOMER SERVICE
1/4" = 1'-0"

- KEYED NOTES**
- M1 CONTRACTOR TO REFER TO HSD-3 FOR DUCTWORK INSTALLATION INFORMATION. TYPICAL.
 - M2 THERMOSTAT TO BE MOUNTED A MINIMUM OF 4'-0" AFF. PROVIDE LOCKABLE PROTECTIVE COVER OVER DEVICE.
 - M5 DUCT UP TO OPENING THROUGH ROOF CAPPED WITH CURB AND KROGER FURNISHED EXHAUST FAN.
 - M6 DUCT UP TO OPENING THRU ROOF. CONTRACTOR TO PROVIDE REVERSE ACTING THERMOSTAT FOR FAN. FAN TO ENERGIZE WHEN ROOM REACHES 50 DEGF.
 - M7 SIDEWALL DIFFUSERS TO BE INSTALLED AT 45 DEGREES DOWNWARD. REFER TO 233713.00-02 ON M5.2 FOR INSTALLATION INFORMATION.
 - M8 DUCTWORK TO BE HELD TIGHT TO STRUCTURE.
 - M9 B-VENT DUCT UP FROM RACK OVEN VENT COLLAR THROUGH ROOF. DUCTS ARE ONLY TO OFFSET ABOVE ACT TILES. DUCTS ARE TO BE RUN STRAIGHT AND VERTICAL WHEN VISIBLE TO SALES FLOOR. REFER TO DETAIL HSD-7 FOR ADDITIONAL INFORMATION.
 - M11 RETURN AIR GRILLE IN SIDE OF DUCT DROP, TITUS SOF WITH 1 INCH OPENINGS OR APPROVED EQUAL.
 - M12 KROGER FURNISHED SPLIT SYSTEM PROVIDED WITH LOW AMBIENT KIT AND WIND BATTERIES. MOUNT PER MANUFACTURERS RECOMMENDATIONS. ROUTE REFRIGERANT LINES THROUGH ROOF TO CONDENSING UNIT PER MANUFACTURERS GUIDELINES. ROUTE INSULATED CONDENSATE TO HUB DRAIN IN AREA. COORDINATE ORDERING OF REFRIGERANT LINES WITH OWNERS PROJECT MANAGER. REFERENCE HSD-11, SHEET M0.1 FOR ADDITIONAL INFORMATION. DS-1 TO BE MOUNTED ON WALL A MINIMUM OF 7'-0" AFF.
 - M13 INSTALL RETURN IN ACCORDANCE WITH 233713.00-19 ON M5.2.
 - M14 ROOFTOP UNIT FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. BALANCE TO SCHEDULED AIRFLOW. REFER TO ARCHITECTURAL ROOF PLAN FOR HVAC ROOFTOP DIMENSIONAL INFORMATION. REFER TO STRUCTURAL DRAWINGS FOR JOIST AND BEAM LOCATIONS AND DIMENSIONAL INFORMATION. REFER TO HSD-10 FOR SEISMIC WIND RESISTANCE INFORMATION.
 - M15 DUCT MOUNTED SMOKE DETECTOR TO BE INSTALLED IN THE RETURN DUCTWORK. DOWNSTREAM OF FILTERS AND UPSTREAM OF ANY BRANCH CONNECTIONS. INSTALL SAMPLING TUBES(S) AND DETECTOR HOUSING IN STRICT ACCORDANCE WITH MANUFACTURERS INSTALLATION INSTRUCTIONS. DETECTOR, FAN SHUTDOWN WIRING, AND CONTROLS BY OTHERS.

NOTE TO CONTRACTOR

A. CONTRACTOR TO VERIFY THE NECESSARY SIZES OF SUPPLY AND RETURN DUCT DROPS FROM ROOFTOP UNITS PRIOR TO ORDERING SHEET METAL. CONFIRM SIZES WITH APPROVED RTU SUBMITTAL. CONFIRM WITH OWNER THAT THE RTU LOCATIONS SHOWN WILL ALLOW BOTH THE SUPPLY AND RETURN DUCT DROPS TO FALL WITHIN SAME TWO STRUCTURAL JOISTS. REFER TO STRUCTURAL AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONS. CONTACT ENGINEER IMMEDIATELY WITH ANY DISCREPANCIES.



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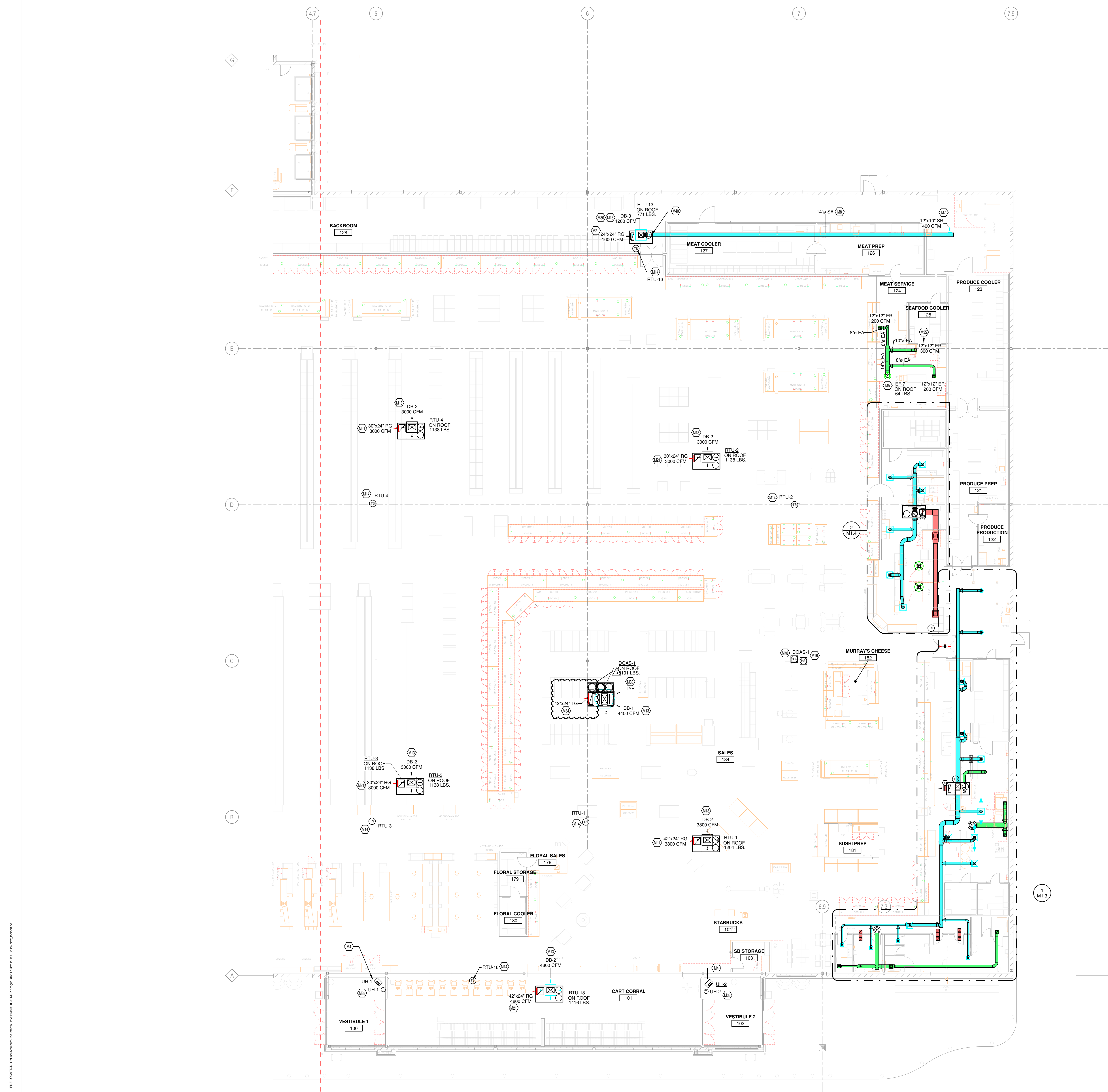
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PROJECT TITLE
**KROGER STORE
L365**

265 + BEULAH CHURCH RD.
LOUISVILLE, KY 40291

COMMISSION NO. 524322
ISSUE DATE 08/01/2024
SHEET TITLE
HVAC ENLARGED PLANS

SHEET NO.
M1.4

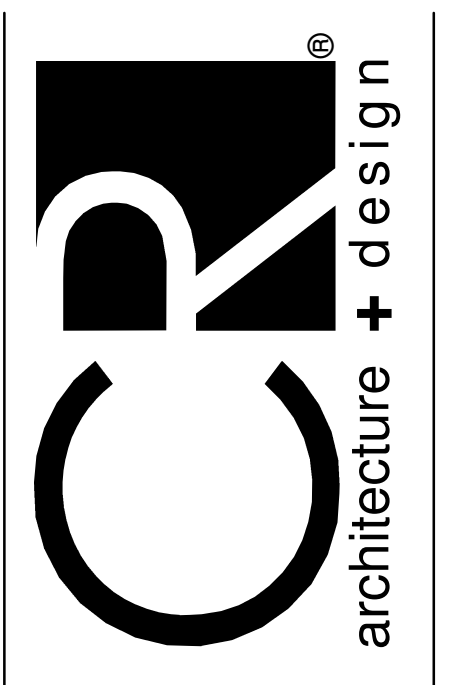


KEYED NOTES

- M4 SUSPEND ELECTRIC HEATER USING THREADED ROD TO UNISTRUT CHANNEL OR APPROVED EQUAL. MOUNT 18\"/>
- M5 DUCT UP TO OPENING THROUGH ROOF CAPPED WITH CURB AND KROGER FURNISHED EXHAUST FAN.
- M7 SIDEWALL DIFFUSERS TO BE INSTALLED AT 45 DEGREES DOWNWARD. REFER TO 233713.00-02 ON M5.2 FOR INSTALLATION INFORMATION.
- M8 DUCTWORK TO BE HELD TIGHT TO STRUCTURE.
- M13 DROP BOX DIFFUSER SYSTEM. REFER TO DIFFUSER SCHEDULE FOR AFS MODEL NUMBERS AND QUANTITIES. REFER TO FLOOR PLANS FOR THROW DIRECTIONS AND AIRFLOW. REFER TO DETAIL HSD-1 FOR INSTALLATION.
- M14 TEMPERATURE SENSOR FOR RTU FURNISHED BY BUILDING CONTROL PROVIDER. ROUTE CONTROL WIRING THROUGH RTU AND BACK TO BUILDING CONTROL PANEL.
- M16 HUMIDITY/TEMPERATURE SENSOR FURNISHED BY BUILDING CONTROLS PROVIDER. INSTALL PROBE AT 7'-0\"/>

