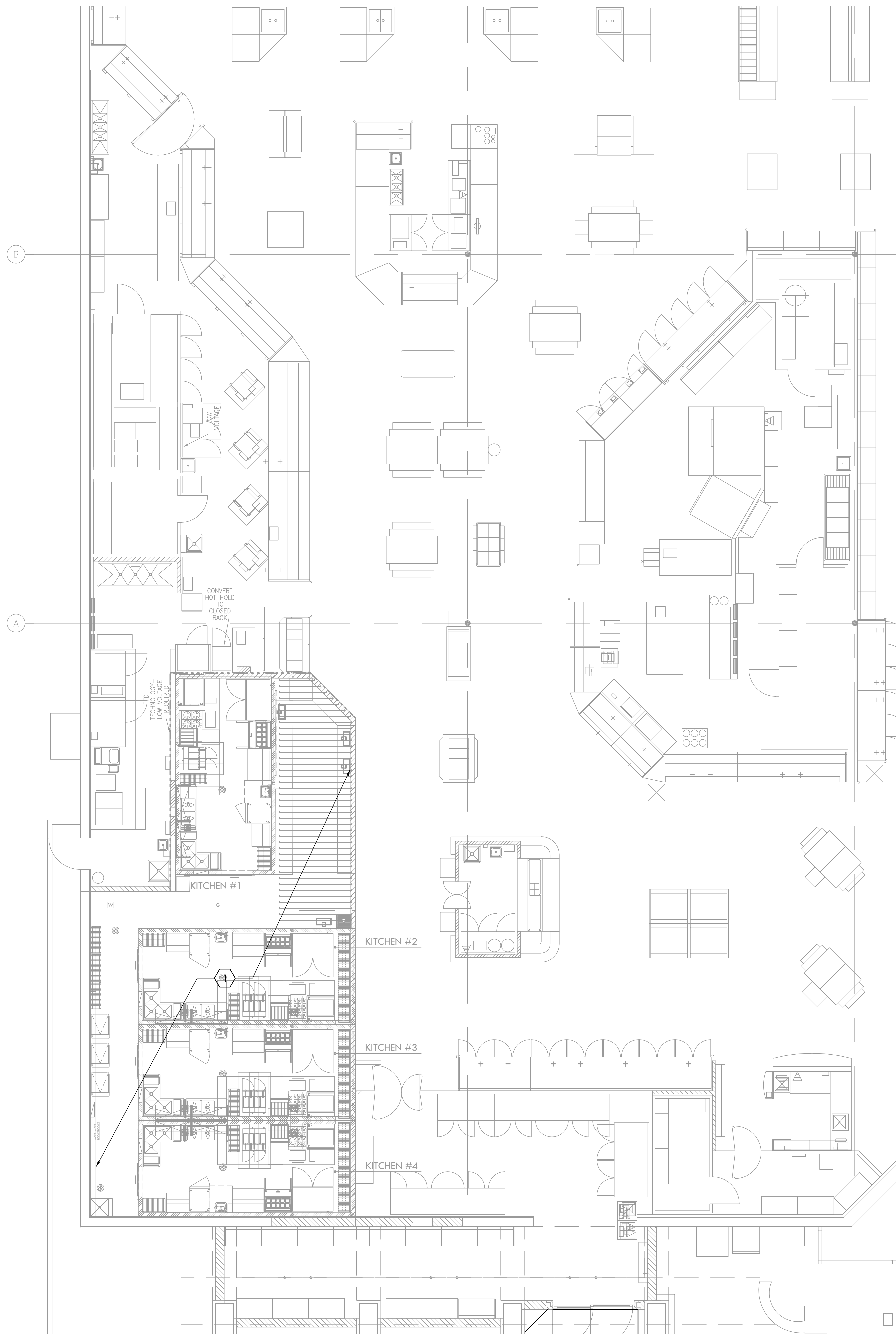




Issue Dates:	90% OWNER REVIEW SET	07.20.21
	PERMIT ISSUE SET	07.26.21



**MECHANICAL DEMOLITION NOTES**

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO AIR HANDLING UNITS, CONDENSERS, INTAKE HOODS, FANS, BMCS CONTROL PANELS, AND TEMPERATURE SENSORS.
2. COORDINATE ALL TEMPORARY SERVICE INTERRUPTIONS WITH OWNER. SCHEDULE FOR MINIMAL INTERRUPTION OF SERVICE AT OWNER'S SCHEDULED TIME.
3. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD-VERIFY ALL DIMENSIONS AND COORDINATE ALL EQUIPMENT LOCATIONS AND ROUTING OF ALL PIPING AND DUCT SYSTEMS.
4. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EXISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF THE WORK.

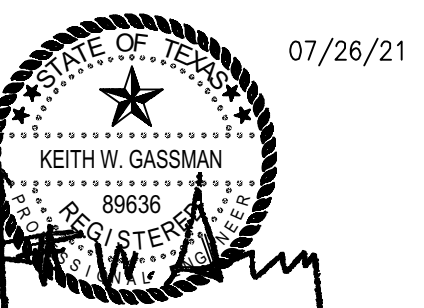
**HVAC KEYED NOTES**

- 1 REMOVE ALL EXISTING MECHANICAL EQUIPMENT AND DUCTWORK ASSOCIATED WITH PREVIOUS KITCHEN AS NECESSARY TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT.

**P/M**  
SUBJECT TO FIELD INSPECTOR'S APPROVAL

**1 HVAC DEMOLITION FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

**SALAS O'BRIEN**  
ARCHITECTURE + INTERIOR DESIGN  
106 Decker Drive, Suite 200  
Irving, Texas 75062  
972.812.1270 | Registration No. F-4111  
SOBE Project No. 2021-02183



**Heights Venture**  
ARCHITECTURE + DESIGN  
HOUSTON: 1111 North Loop West, Suite 800, Houston, Texas 77008, 713.869.1133 V.  
DALLAS: 5741 Legacy Drive, Suite 300, Plano, Texas 75024, 972.493.7292 V.

**KROGER FOOD STORE # 518 KITCHEN UNITED REMODEL**

5665 E. MOCKINGBIRD LN.  
DALLAS, TX 75206

Project Number: Phase:	211445-001	Sheet Size:	34x44
Drawn By:	AJ	Checked By:	AJ
Project Phase:			

**HVAC DEMOLITION FLOOR PLAN**

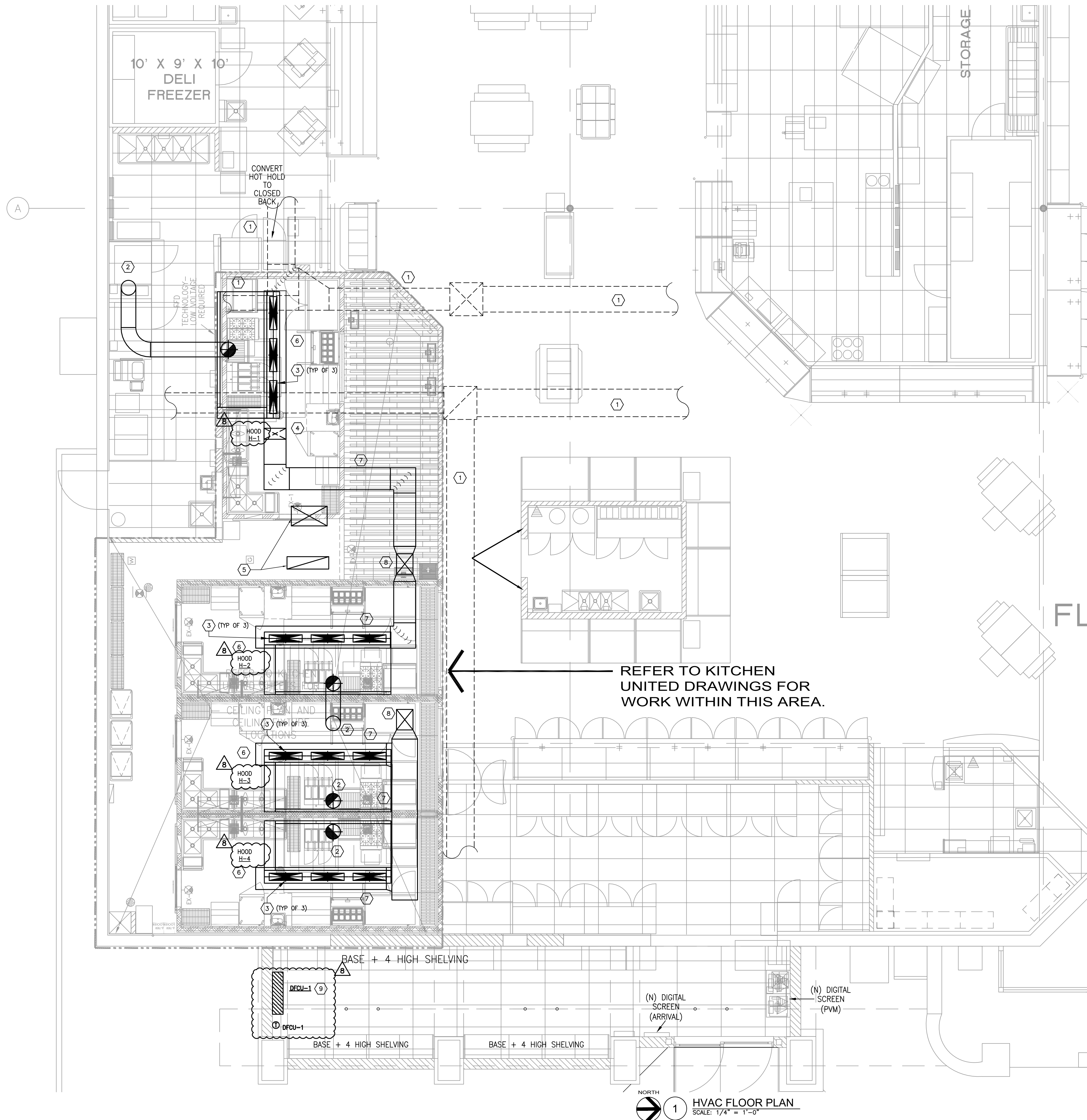
**MD1.1**



### HVAC KEYED NOTES

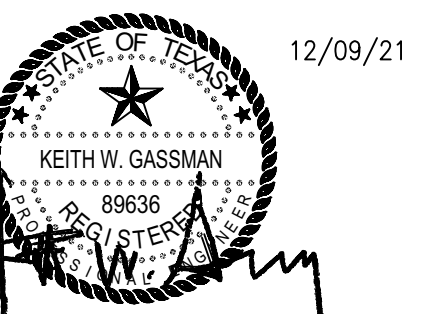
- 1 EXISTING DUCTWORK TO REMAIN.
- 2 16" GREASE DUCT UP THRU ROOF TO NEW KITCHEN EXHAUST FAN ON ROOF.
- 3 36" MAKE-UP AIR DUCTWORK DOWN WITH VOLUME DAMPER IN RISER. BALANCE PER KITCHEN UNITED VENTILATION DRAWINGS.
- 4 DROP AND OFFSET DUCTWORK TO ROUTE UNDER EXISTING ROUND DUCTWORK.
- 5 FULL SIZE DUCTWORK DOWN THRU ROOF. COVER WITH WIRE MESH.
- 6 SEE KITCHEN UNITED DRAWINGS FOR HOOD DETAILS AND SPECIFICATIONS.
- 7 COORDINATE WITH KITCHEN UNITED DRAWINGS FOR SIZING AND ROUTING OF DUCTWORK. NEW DUCTWORK PROVIDED AND INSTALLED BY CONTRACTOR.
- 8 ROUTE 22/22 DUCTS UP THROUGH ROOF TO NEW MAU'S ON ROOF. NEW DUCTWORK PROVIDED AND INSTALLED BY CONTRACTOR.
- 9 ROUTE 3/4" CONDENSATE LINE TO NEAREST APPROVED RECEPTACLE. PROVIDE ACCESSORY CONDENSATE PUMP.

Issue/Date	Description
07.20.21	90% OWNER REVIEW SET
07.26.21	PERMIT ISSUE SET
08.02.21	BID SET ISSUE
08.12.21	ADDENDUM 001
08.16.21	ADDENDUM 002
11.01.21	ADDENDUM 006
11.11.21	ADDENDUM 007 (PLAN REVISION UPDATES)
12.09.21	ADDENDUM 008 (CITY RE-SUBMITTAL)



**SALAS O'BRIEN**  
ARCHITECTURE + DESIGN

106 Decker Drive, Suite 200  
Denton, Texas 76202  
972.812.1270 | Registration No. F-4111  
SOBE Project No. 2021-02183



**Heights Venture**  
ARCHITECTURE + DESIGN

HOUSTON: 1111 North Loop West, Suite 800 | HOUSTON, TEXAS 77008 | 713.869.1030 V.  
DALLAS: 5741 Legacy Drive, Suite 300 | PLANO, TEXAS 75024 | 972.490.7262 V.