NOTE TO CONTRACTOR

A. CONTRACTOR TO VERIFY THE NECESSARY SIZES OF SUPPLY AND RETURN DUCT DROPS FROM ROOFTOP UNITS PRIOR TO ORDERING SHEET METAL. CONFIRM SIZES WITH APPROVED RTU SUBMITTAL. CONFIRM WITH OWNER THAT THE RTU LOCATIONS SHOWN WILL ALLOW BOTH THE SUPPLY AND RETURN DUCT DROPS TO FALL WITHIN SAME TWO STRUCTURAL JOISTS. REFER TO STRUCTURAL AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONS. CONTACT ENGINEER IMMEDIATELY WITH ANY DISCREPANCIES.



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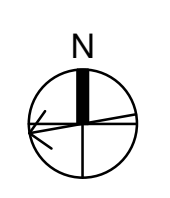
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HVAC FLOOR PLAN - RIGHT

SHEET NO.
M1.1b

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1 HVAC FLOOR PLAN - RIGHT
3/32" = 1'-0"



KEYED NOTES

M1 REFER TO SHEETS M3.1.1 - M3.1.3 FOR INFORMATION REGARDING DOAS UNITS AND INSTALL PER MANUFACTURER'S INSTALLATION DETAILS AND RESTRICTIONS.

M20 ROOF HATCH

M23 KROGER FURNISHED SPLIT SYSTEM PROVIDED WITH LOW AMBIENT KIT AND WIND Baffles. MOUNT PER MANUFACTURER'S RECOMMENDATIONS. ROUTE REFRIGERANT LINES THROUGH ROOF TO CONDENSING UNIT PER MANUFACTURER'S GUIDELINES. ROUTE INSULATED CONDENSATE TO HUB DRAIN IN AREA. COORDINATE ORDERING OF REFRIGERANT LINES WITH OWNER'S PROJECT MANAGER. REFERENCE HSD-1, SHEET M0.1 FOR ADDITIONAL INFORMATION. DS-1 TO BE MOUNTED ON WALL A MINIMUM OF 7'-0" AFF. ADJACENT BUILDINGS, AND PROPERTY LINES.

M28 INSTALL EQUIPMENT A MINIMUM OF 10 FEET FROM BUILDING EDGE, ADJACENT BUILDINGS, AND PROPERTY LINES.

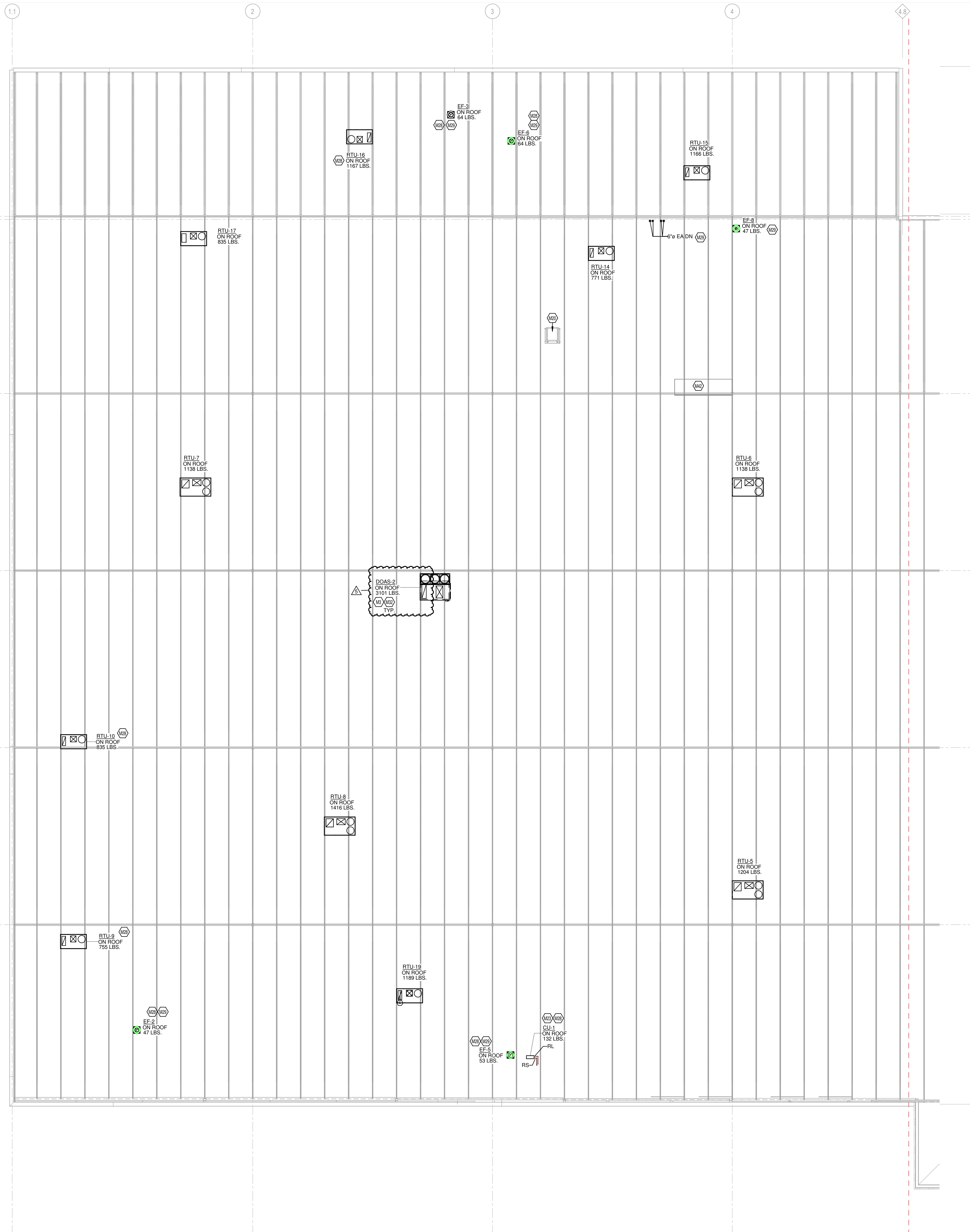
M29 INSTALL FLUES AND EXHAUST FANS A MINIMUM OF 10 FEET FROM OUTSIDE AIR INTAKES OF ROOFTOP UNITS.

M32 ROOFTOP UNIT FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. BALANCE TO SCHEDULED AIRFLOW. REFER TO ARCHITECTURAL ROOF PLAN FOR HVAC ROOFTOP DIMENSIONAL INFORMATION. REFER TO STRUCTURAL DRAWINGS FOR JOIST AND BEAM LOCATIONS AND DIMENSIONAL INFORMATION. REFER TO HSD-10 FOR SEISMIC WIND RESISTANCE INFORMATION.

M42 ROOF MOUNTED REFRIGERATION CONDENSER SHOWN FOR COORDINATION PURPOSES.

NOTE TO CONTRACTOR

A. CONTRACTOR TO VERIFY THE NECESSARY SIZES OF SUPPLY AND RETURN DUCT DROPS FROM ROOFTOP UNITS PRIOR TO ORDERING SHEET METAL. CONFIRM SIZES WITH APPROVED RTU SUBMITTAL. CONFIRM WITH OWNER THAT THE RTU LOCATIONS SHOWN WILL ALLOW BOTH THE SUPPLY AND RETURN DUCT DROPS TO FALL WITHIN SAME TWO STRUCTURAL JOISTS. REFER TO STRUCTURAL AND/OR ARCHITECTURAL DRAWINGS FOR DIMENSIONS. CONTACT ENGINEER IMMEDIATELY WITH ANY DISCREPANCIES.



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FT. THOMAS, KENTUCKY 41075
859-442-8850 FAX
859-442-8858 FAX

OWNER

Kroger

ISSUE/REVISION

DATE	DESCRIPTION
06/18/2024	90% OWNER REVIEW
08/01/2024	BID PERMIT ISSUE
3 11/13/2024	BULLETIN NO. 2
5 05/30/2025	BULLETIN NO. 6

EXECUTED BY: TDS
REVIEWED BY: NSL

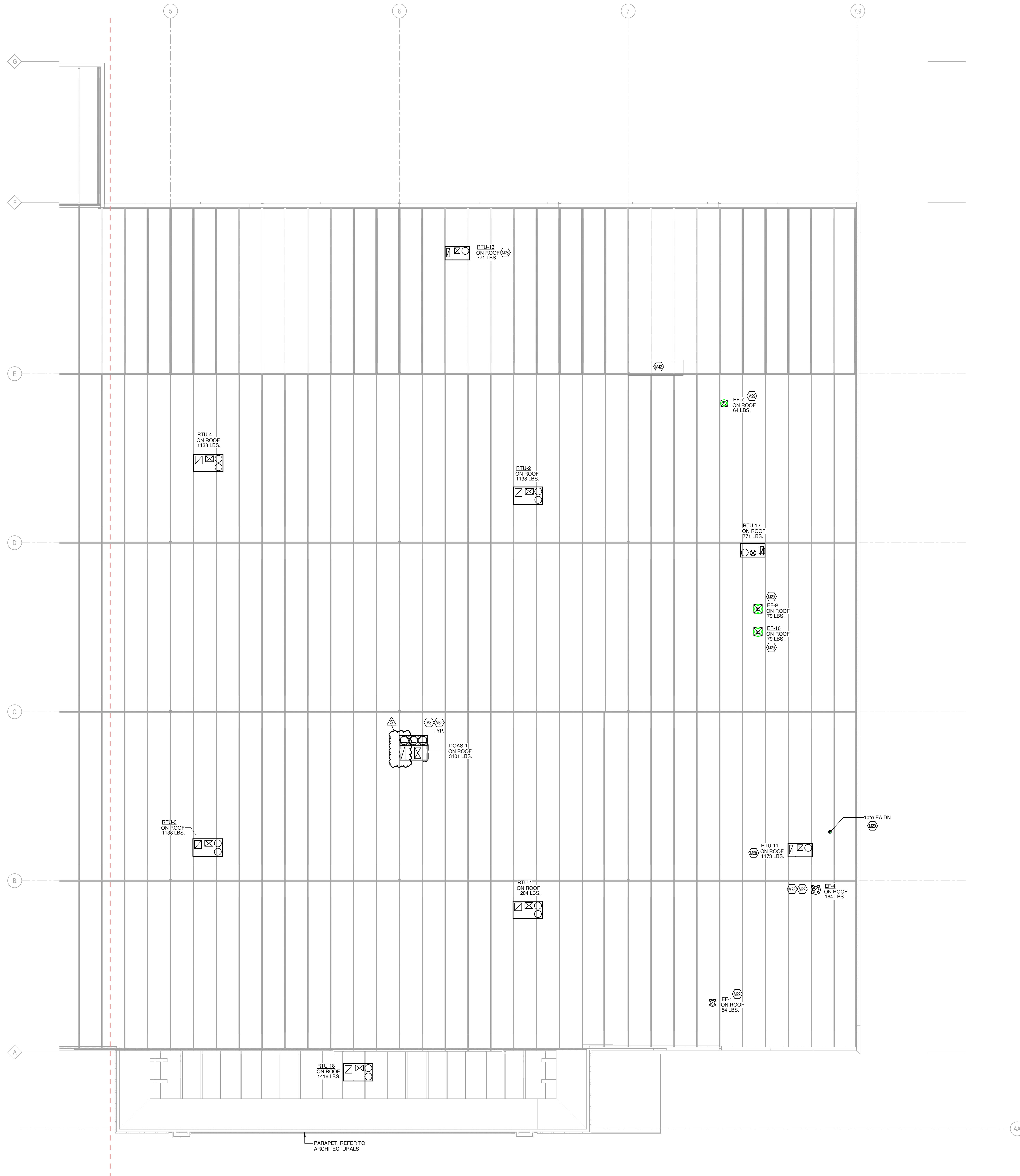
PROJECT TITLE
**KROGER STORE
L365**

265 + BEULAH CHURCH RD.
LOUISVILLE, KY 40291

COMMISSION NO. 524322
ISSUE DATE 08/01/2024
SHEET TITLE
HVAC ROOF PLAN - LEFT

SHEET NO.
M1.2a

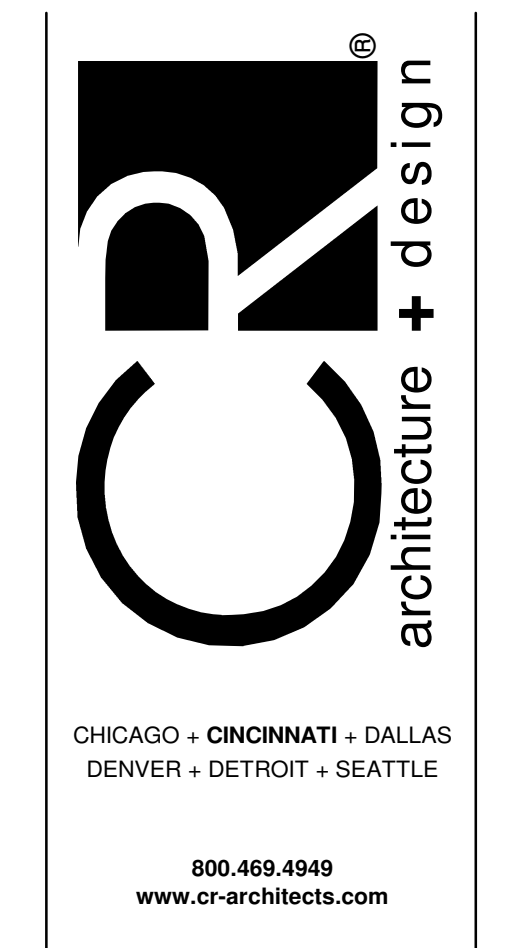
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- ### KEYED NOTES
- M3 REFER TO SHEETS M3.1.1 - M3.1.3 FOR INFORMATION REGARDING DOAS UNITS AND INSTALL PER MANUFACTURER'S INSTALLATION DETAILS AND INSTRUCTIONS.
 - M28 INSTALL EQUIPMENT A MINIMUM OF 10 FEET FROM BUILDING EDGE, ADJACENT BUILDINGS, AND PROPERTY LINES.
 - M29 INSTALL FILLES AND EXHAUST FANS A MINIMUM OF 10 FEET FROM OUTSIDE AIR INTAKES OF ROOFTOP UNITS.
 - M32 ROOFTOP UNIT FURNISHED BY KROGER AND INSTALLED BY MECHANICAL CONTRACTOR. BALANCE TO SCHEDULED AIRFLOW. REFER TO ARCHITECTURAL ROOF PLAN FOR HVAC ROOFTOP DIMENSIONAL INFORMATION. REFER TO STRUCTURAL DRAWINGS FOR JOIST AND BEAM LOCATIONS AND DIMENSIONAL INFORMATION. REFER TO HSD-10 FOR SEISMIC WIND RESISTANCE INFORMATION.
 - M42 ROOF MOUNTED REFRIGERATION CONDENSER SHOWN FOR COORDINATION PURPOSES.

NOTE TO CONTRACTOR

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EXECUTED BY: TDS
REVIEWED BY: JSL

PROJECT TITLE
KROGER STORE L365

265 + BEULAH CHURCH RD.
LOUISVILLE, KY 40291

COMMISSION NO. 524322
ISSUE DATE 08/01/2024

SHEET TITLE
HVAC ROOF PLAN - RIGHT

SHEET NO.
M1.2b

1 HVAC ROOF PLAN - RIGHT
3/32" = 1'-0"

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FAN UNIT NO.	TAG	QTY	FAN INFORMATION										ELECTRICAL INFORMATION										COOLING INFORMATION										HEAT INFORMATION										GAS HEAT INFORMATION										AIR MINIMUM ROOM VOLUME										NOTES
			DOAS/RTU MODEL #	MANUFACTURER	BLOWER	RETURN AIR CFM	MAX OUTSIDE AIR CFM	TOTAL CFM	WEIGHT (LBS)	ESP	HP	PHASE	VOLTS	NCA	MCP	OUTSIDE AIR	MOVED AIR	LEAVING AIR	DISCHARGE	DISCHARGE CAPACITY	DISCHARGE MOISTURE	DISCHARGE SAT.	DISCHARGE TYPE	INPUT RTON	OUTPUT RTON	TEMP RISE	REQUIRED INPUT GAS PRESSURE	ROOM AREA (SQ FT)	AIRFLOW (CFM)	HEIGHT (FT)																																	
1	DOAS-1	1	CAS-HVAC3-1400-02-30T	CAPTIVEARE	EEZ-3	0	4400	4400	3001	0.500	3.00	3	460	716A	80A	8847	7827	8847	7827	55.47	55.37	55.37	3596	MB	158.9	MB	14.9	5.8	75.07	66.87	69.7	MB	8046	MB	72.0	135	NATURAL	380435399772	61Y	7	IN. W.C. - 14	IN. W.C.	6668	1189	7.2	3.8,3.4,5.6,7.8,9,10,11,13,14,15,16,17,18,19,20																	
2	DOAS-2	1	CAS-HVAC3-1400-02-30T	CAPTIVEARE	EEZ-3	0	4400	4400	3001	0.500	3.00	3	460	716A	80A	8847	7827	8847	7827	55.47	55.37	55.37	3596	MB	158.9	MB	14.9	5.8	75.07	66.87	69.7	MB	8046	MB	72.0	135	NATURAL	380435399772	61Y	7	IN. W.C. - 14	IN. W.C.	6755	1216	7.2	3.8,3.4,5.6,7.8,9,10,11,13,14,15,16,17,18,19,20																	