**KROGER FOOD STORE # 518 KITCHEN UNITED REMODEL**

5665 E. MOCKINGBIRD LN.  
DALLAS, TX 75206

Project Number: Phase: 21145-001 | Sheet Size: 34x44  
Date/Time Printed:

Drawn By: | Checked By: AJ  
Project Phase:

**HVAC FLOOR PLAN**

**M1.1**



Issue/Date	Description
07.20.21	90% OWNER REVIEW SET
07.28.21	PERMIT ISSUE SET
08.02.21	BID SET ISSUE
08.12.21	ADDENDUM 001
08.16.21	ADDENDUM 002
11.01.21	ADDENDUM 006
11.11.21	ADDENDUM 007 (PLAN REVISION UPDATES)
12.09.21	ADDENDUM 008 (CITY RE-SUBMITTAL)

**ADDENDUM**  
ALL ORIGINAL STAMPS & NOTES APPLY

DATE: 12/28/2021

BY: Terry Johnson

**P/M**  
SUBJECT TO FIELD INSPECTOR'S APPROVAL

ALL MECHANICAL MUST CONFORM TO DALLAS MECHANICAL CODE

ALL DUCT JOINTS EXPOSED FOR INSPECTION.

DUCTLESS MINI SPLIT DX UNIT (INDOOR)															
MARK	INDOOR AIR FAN				COOLING				ACCESSORY ELECTRIC HEATING					REMARKS	
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C.)	HORSE POWER	AIR TEMPERATURE (°F) ENTERING DRY BULB	AIR TEMPERATURE (°F) ENTERING WET BULB	MIN. TOTAL CAPACITY (BTUH)	MIN. SEER	NUMBER OF STAGES	ENTERING AIR TEMP. (°F)	MINIMUM CAPACITY (BTUH)	KW	NUMBER OF STAGES		CURRENT CHARAC.
DFCU-1	425	0	0.10	0.33 FLA	208/17/60	80.0	67.0	12,000	20.8	MOD	-	-	-	NO ACCESSORY HEATING	1,2,3,4,5,6

**GENERAL NOTES:**

- EXTERNAL STATIC PRESSURE INCLUDED LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASINGS MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET THE TOTAL PRESSURE LOSS. COORDINATE ALL ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
- MINIMUM RECOMMENDED CLEARANCE AROUND FAN COIL UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

**REMARKS:**

- REFERENCE SPECIFICATIONS FOR OPTIONS, CONTROLS, AND ACCESSORIES REQUIRED.
- REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.
- WALL MOUNTED DUCTLESS SPLIT SYSTEM BASED ON MITSUBISHI P-SERIES.
- PROVIDE WITH LOCKING MOUNT KIT.
- PROVIDE WITH CONDENSATE PUMP. PUMP REQUIRES A SEPARATE 230V POWER SOURCE.
- PROVIDE WITH WALL MOUNTED THERMOSTAT.

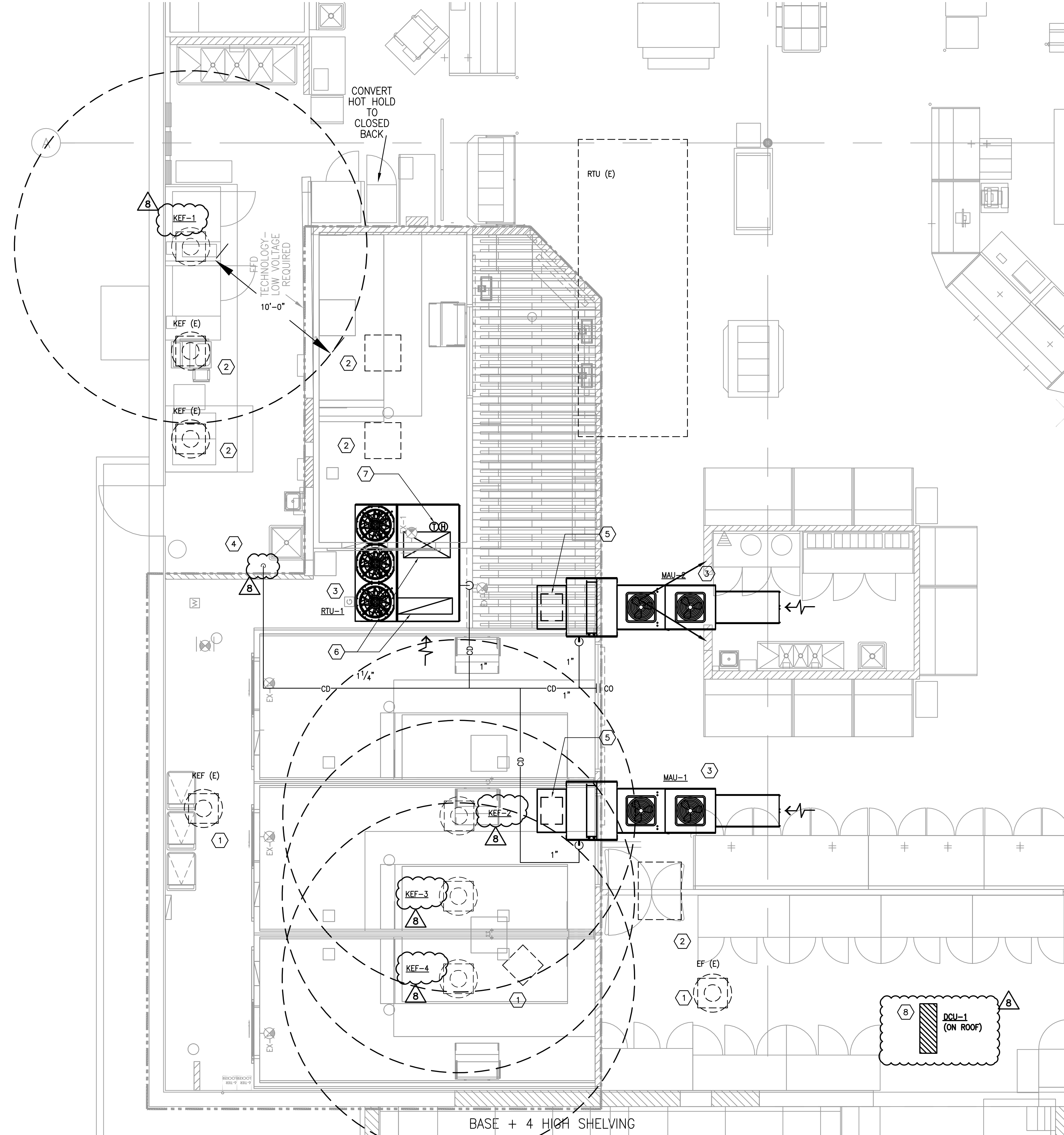
DUCTLESS MINI SPLIT DX UNIT (OUTDOOR)															
MARK	COOLING				HEATING				BASIS OF DESIGN					REMARKS	
	MIN. TOTAL CAPACITY (BTUH)	OUTDOOR AIR TEMP. (°F)	MINIMUM SEER	NUMBER OF STAGES	MIN. TOTAL CAPACITY (BTUH)	OUTDOOR AIR TEMP. (°F)	HSPF	NUMBER OF STAGES	CURRENT CHARAC.	RELATED UNIT MARK	MANUFACTURER	MODEL	MCA/MOCP		WEIGHT (LBS)
DCU-1	12,000	105	20.8	MOD	11,100	17.0	10.2	MOD	208/17/60	DFCU-1	MITSUBISHI	PUZ-A12NK	11.0/28.0	211	1,2,3

**GENERAL NOTES:**

- MINIMUM RECOMMENDED CLEARANCE AROUND CONDENSING UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE FOR CONDENSER AIR FLOW AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

**REMARKS:**

- PROVIDE WITH HAL GUARDS.
- PROVIDE WITH LOW AMBIENT CONTROLLER, CRANKCASE HEATER AND WIND BAFFLES.
- PROVIDE HEAT PUMP UNIT.



- HVAC KEYED NOTES**
- EXISTING EXHAUST FAN/MECHANICAL EQUIPMENT TO BE REMOVED/ABANDONED IN PLACE.
  - EXISTING EXHAUST FAN/MECHANICAL EQUIPMENT TO REMAIN.
  - MAINTAIN MANUFACTURER RECOMMENDED CLEARANCE AROUND EQUIPMENT. ENSURE A MINIMUM OF 10" CLEARANCE BETWEEN OUTSIDE AIR INTAKES AND ALL EXHAUST OUTLETS. RELOCATE EXISTING EQUIPMENT/GAS PIPING ON ROOF AS REQUIRED.
  - ROUTE CONDENSATE DOWN BELOW ROOF. CONDENSATE TO DRAIN TO ES-1 WITH A 1" AIR GAP.
  - ROUTE FULL SIZE SUPPLY AIR DUCTWORK DOWN THRU ROOF.
  - ROUTE FULL SIZE SUPPLY/RETURN AIR DUCTWORK DOWN THRU ROOF. COVER WITH WIRE MESH.
  - PROVIDE THERMOSTAT AND HUMIDISTAT WITH 150' OF WIRING. COIL AND LEAVE ON RETURN DUCT.
  - CONDENSER LOCATED ON ROOF. COORDINATE EXACT LOCATION WITH EXISTING ROOFTOP EQUIPMENT.

**1 HVAC ROOF PLAN**  
SCALE: 1/4" = 1'-0"

**SALAS O'BRIEN**  
ARCHITECTURE + INTERIOR DESIGN  
106 Decker Drive, Suite 200  
Denton, Texas 76202  
972.812.1270 | Registration No. F-4111  
SOBE Project No. 2021-02183

**KEITH W. GASSMAN**  
REGISTERED ARCHITECT  
NO. 98938  
12/09/21

**Heights Venture**  
ARCHITECTURE + DESIGN  
HOUSTON: 1111 North Loop West, Suite 800, Houston, Texas 77008, 713.869.1133 V.  
DALLAS: 5741 Legacy Drive, Suite 301, Plano, Texas 75024, 972.499.7292 V.

**KROGER FOOD STORE # 518 KITCHEN UNITED REMODEL**

5665 E. MOCKINGBIRD LN.  
DALLAS, TX 75206

Project Number: 21145-001  
Phase: 34x44  
Date/Time Printed:  
Drawn By:  
Checked By: AJ