- NOTES:**
- INVERTER SCROLL COMPRESSOR WITH INTEGRATED OIL SENSOR. DIGITAL OR STAGED SCROLL NOT AN APPROVED EQUAL.
 - DRIFT DRIVE FAN-BLOWER BELT BEVEN BLOWERS ARE NOT ACCEPTABLE.
 - INTEGRATED MONITORING VIA CELLULAR CONNECTION BY MANUFACTURER.
 - REFRIGERANT PRESSURE MONITORING IN HIGH AND LOW PRESSURE SIDE OF SYSTEM INCLUDING DIGITAL INTERFACE.
 - EC MOTOR CONDENSING FAN.
 - ELECTRIC EXPANSION VALVE. TXV NOT ACCEPTABLE.
 - SECTION LINE ACCUMULATOR.
 - FACTORY CONDENSING WITH 5 YEAR PARTS WARRANTY, 25 YEAR WARRANTY ON STAINLESS STEEL HEAT EXCHANGER.
 - 8" EXTERIOR DUAL-WALL CONSTRUCTION, V-R-13 INSULATION-MINIMUM 80GA EXTERIOR V-14GA BASE.
 - 15" EXTERIOR DUAL-WALL CONSTRUCTION WITH INSULATING ROOFER TO MINIMIZE CONDENSING. ACCESS FIRING RANGE 151 TURNDOWN WITH NG AND 121 TURNDOWN WITH LP.
 - SUPPLY CFM MONITORING INTEGRAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE.
 - FULLY INSULATING MET GAS ROOF.
 - 15 DEGREE LOW AMBIENT OPERATION.
 - 15" HALL GUARD FOR CONDENSING COIL.
 - RTU ECONOMIZER WITH DIFFERENTIAL ENTHALPY CONTROL.
 - BACKDRIFT RELIEF DAMPER.
 18. DOWN DISCHARGE/DOWN RETURN.
 19. DRIFT DRIVE EC FAN-BLOWER BELT BEVEN BLOWERS ARE NOT ACCEPTABLE.
 20. MINIMUM ROOM AREA ASSUMED 7'2" SUPPLY DIFFUSER HEIGHT AND IS CALCULATED PER UL6035-04 4TH ED. VALUES BASED ON FACTORY CHARGE. ACTUAL SITE CHARGE MAY DIFFER.

FOR QUESTIONS, CALL THE
National Accounts
REGR ID
PHONE: (919) 882 - 2410
EMAIL: reg@captivare.com

DOAS/RTU BACNET Points List - JOB#7446179

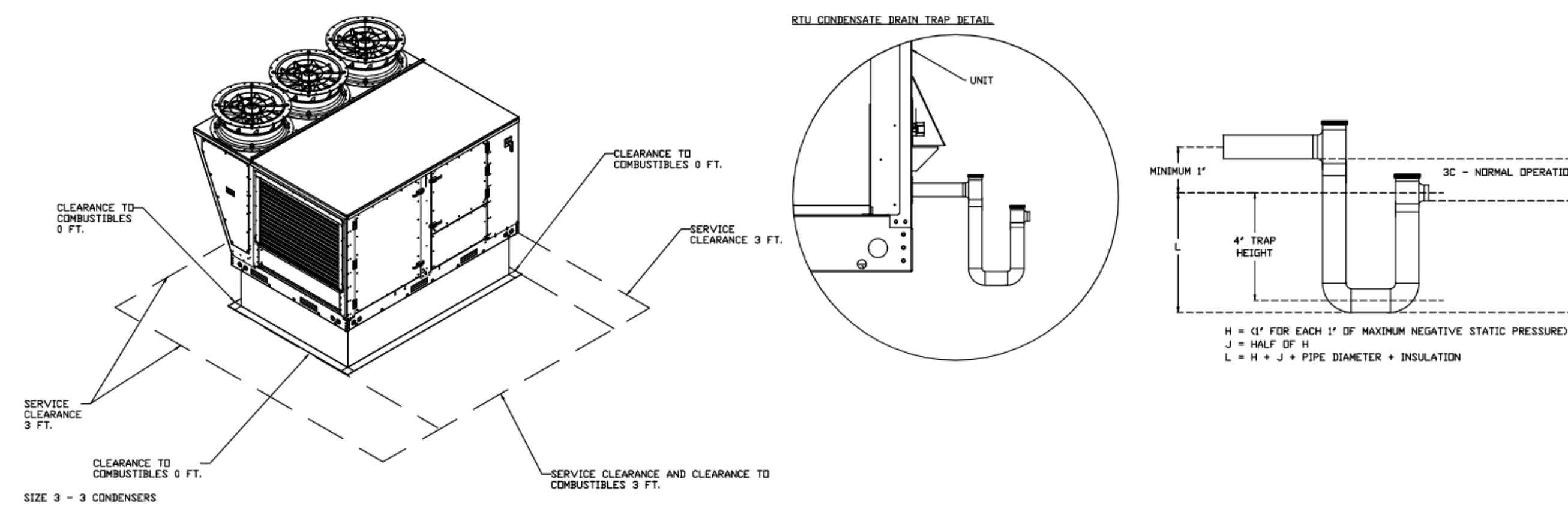
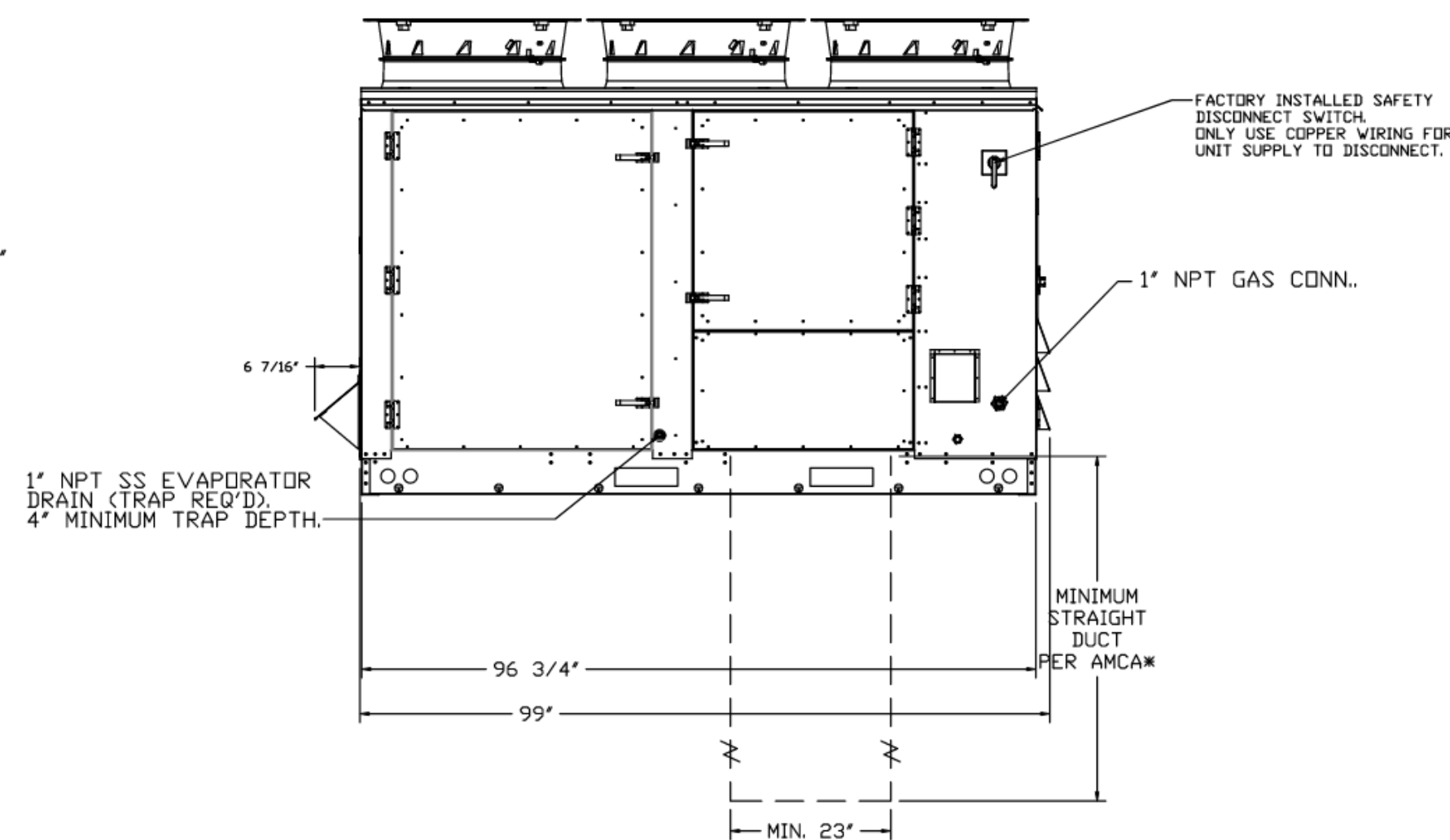
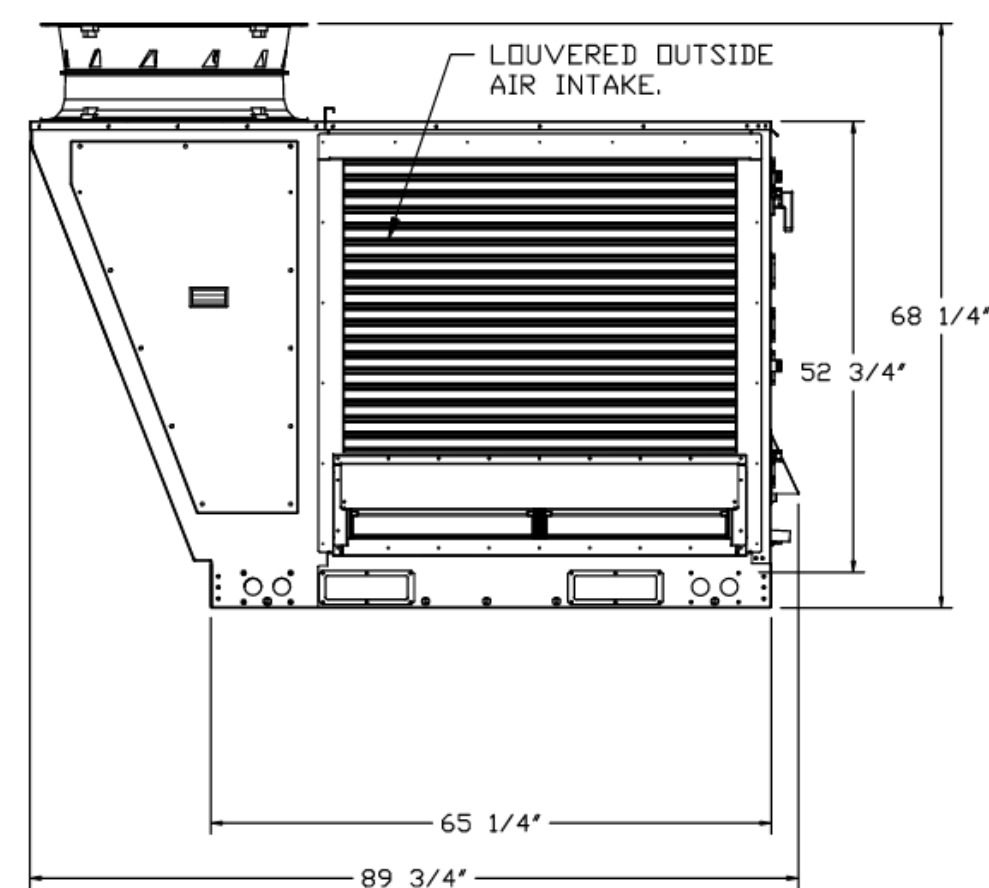
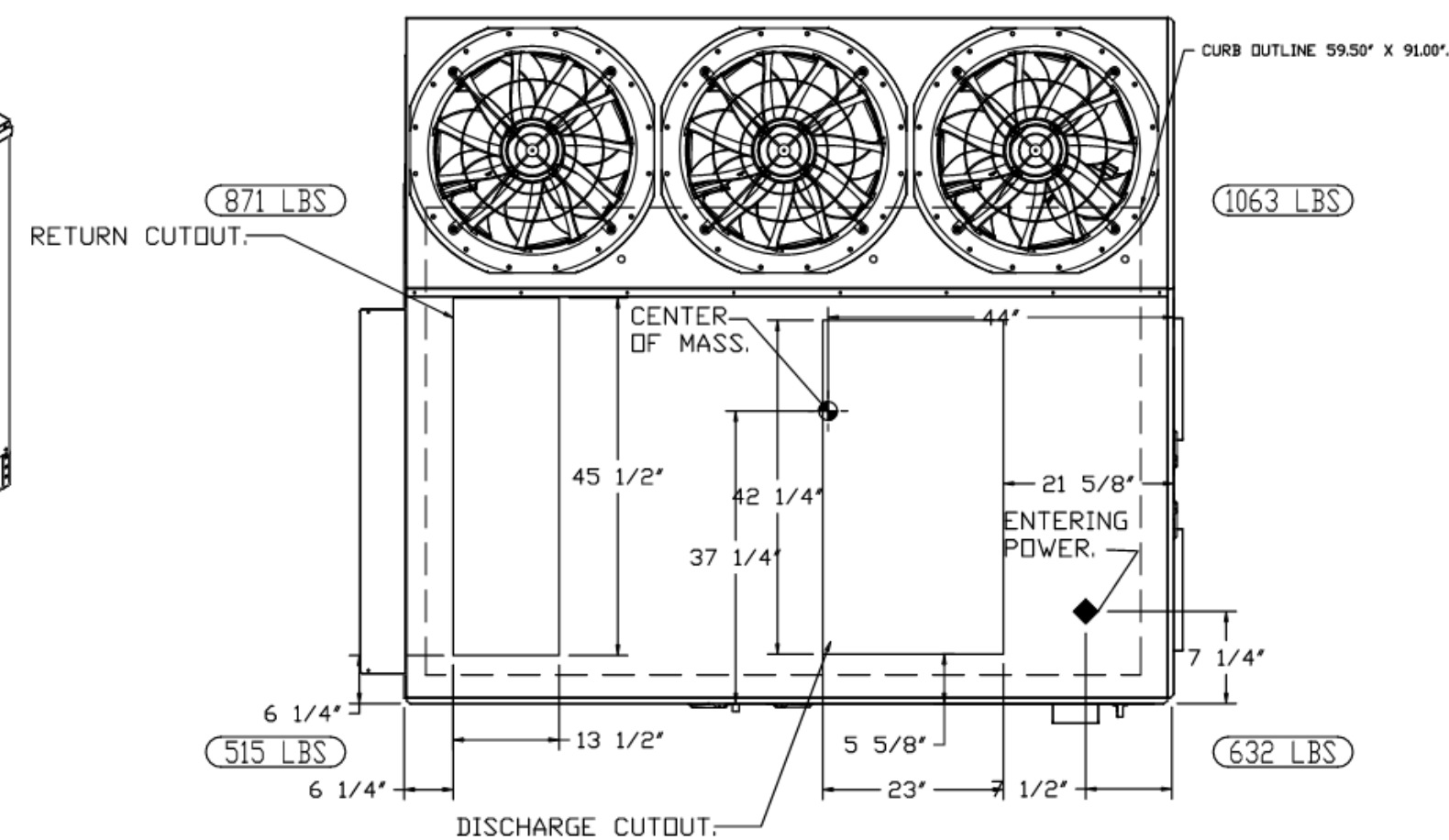
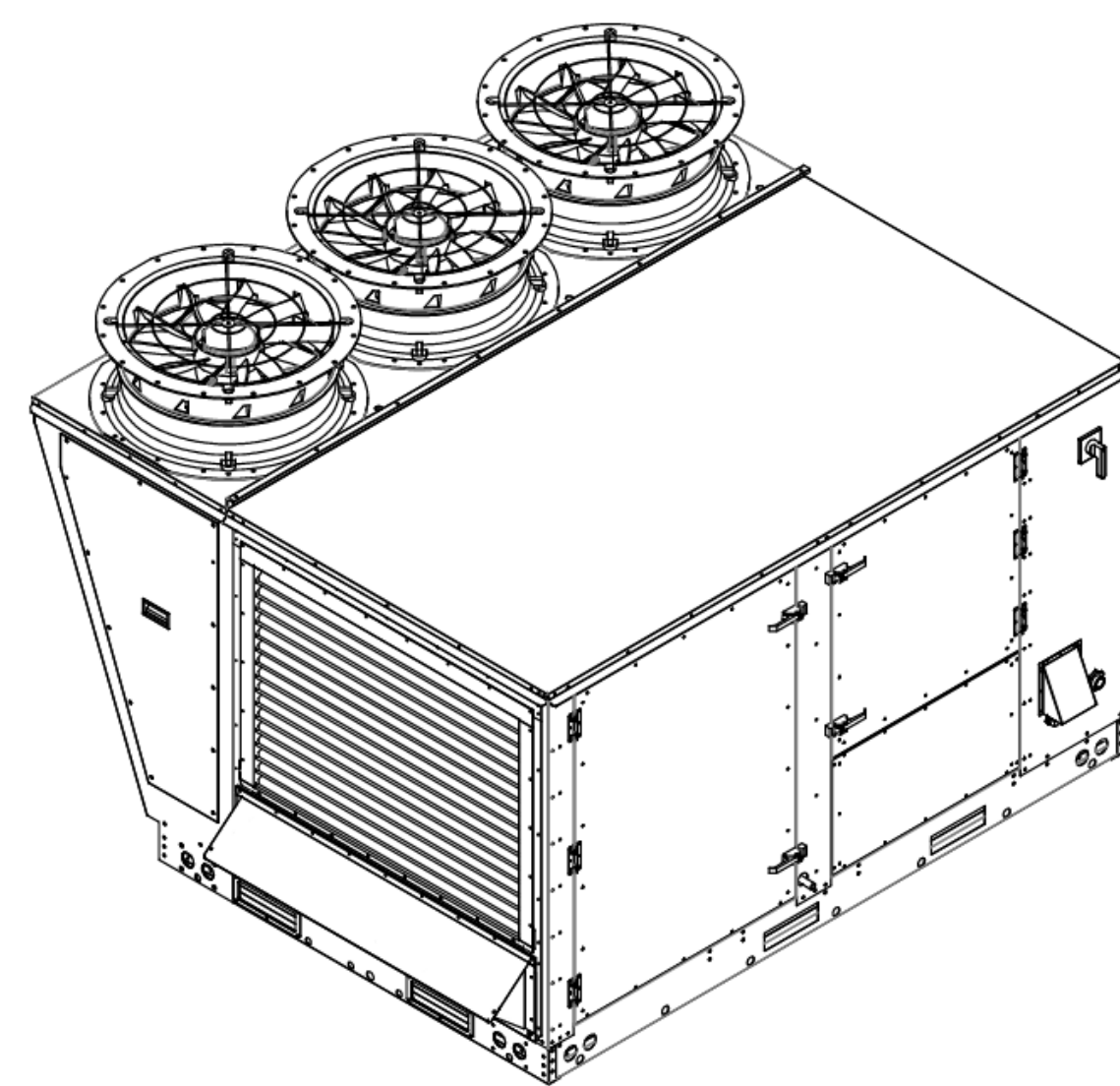
BACNET POINTS AVAILABLE FOR FAN #1 (DOAS-1), #2 (DOAS-2)										BACNET POINTS AVAILABLE FOR FAN #1 (DOAS-1), #2 (DOAS-2)										BACNET POINTS AVAILABLE FOR FAN #1 (DOAS-1), #2 (DOAS-2)									
BACNET Object	BACNET Type	BACNET ID	LON DNVT Name	Function	BACNET Object	BACNET Type	BACNET ID	LON DNVT Name	Function	BACNET Object	BACNET Type	BACNET ID	LON DNVT Name	Function	BACNET Object	BACNET Type	BACNET ID	LON DNVT Name	Function	BACNET Object	BACNET Type	BACNET ID	LON DNVT Name	Function					
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IDChas2Command	BV	2	nvIDChas2	Control/Monitor	ScheduleStart	AV	87	nvIDChas2Start	Control/Monitor	Reheat SP Adj Unocc	AV	227	nvIDChas2Unocc	Control/Monitor	IDChas3Command	BV	3	nvIDChas3	Control/Monitor	ScheduleStart	AV	88	nvIDChas3Start	Control/Monitor	Reheat SP Adj Unocc	AV	228	nvIDChas3Unocc	Control/Monitor
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FAN #1 (DDAS-1), #2 (DDAS-2) - CAS-HVAC3-1400-22-30T HEATER

NOTES:

- DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL OR OUTSIDE AIR FAN.
- DENOTES CORNER WEIGHT.
- CONNECTION FROM BREAKER TO UNITS SAFETY DISCONNECT SWITCH TO BE COPPER WIRE ONLY.
- EXTERIOR GAS CONNECTION PROVIDED BY FACTORY WITH QUICK SEAL AND ANTI-ROTATION BRACKET.