HVAC ROOF PLAN

M2.1

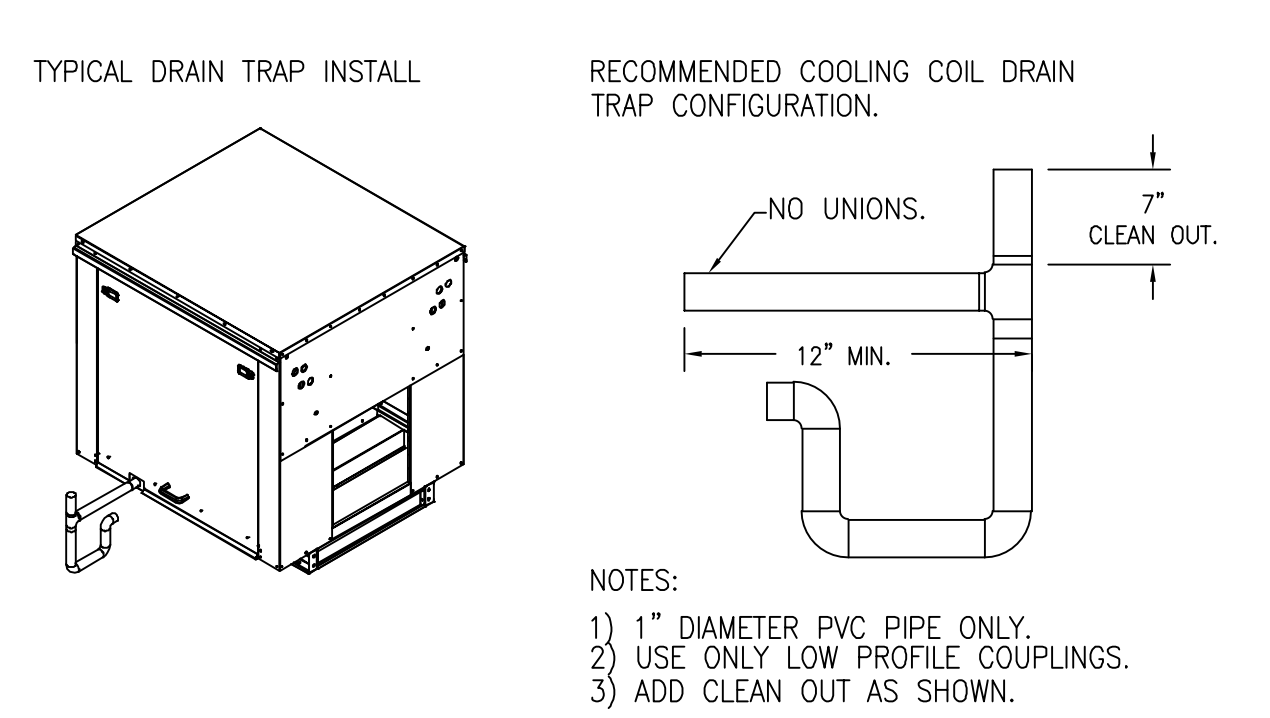
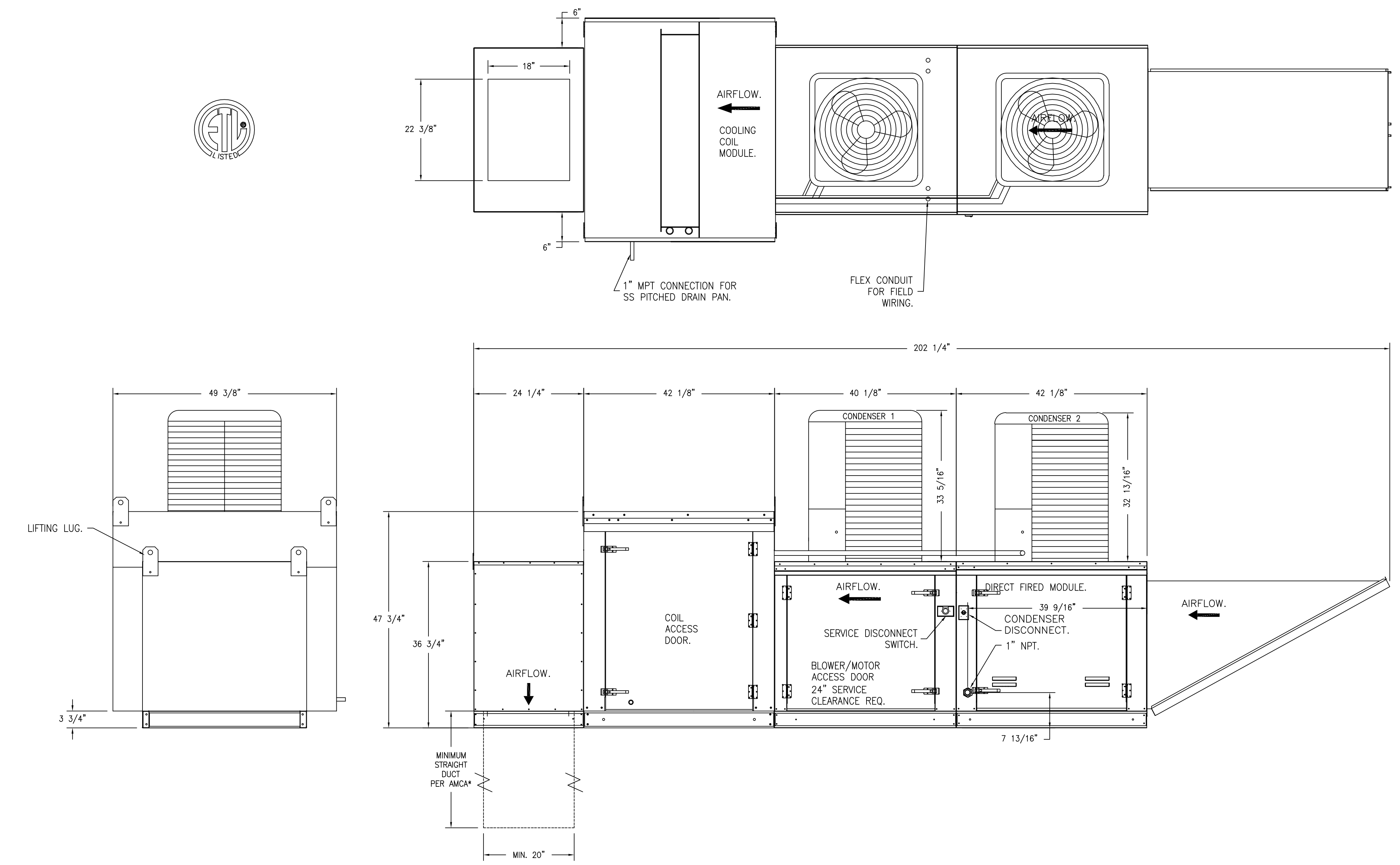




- FANS #6 (SF-1 PNET42845), #6 (SF-2 PNET42845) - A2-D.250-200-MPU HEATER
- DIRECT GAS FIRED HEATED MAKE UP AIR UNIT WITH 20" MIXED FLOW DIRECT DRIVE FAN.
  - INTAKE HOOD WITH EZ FILTERS.
  - DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
  - GAS PRESSURE GAUGE, 0-30", 2.5" DIAMETER, 1/4" THREAD SIZE.
  - GAS PRESSURE GAUGE, -5 TO +15 INCHES WC, 2.5" DIAMETER, 1/4" THREAD SIZE.
  - MOTORIZED BACK DRAFT DAMPER 22.75" X 24" FOR SIZE 2 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, LF120S ACTUATOR INCLUDED.
  - TOTAL CFM MONITORING FOR MUA UNITS, USES 1/2" - 15 PRESSURE TRANSDUCER, RIVET NUTS, 1/4" AIRFLOW TUBING AND PUSH TO CONNECT FITTINGS.
  - COOLING INTERLOCK INPUT TO PCB BOARD. LOCKS OUT BURNER CIRCUIT WHEN AC IS ENERGIZED.
  - 8 TON, DUAL CIRCUIT (3/5) MODULAR PACKAGED COOLING OPTION FOR SIZE 2 DE/EM MODULAR PACKAGED UNIT. INCLUDES CONDENSER, DX COIL, FILTER/DRIER KIT, THERMAL EXPANSION VALVE, R410A REFRIGERANT, AND REFRIGERANT PIPING. (2,000 TO 4,800 CFM) WHEN ORDERED WITH OPPOSITE AIRFLOW CONDENSERS ACCESS AND COIL PIPING WILL REMAIN IN STANDARD POSITION, DRAIN AND SLEGS WILL MOVE TO THE OPPOSITE SIDE. ANY OTHER CHANGE WILL REQUIRE CLL CONDENSERS REQUIRE SEPARATE 208V, 3 PHASE POWER SUPPLY UNLESS ORDERED WITH SINGLE POINT CONNECTION. COIL = JEZ1101D.
  - DOWNTURN PLENUM FOR SIZE 3 COOLING COIL MODULE - REQUIRED FOR DOWN DISCHARGE COOLING COIL APPLICATIONS.
  - PROFILE PLATE CONFIGURATION FOR SIZE 2 DIRECT FIRED UNIT FOR LOW CFM APPLICATIONS.
  - COMMERCIAL SMOKE DETECTOR INTERLOCK (DETECTOR BY OTHERS).
  - SINGLE POINT MPU CONNECTION, 2 CONDENSERS.
  - UNIT MOUNTED VFD FOR USE WITH ECPM03.
  - HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER/MPU SECTION).
  - 2 YEAR PARTS WARRANTY.

SUPPLY SIDE HEATER INFORMATION:  
 WINTER TEMPERATURE = 27F. TEMP. RISE = 48F.  
 BTUs CALCULATED OFF ACTUAL AIR DENSITY.  
 OUTPUT BTUs AT ALTITUDE OF 0.0 FT. = 186096.  
 INPUT BTUs AT ALTITUDE OF 0.0 FT. = 204452.  
 OUTPUT BTUs AT ALTITUDE OF 575 FT. = 184221.  
 INPUT BTUs AT ALTITUDE OF 575 FT. = 200240.

\*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".



**P/M**  
 SUBJECT TO FIELD INSPECTOR'S APPROVAL

**REVISIONS**

DESCRIPTION	DATE
Δ	
Δ	
Δ	
Δ	

**CAPTIVE**  
 National Accounts  
 4641 Paragon Park Rd., Raleigh, NC 27616 PHONE: (919) 862-2410 FAX: (919) 227-5988 EMAIL: nra15@captiveair.com

KROGER 518 DALLAS TX - Kitchen United  
 5665 E MOCKINGBIRD LANE, TAG: PO# 00301117  
 DALLAS, TX, 75206

DATE: 7/26/2021  
 DWG.#: 4986783  
 DRAWN BY: JAC  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

SHEET NO. 2

**SALAS O'BRIEN**  
 (Specialty & Reference)  
 106 Decker Drive, Suite 200  
 Irving, Texas 75062  
 972.812.1270 Registration No. F-4111  
 SOBE Project No. 2021-02183

07/26/21  
 KEITH W. GASSMAN  
 89636

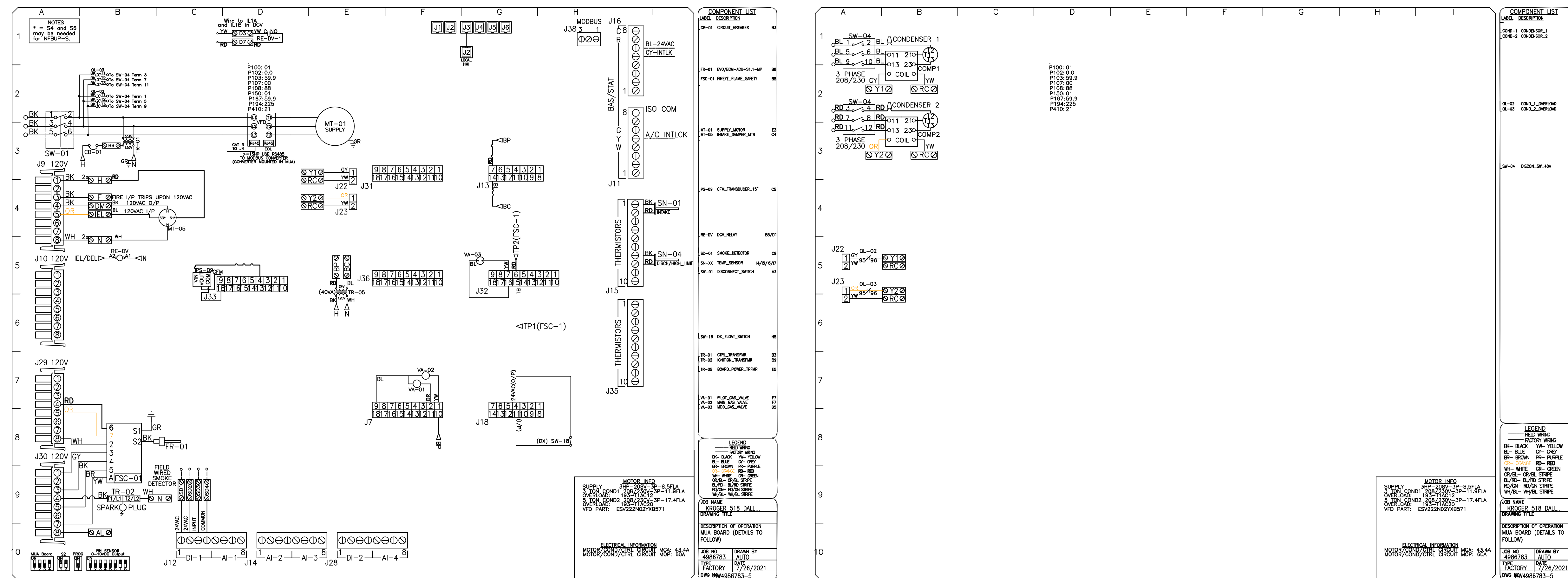
**Heights Venture**  
 ARCHITECTURE + DESIGN  
 HOUSTON 1111 North Loop West, Suite 800 Houston, Texas 77008 713.869.1103 V.  
 DALLAS 5741 Legacy Drive, Suite 300 Plano, Texas 75024 972.493.7292 V.