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 23" x 39".



REVISIONS

DESCRIPTION	DATE

CAPTIVE
National Accounts
4641 Paragon Park Rd., Raleigh, NC 27616 PHONE: (919) 882-2410 FAX: 9192275648 EMAIL: rsg15@captivaire.com

KROGER L365 - LOUISVILLE, KY - DDAS_R3
6745 Beulah Church Rd, TAG: PDH1422437
Louisville, KY, 40291

DATE: 5/28/2025

DWG.#:
7446179

DRAWN BY:

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

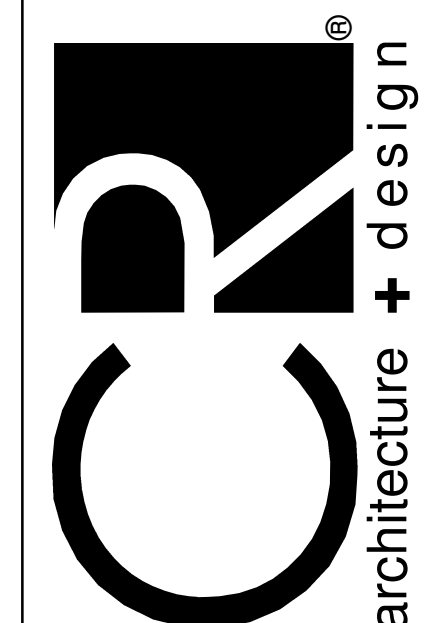
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2

15 AIR DIFFUSION SUPPLY DUCT SPECIFICATIONS:
PROVIDE AIR DIFFUSION SUPPLY DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL DW-S0(K)C, DW-S90(H)C, & DW-S180(H)C. THREE DISTINCT HOLE PATTERN OPTIONS TO COVER A VARIETY OF CEILING HEIGHTS. NO ADDITIONAL DIFFUSERS REQUIRED, AS THE DUCT ITSELF PROVIDES AIR DIFFUSION. MADE OF HIGH QUALITY STAINLESS STEEL DESIGNED TO LAST 20+ YEARS. HIGH INDUCTION SUPPLY DUCT IS CONSTRUCTED USING 24 GAUGE, 430 SS - 5' THRU 24'. HIGH INDUCTION SUPPLY DUCT IS CONSTRUCTED USING 20 GAUGE, 430 SS - 26' THRU 36'. QUICK ONSITE ASSEMBLY USING EPDM GASKETS & UNIVERSAL V-BANDS. DOUBLE WALL SUPPLY DUCT AVAILABLE FOR INTERIOR AND EXTERIOR SPACES, EITHER CONDITIONED OR UNCONDITIONED. DOUBLE WALL SUPPLY DUCT AVAILABLE IN DW-1S, DW-2S, & DW-3S TO MEET SPECIFIC REGIONAL 'R' VALUE REQUIREMENTS.

Insulation R-Value Recommendations		
Supply Duct Type	Minimum R-value	Space Type
Single Wall - S & -HC	N/A	Conditioned Space Only
Double Wall - 1S	R-4	Unconditioned Interior Space Only
Double Wall - 2S	R-8	Unconditioned Space Climate Zones 1-4
Double Wall - 3S	R-12	Unconditioned Space Climate Zones 5-8

DOUBLE WALL SUPPLY DUCT IS INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL. AIR DIFFUSION SUPPLY DUCT COMPLIES WITH SMACNA (SHEET METAL AND AIR CONDITIONING CONTRACTORS) BEST PRACTICES. POSITIONING OF SPRINKLERS TO AVOID OBSTRUCTION TO DISCHARGE, SEE NFPA 13, TABLE 8.12.5.1.1.