**KROGER FOOD STORE # 518 KITCHEN UNITED REMODEL**

5665 E. MOCKINGBIRD LN. DALLAS, TX 75206  
 Project Number: Phase: Sheet Size: 21145-001 34x44  
 Date/Time Plotted:  
 Drawn By: Checked By: Project Phase: AJ

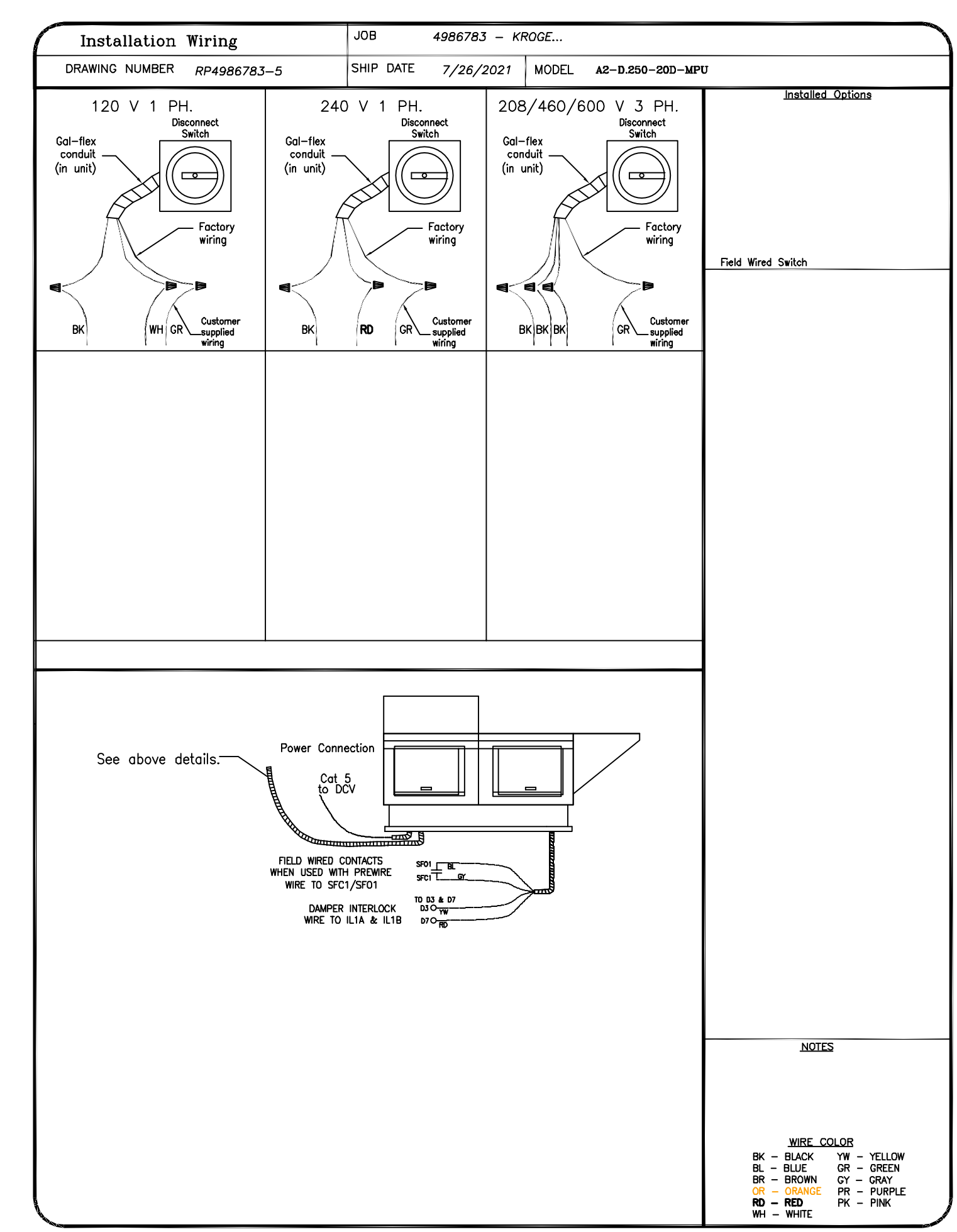
**MAKE UP AIR UNIT DETAILS**

**M4.1**  
 © COPYRIGHT 2021 HEIGHTS VENTURE



REVISIONS	
DESCRIPTION	DATE

**CAPTIVE**  
 National Accounts  
 4841 Prangton Park Rd., Raleigh, NC, 27616 PHONE: (919) 882-2410 FAX: (919) 227-5948 EMAIL: nreg15@captiveware.com  
 www.captiveware.com



**P/M**  
 SUBJECT TO FIELD INSPECTOR'S APPROVAL

KROGER 518 DALLAS TX - Kitchen United  
 5665 E MOCKINGBIRD LANE, TAG: PO# 003711  
 DALLAS, TX, 75206

DATE: 7/26/2021  
 DWG.#: 4986783  
 DRAWN BY: JAC  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

**SHEET NO.**  
 3

**SALAS O'BRIEN**  
 106 Decker Drive, Suite 200  
 Irving, Texas 75062  
 972.812.1270 Registration No. F-4111  
 SOB# Project No. 2021-02183

07/26/21  
 KEITH W. GASSMAN  
 89638  
**Heights Venture**  
 ARCHITECTURE + DESIGN  
 HOUSTON: 1111 North Loop West, Suite 800 Houston, Texas 77008 713.869.1103 V.  
 DALLAS: 5741 Legacy Drive, Suite 300 Plano, Texas 75024 972.493.7292 V.

**KROGER FOOD STORE # 518 KITCHEN UNITED REMODEL**

5665 E. MOCKINGBIRD LN.  
 DALLAS, TX 75206

Project Number: Phase: 21145-001 Sheet Size: 34x44  
 Date/Time Plotted: Drawn By: Checked By: AJ

**MAKE-UP AIR UNIT CONTROLS**

**M4.2**

DUCTWORK #1 PARTS - JOB#4986783 DOUBLE WALL H-1

TAG	PART #	CFM	GPM	ZONE	COVERED BY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
P1	DW1623DWLT-2R-S	2446				-0.009	34.30	1751.82	1	DOUBLE WALL DUCT - 16" INNER DUCT, 23" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P2	DW1630DWASY-2R-S	2446				-0.0345	19.60	1751.82	1	DOUBLE WALL DUCT - 16" INNER 30" DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P3	DW1627DWAJD-2R-S	2446				-0.009	58.31	1751.82	1	DOUBLE WALL ADJUSTABLE DUCT - 16" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 24.5" / ADJUSTMENT = 13.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P4	DW1630DWASY-2R-S	2446				-0.0575	19.60	1751.82	1	DOUBLE WALL DUCT - 16" INNER 30" DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P5	DW1647DWLT-2R-S	2446				-0.0187	70.12	1751.82	1	DOUBLE WALL DUCT - 16" INNER 47" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P6	DW1647DWAJD-2R-S	2446				-0.0153	103.34	1751.82	1	DOUBLE WALL ADJUSTABLE DUCT - 16" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 48.5" / ADJUSTMENT = 30.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P7 ASSEMBLED W/P8	DW1645DOWLTP-2R-S	2446				-0.018	68.55	1751.82	1	DOUBLE WALL DUCT - 16" INNER DUCT, 45.5" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATE.
P8 ASSEMBLED W/P7	DW2316POBEX	2446					8.00	1751.82	1	DUCT TO CURB TRANSITION 3/4" DOWN TURN, 23" CURB TO 16" DUCT, 16 GA ALUMINIZED. USED ON NCA14FA & NCA14HPFA. TRANSITION PLATE OD IS 23.5" DESIGNED FOR USE WITH EXHAUST FAN. NON-STANDARD PART.
SYSTEM AT P8						-0.742	0.00			
	3M-2000PLUS						0.80		3	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
	DW16DWCLASY-2R-S						7.96		2	DUCT - 16" DUCT - 20" DOUBLE "V" CLAMP - 2R INSULATION & SINGLE "V" CLAMP INCLUDED - REDUCED CLEARANCE.
TOTAL WEIGHT							400.14			

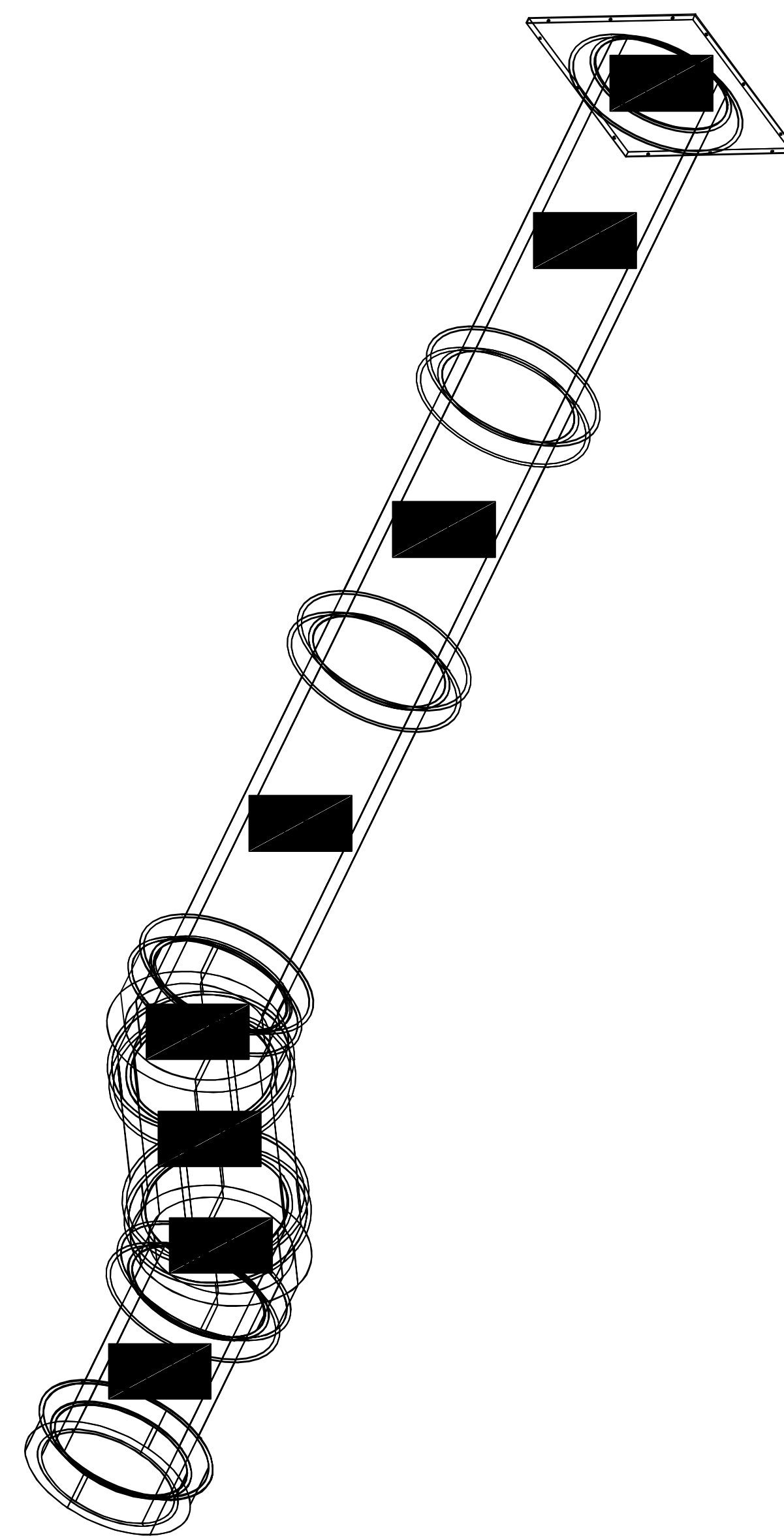
DOUBLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

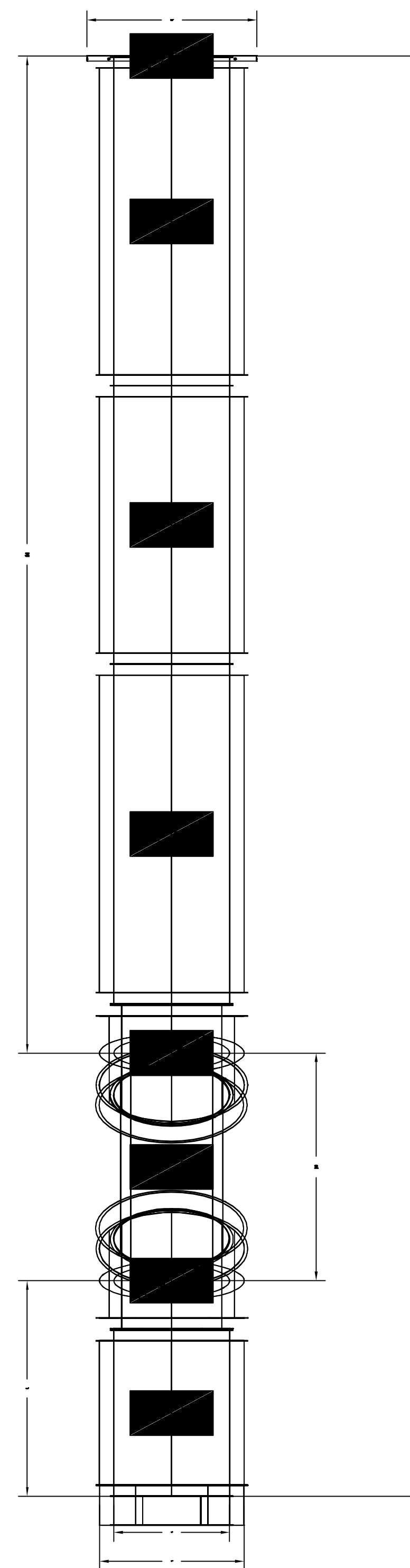
HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (FT)
5"	7'
6"	7'
7"	7'
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'
26"	5'
28"	5'
30"	5'
32"	5'
34"	5'
36"	5'