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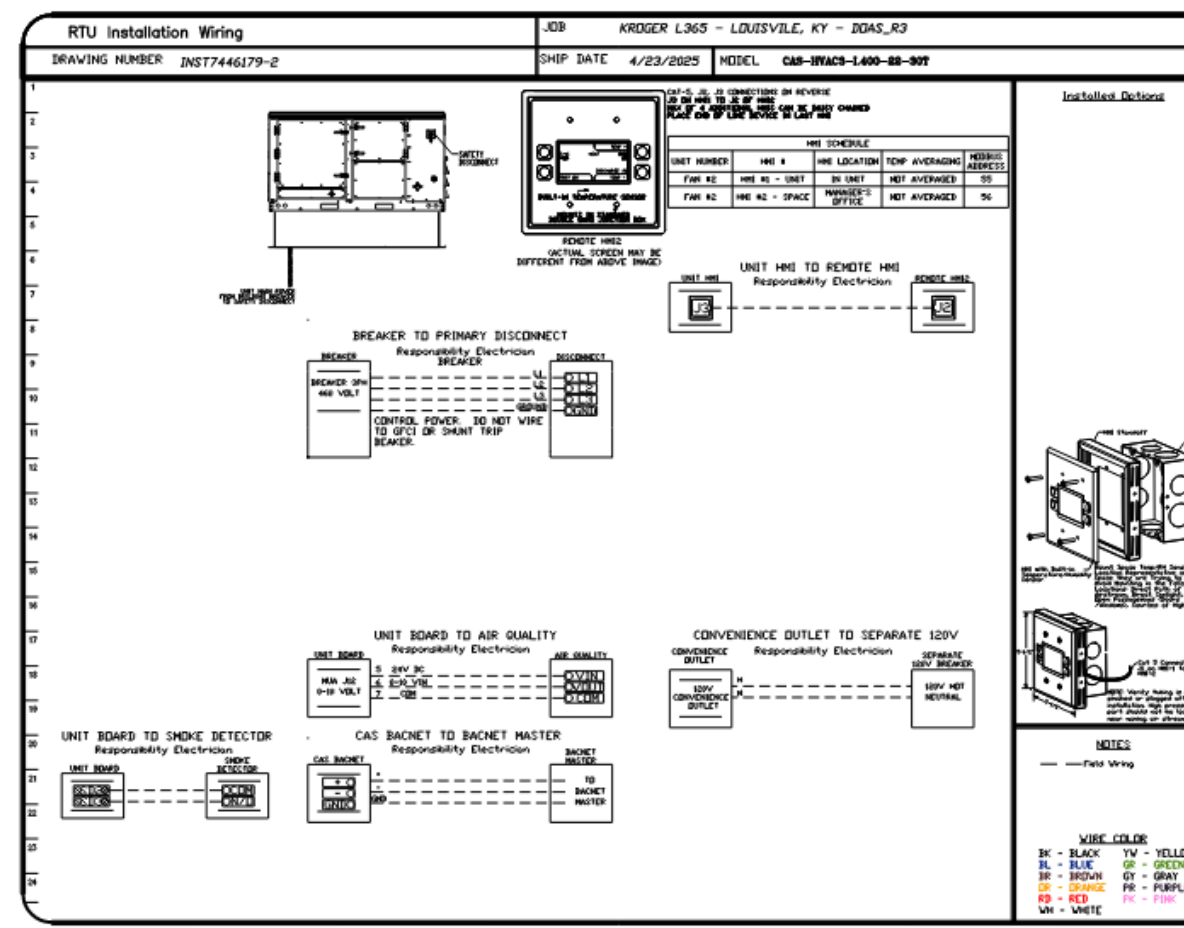
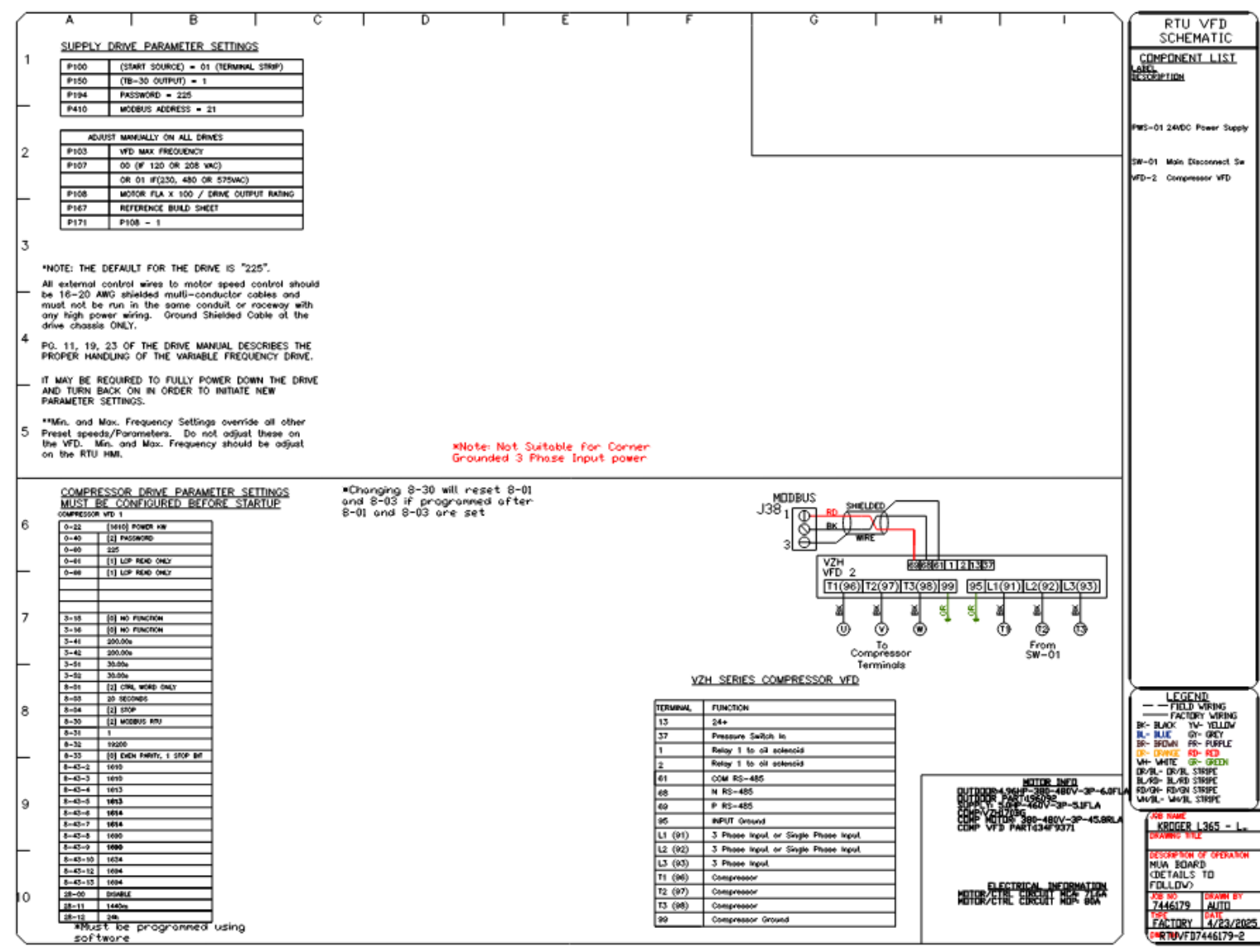
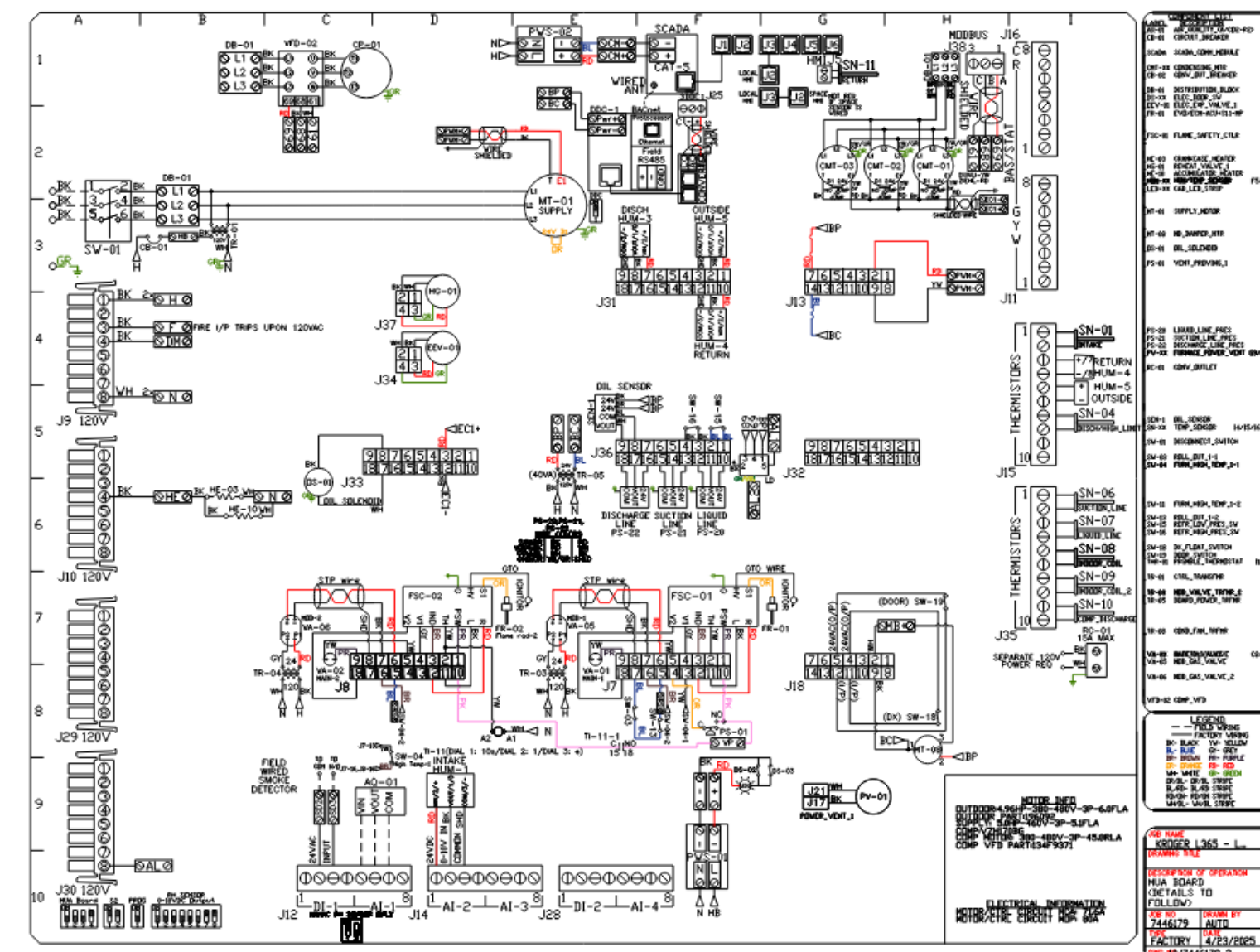
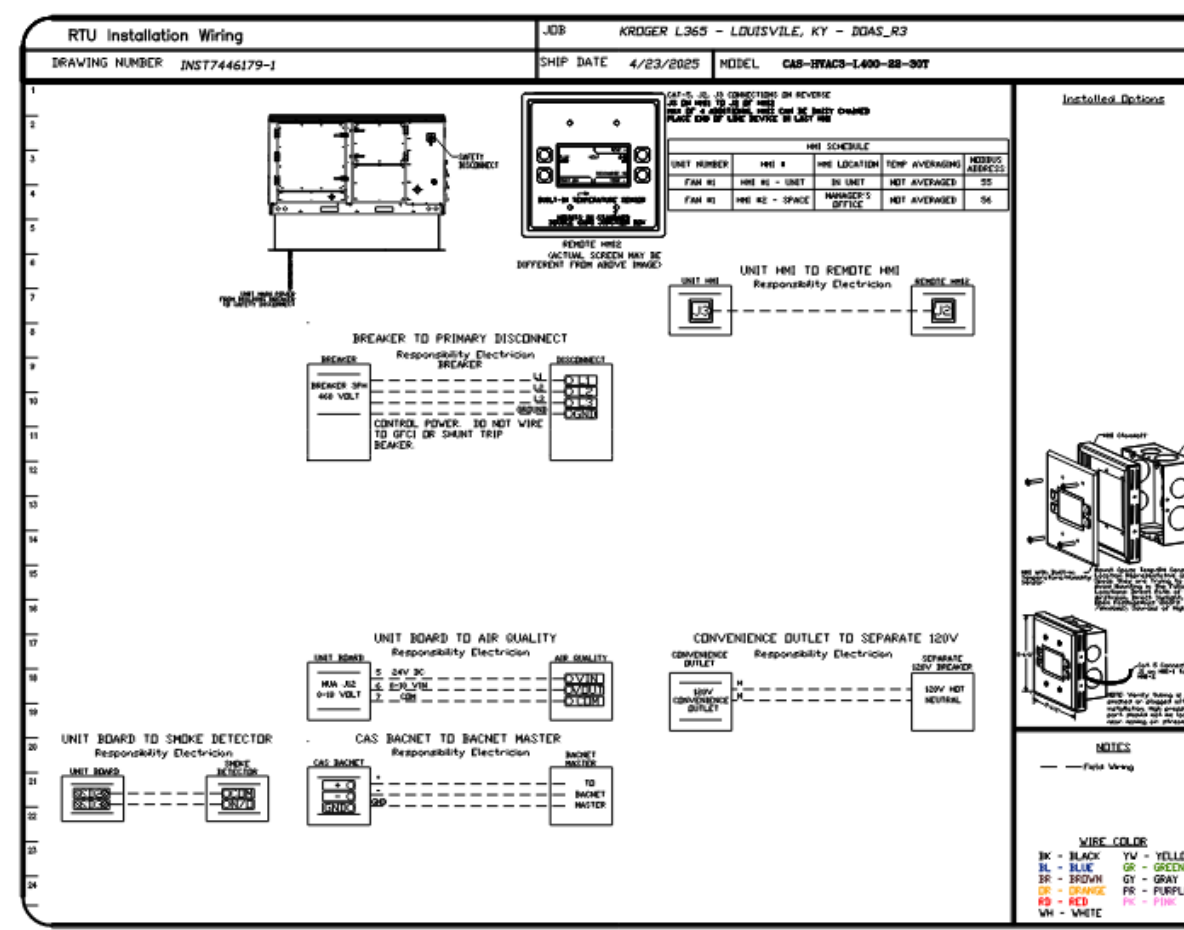
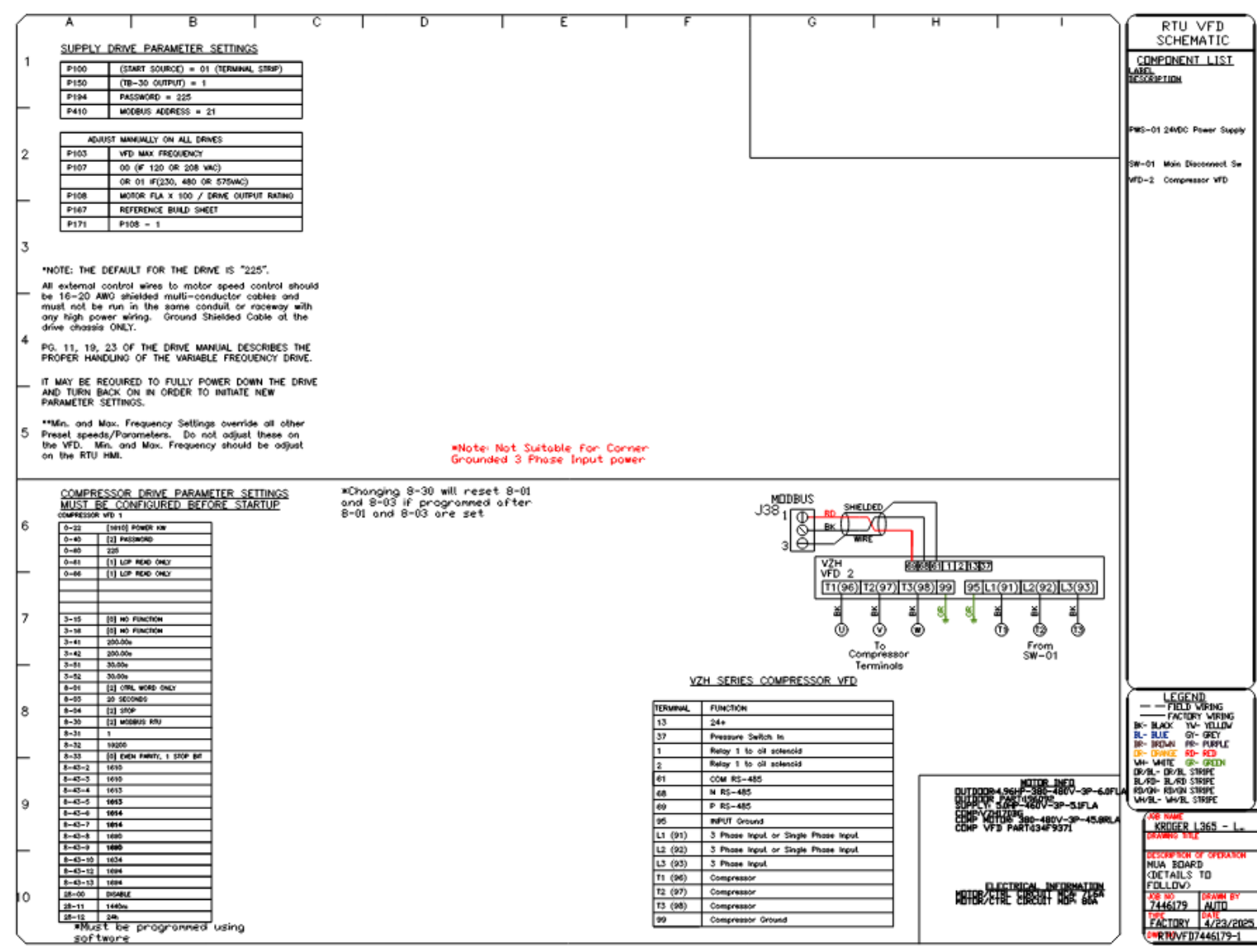
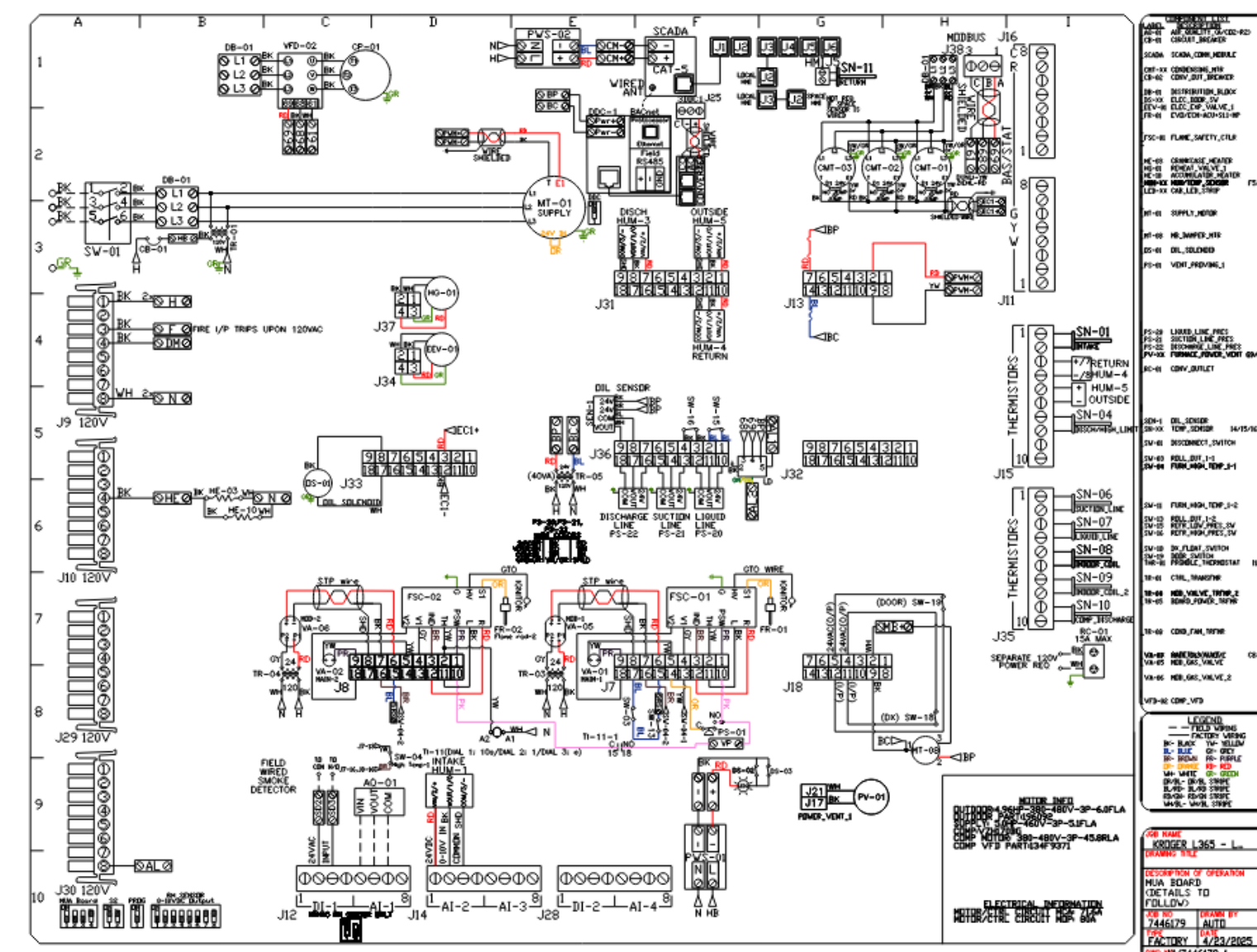
ISSUE/REVISION