VERTICAL			
TYPE	WALL SUPPORT (FT)	CURB SUPPORT (FT)	FLOOR SUPPORT (FT)
2R & 2R HT (5"-16")	20'	24'	24'
2R (18")	18'	24'	24'
3R & 3Z (5"-24")	10'	24'	24'
3Z (26" -36")	10'	20'	20'

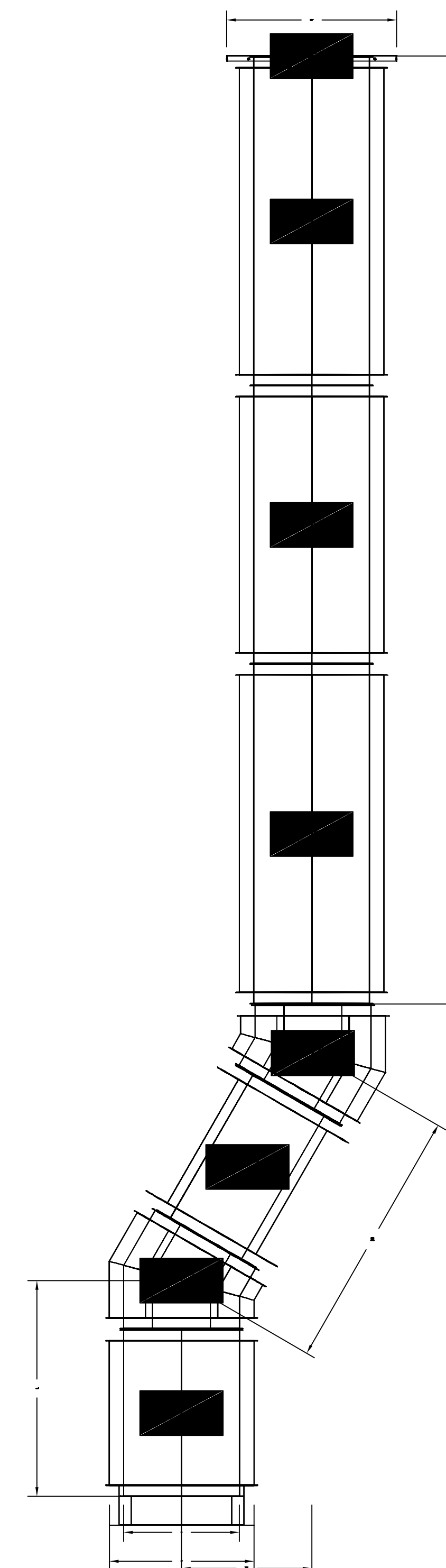
DUCTWORK #1 SE VIEW H-1



DUCTWORK #1 FRONT VIEW H-1



DUCTWORK #1 SIDE VIEW H-1



REVISIONS	
DESCRIPTION	DATE

**CAPTIVEAIRE**  
 www.captiveaire.com  
 National Accounts  
 4641 Paragon Park Rd., Raleigh, NC 27616 PHONE: (819) 882-2410 FAX: (819) 227-5945 EMAIL: reg15@captiveaire.com

KROGER 518 DALLAS TX - Kitchen United  
 5665 E MOCKINGBIRD LANE, TAG: PO# 11111  
 DALLAS, TX, 75206

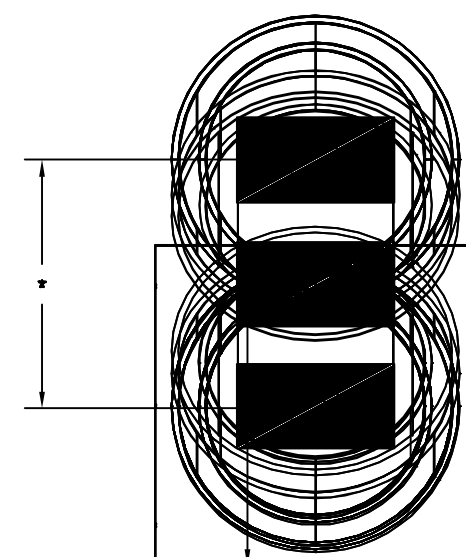
DATE: 7/26/2021  
 DWG.#: 4986783  
 DRAWN BY: JAC  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

SHEET NO. 4

**P/M**  
 SUBJECT TO FIELD INSPECTOR'S APPROVAL

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

DUCTWORK #1 TOP VIEW H-1





Issue Date: 01/25/22  
 90% OWNER REVIEW SET 07.20.21  
 PERMIT ISSUE SET 07.26.21

DUCTWORK #2 PARTS - JOB#4986783 DOUBLE WALL H-2

TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
P1	DW1623DWLT-2R-S	2446				-0.009	34.30	1751.82	1	DOUBLE WALL DUCT - 16" INNER DUCT, 23" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P2	DW1615DWASY-2R-S	2446				-0.0345	17.21	1751.82	1	DOUBLE WALL DUCT - 16" INNER 15 DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P3	DW1647DWAJD-2R-S	2446				-0.011	103.34	1751.82	1	DOUBLE WALL ADJUSTABLE DUCT - 16" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 48.5" / ADJUSTMENT = 30.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P4	DW1615DWASY-2R-S	2446				-0.0575	17.21	1751.82	1	DOUBLE WALL DUCT - 16" INNER 15 DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P5	DW1647DWLT-2R-S	2446				-0.0189	70.12	1751.82	1	DOUBLE WALL DUCT - 16" INNER DUCT, 47" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P6	DW1647DWAJD-2R-S	2446				-0.0141	103.34	1751.82	1	DOUBLE WALL ADJUSTABLE DUCT - 16" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 48.5" / ADJUSTMENT = 30.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P7 ASSEMBLED W/P8	DW164550DWLTP-2R-S	2446				-0.018	68.55	1751.82	1	DOUBLE WALL DUCT - 16" INNER DUCT, 45.5" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATE.
P8 ASSEMBLED W/P7	DW2316TPDBEX	2446					8.00	1751.82	1	DUCT TO CURB TRANSITION 3/4" DOWN TURN, 23" CURB TO 16" DUCT, 16 GA ALUMINIZED. USED ON NCA14FA & NCA14HPFA. TRANSITION PLATE DD IS 23.5" DESIGNED FOR USE WITH EXHAUST FAN. NON-STANDARD PART.
SYSTEM AT P8						-0.743	0.00			
	3M-2000PLUS						0.80		3	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
	DW16DWCLASY-2R-S						7.96		2	DUCT - 16" DUCT - 20" DOUBLE "V" CLAMP - 2R INSULATION & SINGLE "V" CLAMP INCLUDED - REDUCED CLEARANCE.
TOTAL WEIGHT							440.39			

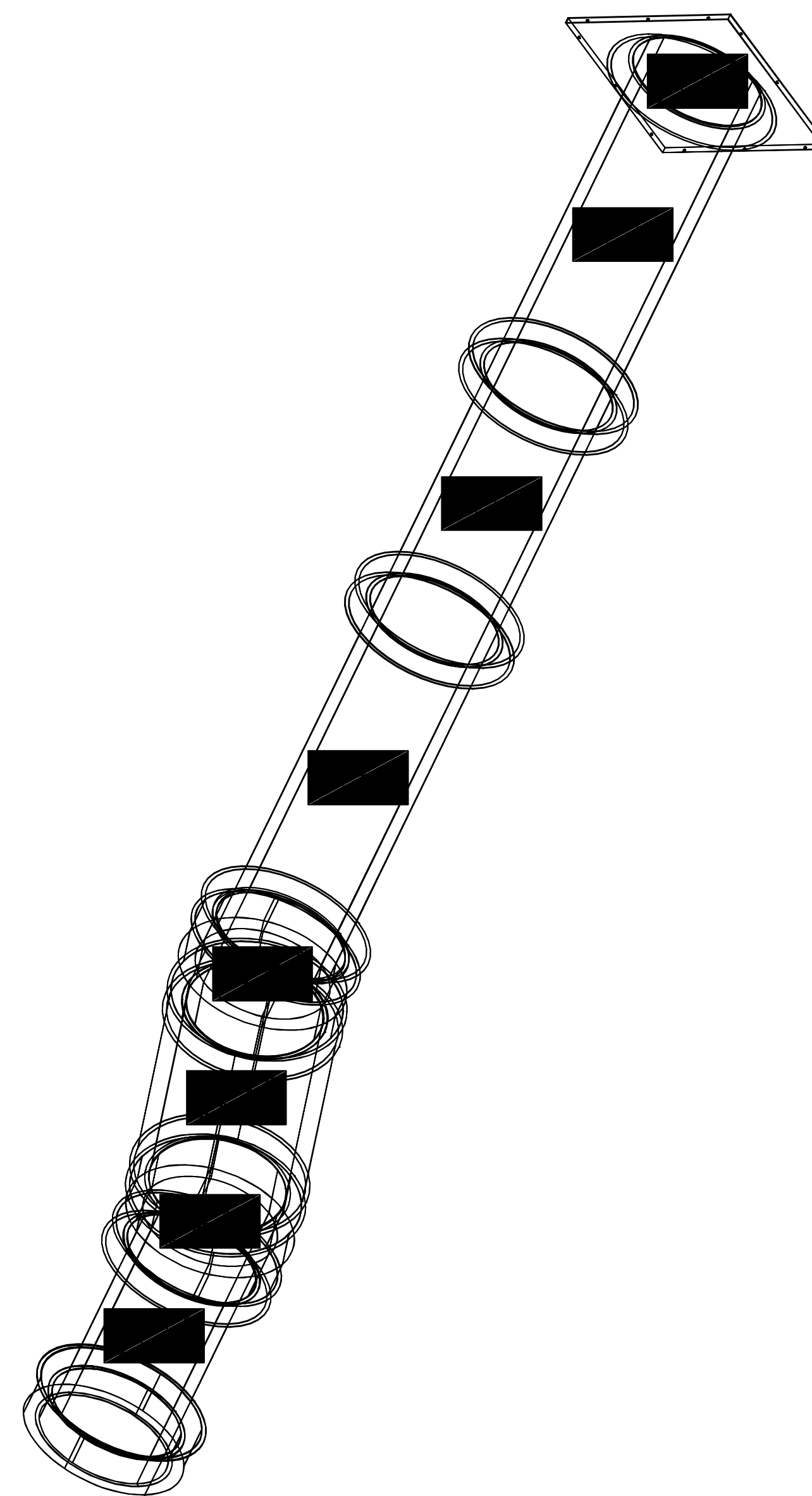
DOUBLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

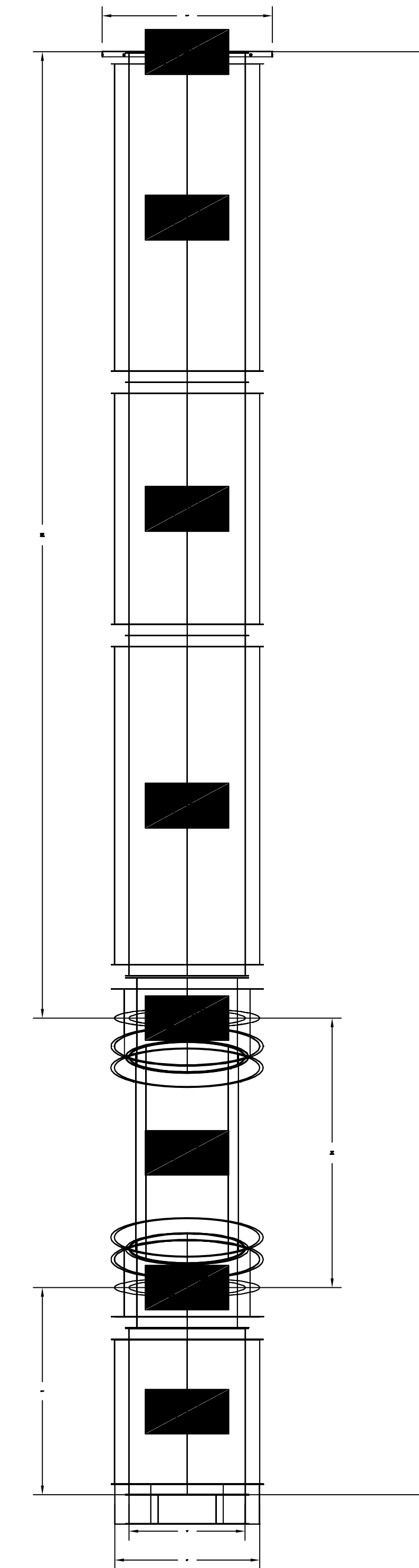
HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (FT)
5"	7'
6"	7'
7"	7'
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'
26"	5'
28"	5'
30"	5'
32"	5'
34"	5'
36"	5'

VERTICAL			
TYPE	WALL SUPPORT (FT)	CURB SUPPORT (FT)	FLOOR SUPPORT (FT)
2R & 2R HT (5"-16")	20'	24'	24'
2R (18")	18'	24'	24'
3R & 3Z (5"-24")	10'	24'	24'
3Z (26" -36")	10'	20'	20'

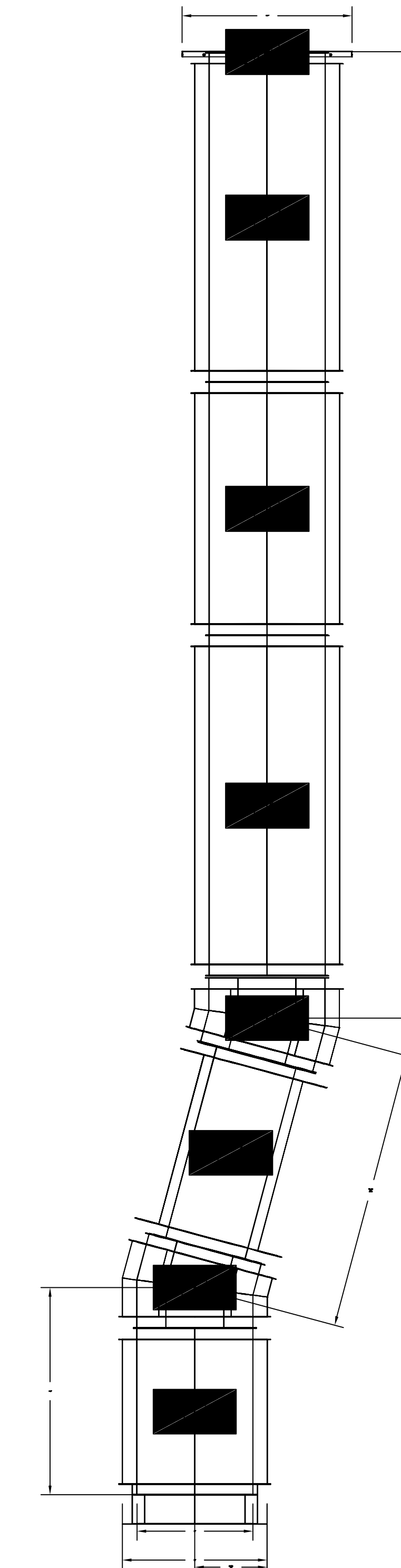
DUCTWORK #2 SE VIEW H-2



DUCTWORK #2 FRONT VIEW H-2



DUCTWORK #2 SIDE VIEW H-2



**REVISIONS**

NO.	DESCRIPTION	DATE

**CAPTIVEAIRE**  
 National Accounts  
 4641 Praeger Park Rd., Raleigh, NC 27616 PHONE: (919) 882-2410 FAX: (919) 277-5948 EMAIL: nag15@captiveaire.com

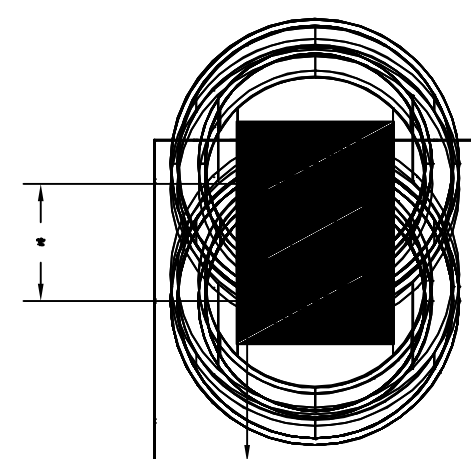
KROGER 518 DALLAS TX - Kitchen United  
 5665 E MOCKINGBIRD LANE, TAG: PO#  
 DALLAS, TX, 75206

DATE: 7/26/2021  
 DWG.#: 4986783  
 DRAWN BY: JAC  
 SCALE: 3/4" = 1'-0"  
 MASTER DRAWING

SHEET NO. 5

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

DUCTWORK #2 TOP VIEW H-2



**P/M**  
 SUBJECT TO FIELD INSPECTOR'S APPROVAL

**SALAS O'BRIEN**  
 106 Decker Drive, Suite 200  
 Irving, Texas 75062  
 972.812.1270 Registration No. F-4111  
 SOBE Project No. 2021-02183

07/26/21  
 KEITH W. GASSMAN  
 ARCHITECT  
 89636

**Heights Venture**  
 ARCHITECTURE + DESIGN  
 HOUSTON: 1111 North Loop West, Suite 800 Houston, Texas 77008 713.869.1103 V.  
 DALLAS: 5741 Legacy Drive, Suite 300 Plano, Texas 75024 972.493.7292 V.

KROGER FOOD STORE # 518 KITCHEN UNITED REMODEL

5665 E. MOCKINGBIRD LN. DALLAS, TX 75206

Project Number: Phase: 211445-001 Sheet Size: 34x44  
 Date/Time Plotted: Drawn By: Checked By: AJ  
 Project Phase:

DUCTWORK DETAILS

M4.4



Issue Date: 01/25/22  
 90% OWNER REVIEW SET 07.20.21  
 PERMIT ISSUE SET 07.26.21

DUCTWORK #3 PARTS - JOB#4986783 DOUBLE WALL H-3

TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
P1	DW1623DWLT-2R-S	2446				-0.009	34.30	1751.82	1	DOUBLE WALL DUCT - 16" INNER DUCT, 23" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P2	DW1630DWASY-2R-S	2446				-0.0345	19.60	1751.82	1	DOUBLE WALL DUCT - 16" INNER 30 DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P3	DW1627DWAJD-2R-S	2446				-0.009	58.31	1751.82	1	DOUBLE WALL ADJUSTABLE DUCT - 16" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 24.5" / ADJUSTMENT = 13.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P4	DW1630DWASY-2R-S	2446				-0.0575	19.60	1751.82	1	DOUBLE WALL DUCT - 16" INNER 30 DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P5	DW1647DWLT-2R-S	2446				-0.0187	70.12	1751.82	1	DOUBLE WALL DUCT - 16" INNER DUCT, 47" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P6	DW1647DWAJD-2R-S	2446				-0.0153	103.34	1751.82	1	DOUBLE WALL ADJUSTABLE DUCT - 16" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 48.5" / ADJUSTMENT = 30.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P7	ASSEMBLED W/P8	DW164550DWLTP-2R-S	2446			-0.018	68.55	1751.82	1	DOUBLE WALL DUCT - 16" INNER DUCT, 45.5" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATE.
P8	ASSEMBLED W/P7	DW2316TPDBEX	2446				8.00	1751.82	1	DUCT TO CURB TRANSITION 3/4" DOWN TURN, 23" CURB TO 16" DUCT, 16 GA ALUMINIZED. USED ON NCA14FA & NCA14HPFA. TRANSITION PLATE OD IS 23.5" DESIGNED FOR USE WITH EXHAUST FAN. NON-STANDARD PART.
	SYSTEM AT P8					-0.742	0.00			
	3M-2000PLUS						0.80		3	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
	DW16DWCLASY-2R-S						7.96		2	DUCT - 16" DUCT - 20" DOUBLE "V" CLAMP - 2R INSULATION & SINGLE "V" CLAMP INCLUDED - REDUCED CLEARANCE.
	TOTAL WEIGHT						400.14			

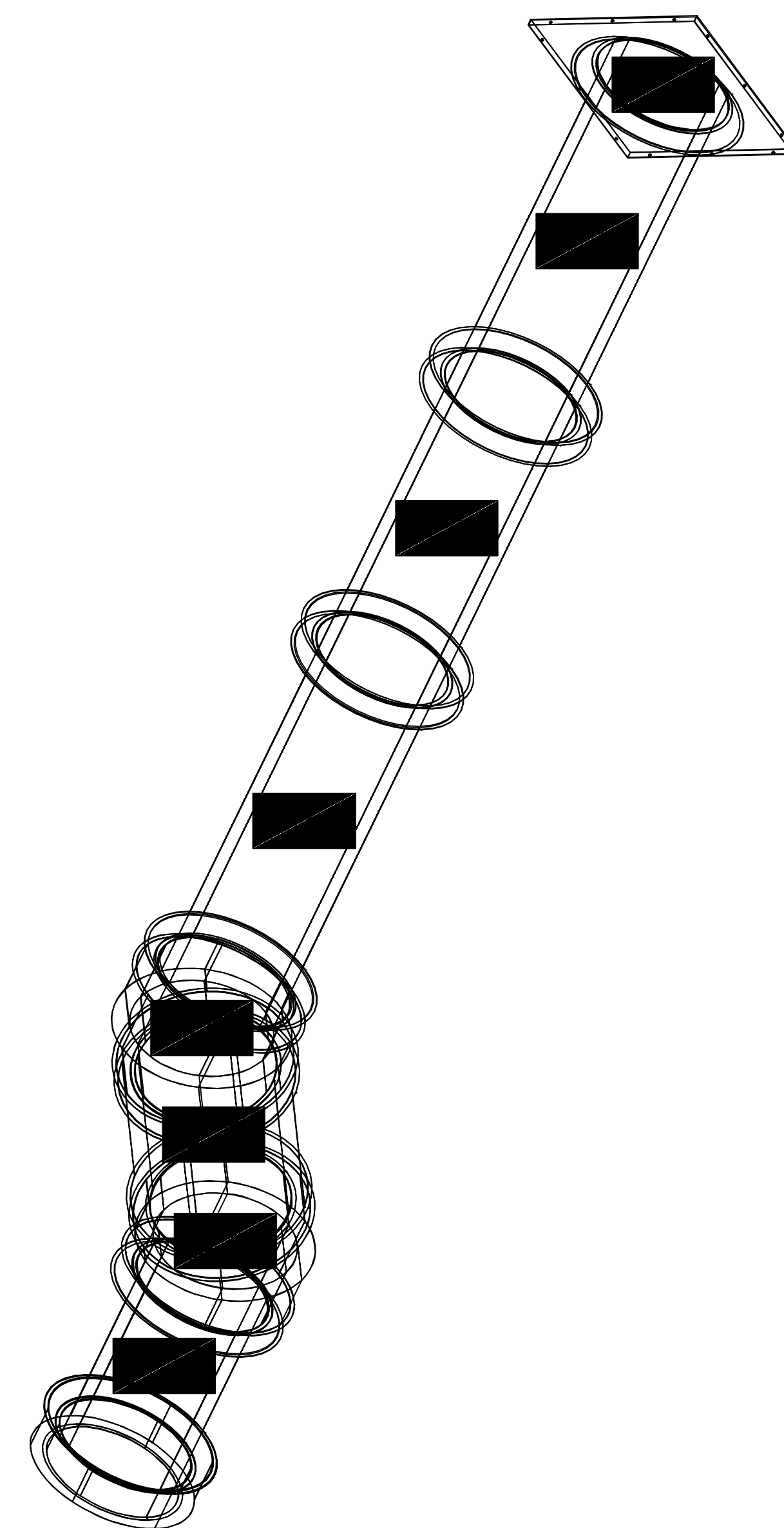
DOUBLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