DATE	DESCRIPTION
06/18/2024	90% OWNER REVIEW
08/01/2024	BID PERMIT ISSUE
5 05/30/2025	BULLETIN NO. 6

EXECUTED BY: TDS
REVIEWED BY: NSL
PROJECT TITLE
KROGER STORE
L365

265 + BEULAH CHURCH RD.
LOUISVILLE, KY 40291
COMMISSION NO. 524322
ISSUE DATE 08/01/2024
SHEET TITLE
HVAC SECTIONS AND
DETAILS

SHEET NO.
M3.1.2



SYSTEM DESIGN VERIFICATION (SDV)

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

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

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

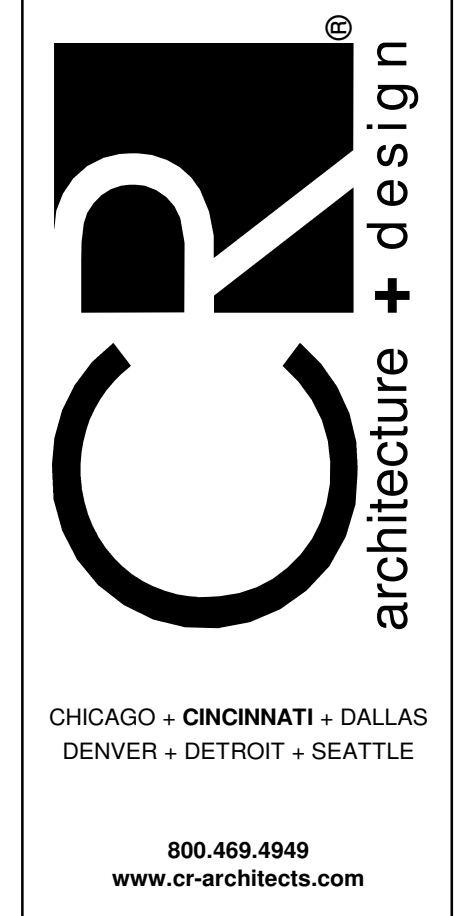
REVISIONS	
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National Accounts
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 HVAC SECTIONS AND DETAILS

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