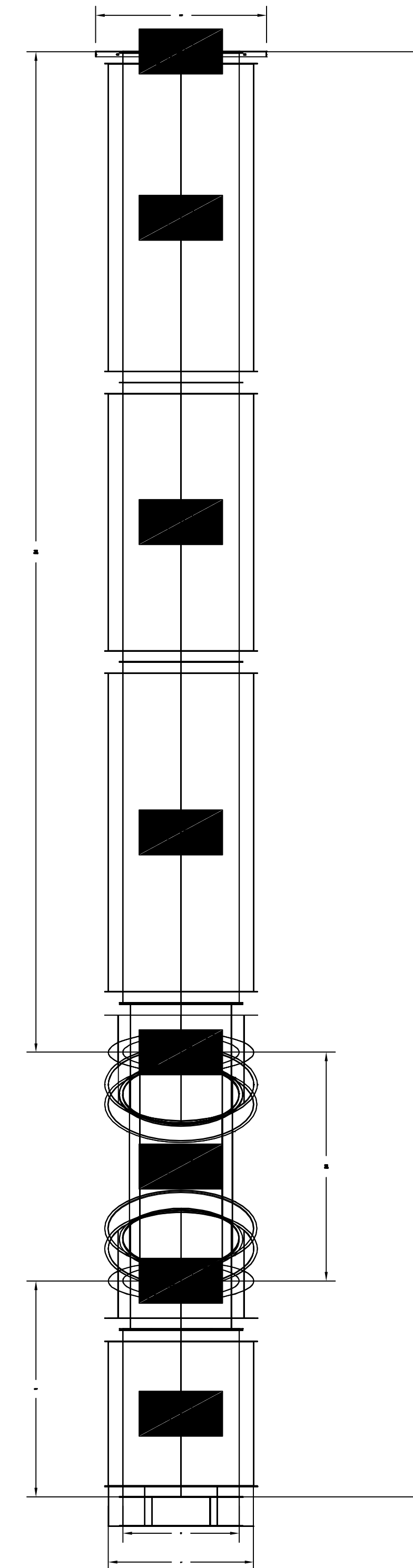
HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (FT)
5"	7'
6"	7'
7"	7'
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'
26"	5'
28"	5'
30"	5'
32"	5'
34"	5'
36"	5'

VERTICAL			
TYPE	WALL SUPPORT (FT)	CURB SUPPORT (FT)	FLOOR SUPPORT (FT)
2R & 2R HT (5"-16")	20'	24'	24'
2R (18")	18'	24'	24'
3R & 3Z (5"-24")	10'	24'	24'
3Z (26"-36")	10'	20'	20'

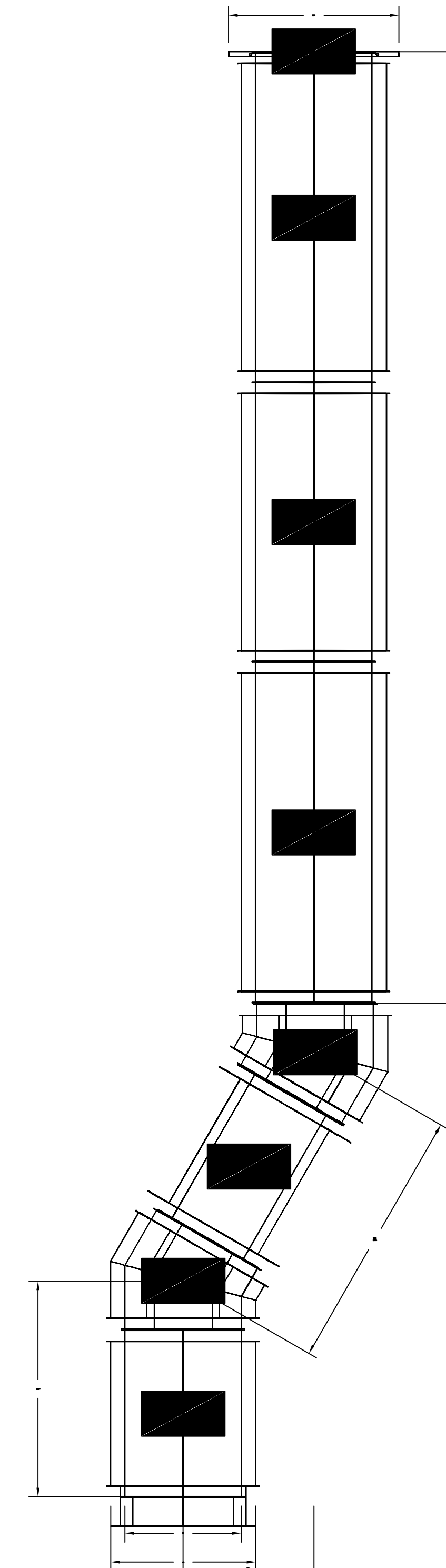
DUCTWORK #3 SE VIEW H-3



DUCTWORK #3 FRONT VIEW H-3

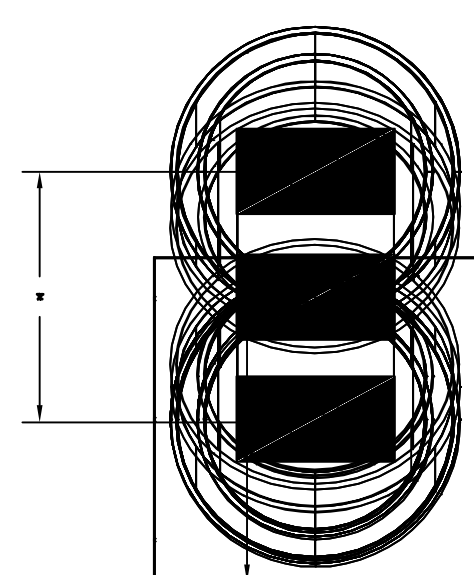


DUCTWORK #3 SIDE VIEW H-3



DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

DUCTWORK #3 TOP VIEW H-3



**P/M**  
 SUBJECT TO FIELD INSPECTOR'S APPROVAL

REVISIONS	DESCRIPTION	DATE



www.captiveaire.com  
 4041 Paragon Park Rd., Raleigh, NC 27616 PHONE: (919) 882-2410 FAX: (919) 227-8948 EMAIL: neg.1@captiveaire.com

**CAPTIVEAIRE**  
 Duct Systems

**National Accounts**

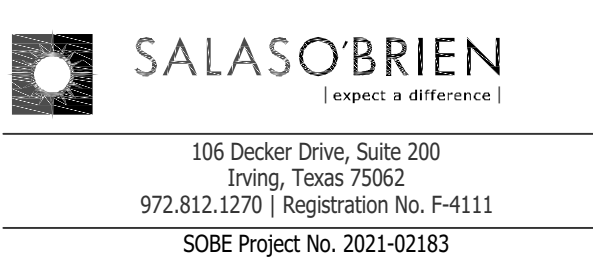
KROGER 518 DALLAS TX - Kitchen United  
 5665 E MOCKINGBIRD LANE, TAG: PO#  
 DALLAS, TX, 75206

DATE: 7/26/2021  
 DWG.#: 4986783

DRAWN BY: JAC  
 SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 6



106 Decker Drive, Suite 200  
 Irving, Texas 75062  
 972.812.1270 Registration No. F-4111  
 SOBE Project No. 2021-02183



HOUSTON 1111 North Loop West, Suite 800 Houston, Texas 77008 713.869.1033 V.  
 DALLAS 5741 Legacy Drive, Suite 300 Plano, Texas 75024 972.493.7292 V.

KROGER FOOD STORE # 518 KITCHEN UNITED REMODEL

5665 E. MOCKINGBIRD LN. DALLAS, TX 75206

Project Number: Phase: Sheet Size: 21145-001 34x44

Date/Time Plotted: Drawn By: Checked By: Project Phase: AJ

DUCTWORK DETAILS

M4.5



Issue Date:	90% OWNER REVIEW SET	07.20.21
	PERMIT ISSUE SET	07.26.21

DUCTWORK #4 PARTS - JOB#4986783 DOUBLE WALL H-4

TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
P1	DW1623DWLT-2R-S	2446				-0.009	34.30	1751.82	1	DOUBLE WALL DUCT - 16" INNER DUCT, 23" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P2	DW1630DWASY-2R-S	2446				-0.0345	19.60	1751.82	1	DOUBLE WALL DUCT - 16" INNER 30 DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P3	DW1627DWAJD-2R-S	2446				-0.009	58.31	1751.82	1	DOUBLE WALL ADJUSTABLE DUCT - 16" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 24.5" / ADJUSTMENT = 13.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P4	DW1630DWASY-2R-S	2446				-0.0575	19.60	1751.82	1	DOUBLE WALL DUCT - 16" INNER 30 DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P5	DW1647DWLT-2R-S	2446				-0.0187	70.12	1751.82	1	DOUBLE WALL DUCT - 16" INNER DUCT, 47" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL.
P6	DW1647DWAJD-2R-S	2446				-0.0153	103.34	1751.82	1	DOUBLE WALL ADJUSTABLE DUCT - 16" INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11" / MAX LENGTH = 48.5" / ADJUSTMENT = 30.5" / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P7	ASSEMBLED W/P8	DW164550DWLTP-2R-S	2446			-0.018	68.55	1751.82	1	DOUBLE WALL DUCT - 16" INNER DUCT, 45.5" LONG - 2 LAYERS REDUCED CLEARANCE - 20" STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATE.
P8	ASSEMBLED W/P7	DW2316TPDBEX	2446				8.00	1751.82	1	DUCT TO CURB TRANSITION 3/4" DOWN TURN, 23" CURB TO 16" DUCT, 16 GA ALLUMINIZED. USED ON NCA14FA & NCA14HPFA. TRANSITION PLATE OD IS 23.5" DESIGNED FOR USE WITH EXHAUST FAN. NON-STANDARD PART.
	SYSTEM AT P8					-0.742	0.00			
		3M-2000PLUS					0.80		3	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
		DW16DWCLASY-2R-S					7.96		2	DUCT - 16" DUCT - 20" DOUBLE "V" CLAMP - 2R INSULATION & SINGLE "V" CLAMP INCLUDED - REDUCED CLEARANCE.
	TOTAL WEIGHT						400.14			

DOUBLE WALL FACTORY BUILT DUCTWORK

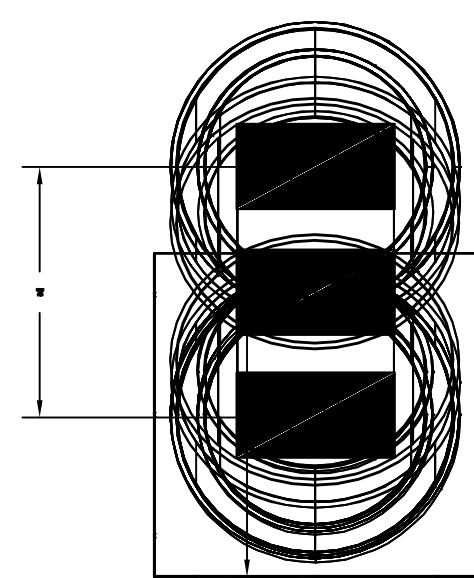
- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (FT)
5"	7'
6"	7'
7"	7'
8"	7'
10"	7'
12"	7'
14"	7'
16"	7'
18"	5'
20"	5'
22"	5'
24"	5'
26"	5'
28"	5'
30"	5'
32"	5'
34"	5'
36"	5'

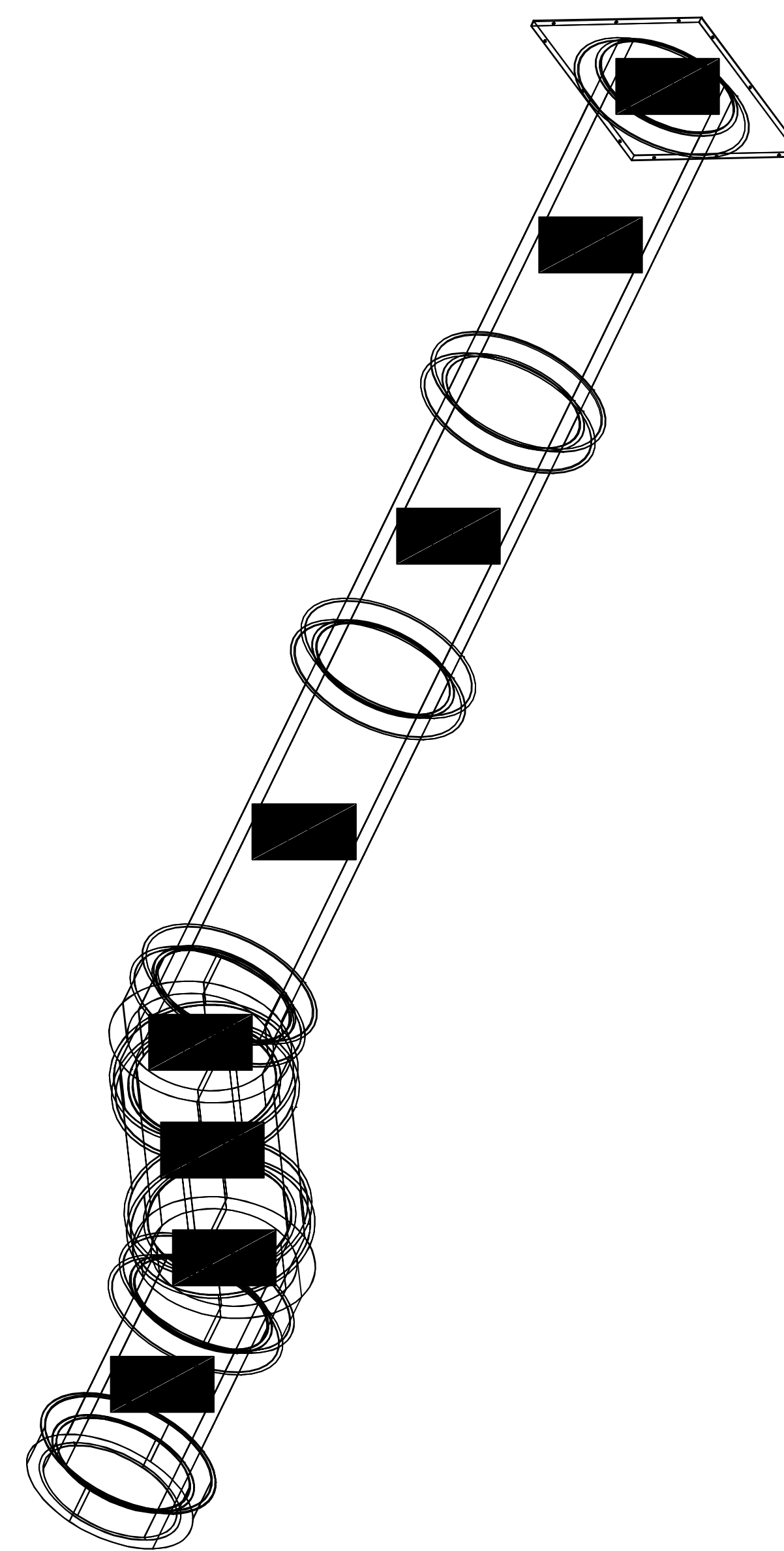
VERTICAL			
TYPE	WALL SUPPORT (FT)	CURB SUPPORT (FT)	FLOOR SUPPORT (FT)
2R & 2R HT (5"-16")	20'	24'	24'
2R (18")	18'	24'	24'
3R & 3Z (5"-24")	10'	24'	24'
3Z (26"-36")	10'	20'	20'

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

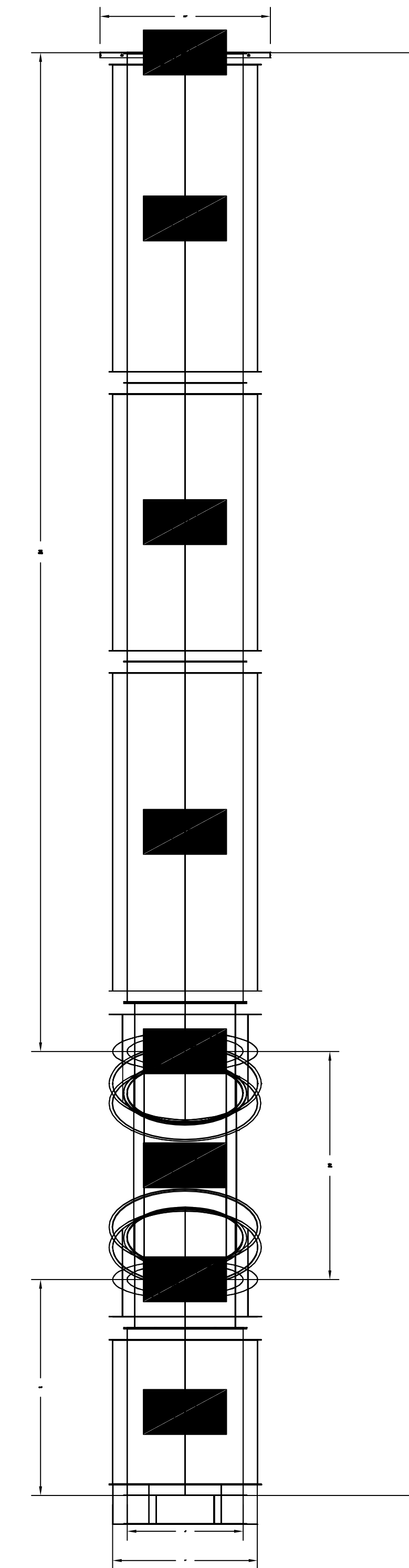
DUCTWORK #4 TOP VIEW  
H-4



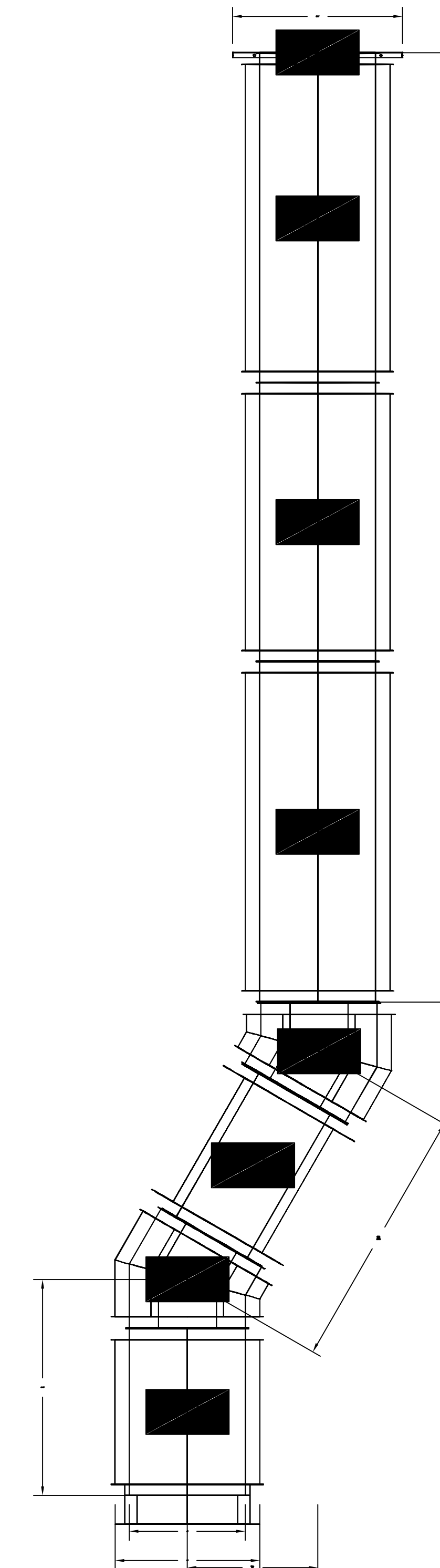
DUCTWORK #4 SE VIEW  
H-4



DUCTWORK #4 FRONT VIEW  
H-4



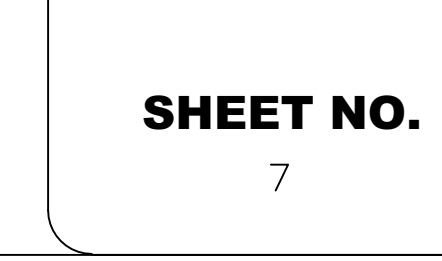
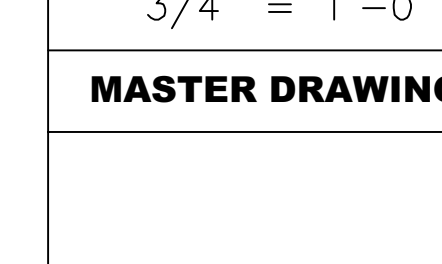
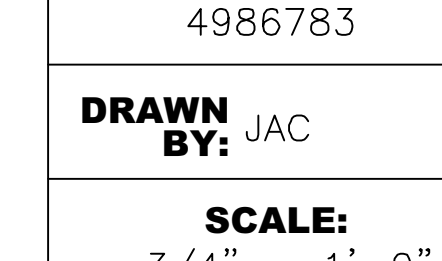
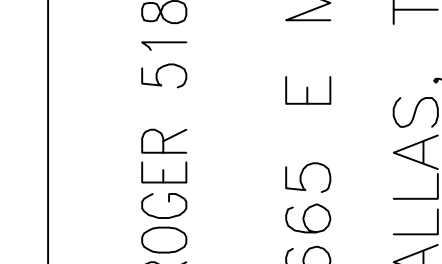
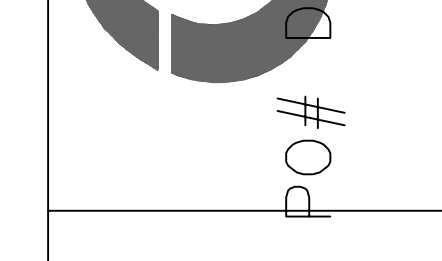
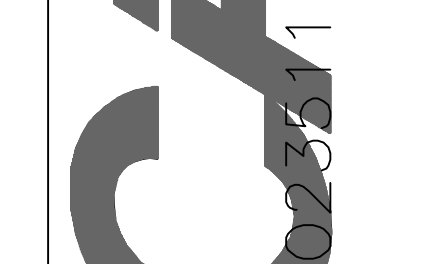
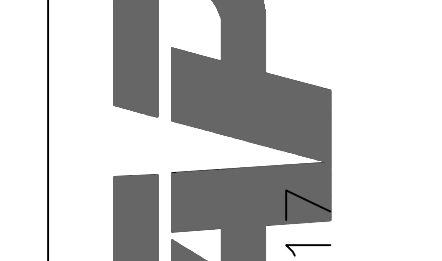
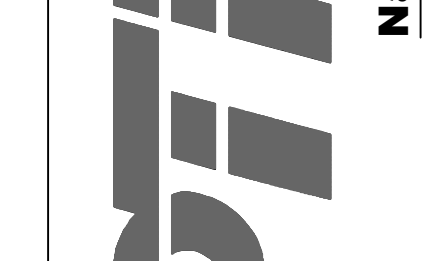
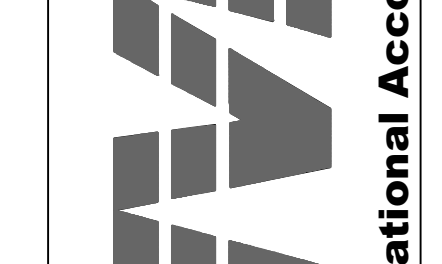
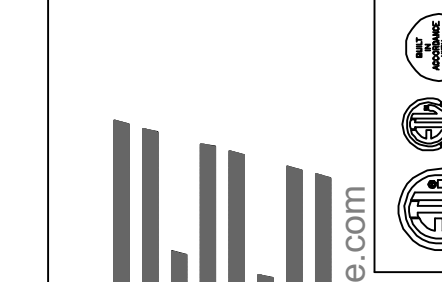
DUCTWORK #4 SIDE VIEW  
H-4



**P/M**  
SUBJECT TO FIELD INSPECTOR'S APPROVAL

REVISIONS

NO.	DESCRIPTION	DATE



KROGER 518 DALLAS TX - Kitchen United  
5665 E MOCKINGBIRD LANE, TAG: PO#  
DALLAS, TX, 75206

DATE: 7/26/2021

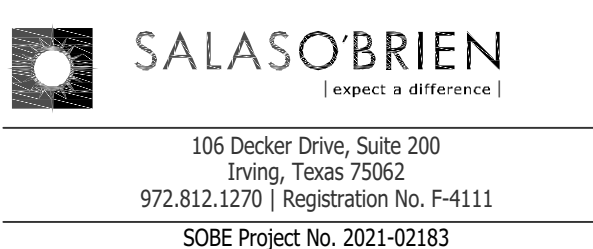
DWG.#:  
4986783

DRAWN BY: JAC

SCALE:  
3/4" = 1'-0"

MASTER DRAWING

SHEET NO.  
7



HOUSTON 1111 North Loop West, Suite 800 Houston, Texas 77008 713.869.1033 V.  
DALLAS 5741 Legacy Drive, Suite 300 Plano, Texas 75024 972.493.7292 V.

KROGER FOOD STORE # 518 KITCHEN UNITED REMODEL

5665 E. MOCKINGBIRD LN. DALLAS, TX 75206

Project Number: Phase: 21145-001 Sheet Size: 34x44

Date/Time Plotted: Drawn By: Checked By: Project Phase: AJ

DUCTWORK DETAILS

M4.6